

Knowing Your Land

A Reference Guide to Researching
Your Land's History

North $89^{\circ}53'W$. on true line between Secs 28 & 33.
Mr Gedro's dwelling bears $S. 51^{\circ}\frac{1}{2}'W$.
The S.W. cor. of Mr Johnson's claim before
taken bears $S. 53^{\circ}15'W$.
15 00 Leave prairie enter timber course N.W.S. a 25
40 03 $\frac{1}{2}$ Set Gr. Sec post at average dist. from which a 125
A oak 10 in. dia. bears $N 55^{\circ}\frac{1}{2}'W$ 165 lbs. dist.
A " 24 " " " $S. 35^{\circ}W$ 339 " " d 125
80 07 To Sec. cor. d 175

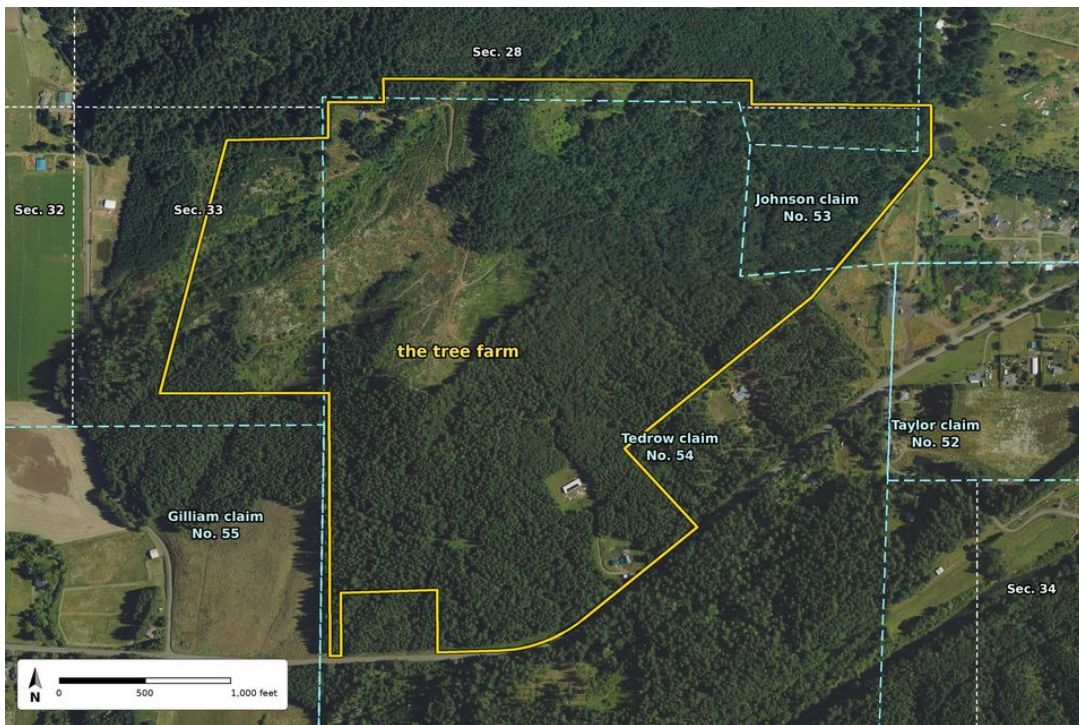
Bob Zybach, PhD

NW Maps Co.



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The Sullivan tree farm from the air, 2022. U.S. Department of Agriculture, National Agriculture Imagery Program. Public domain.



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Bob Zybach, PhD

NW Maps Co.
Cottage Grove, Oregon

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First edition, October 2026

Published by NW Maps Co., Cottage Grove, Oregon

Printed in the United States of America

Prepared with the Your Land History project, YourLandHistory.org

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Foreword

I have a handful of folk heroes, people whose ideas were so original that they changed how I think about the world. I was trained in information systems, so most of them come from that field: Linus Torvalds, who wrote the Linux kernel in 1991; Tim Berners-Lee, who invented the World Wide Web in 1989; and Craig Newmark, who started Craigslist in 1995.

Bob Zybach is less famous than any of them, but he easily tops my list. He found the original documents that show how people and nature have shaped and reshaped Oregon's forests for thousands of years. He changed how I see the world, and he did it with a library card.

In the 1990s, government scientists, environmental groups and many others were saying that Oregon had once been covered with vast forests of old-growth trees. It sounded plausible, so I simply assumed it was true. Then I started going to the talks and history tours Bob gave for free. He understood early Oregon and its forests better than anyone I had ever met, by far. I listened carefully, and I came away from each one knowing something I had not known before.

In 1996 Bob cofounded Oregon Websites and Watersheds, a non-profit that teaches students to use the records of their own watersheds. In 2003 he earned his doctorate in environmental sciences at Oregon State University. He is a forest and wildfire historian, and his work exposed Oregon's actual history, which is very different from the popular myths about earlier times.

When the first settlers arrived, much of the Willamette Valley was prairie and oak savanna, grassland with scattered oaks, kept open by the burning that Native people did. The conifer forests were more like islands of green surrounded by tall grass. After the 1850s, much of that open ground filled in with trees. In the Soap Creek Valley oral histories, a series Bob edited, a logger said it in one sentence: "the oaks were there first and they'd died off because the firs grew up and shut off the sun."

West of the valley, in the Coast Range, the forests were shaped by great fires. Bob's dissertation, *The Great Fires*, follows Indian burning and catastrophic forest fires there from 1491 to 1951. The Elliott State Forest, in Coos and Douglas counties, is the one I know best. Bob and I first went there together in February 2020, to look at an old fire lookout. The state put the Elliott together around 1930 by trading scattered school lands to the Forest Service for one block of burned-over timberland south of the Umpqua River. Roughly 90 percent of it had burned repeatedly. A 1929 report of the State Forester says that in 1868 a fire "leaped the Umpqua river" and "burned over all the forest, with the exception of the southeast portion." In 2020, working from a 2016 timber cruise, I figured that the Elliott had about six times as much timber as it had in 1930. It was never an untouched forest. Most of it is a burn that grew back.

None of this was secret. It was in the public record, scattered and half forgotten, and open to anyone with a library card: the surveyors' field notes of the 1850s, early reports of the Department of the Interior, ships' logbooks, old maps and photographs, pioneer diaries, the journals of early scientists, and the recorded memories of people who knew the land before he did. The list goes on and on. Bob reads the original, not somebody's summary of it, and he finds out how each record was made before he trusts it. He checks one kind of record against another. Then he goes outdoors and looks.

He is just as careful to say what the evidence does not show. After weighing all of it for the whole Coast Range, *The Great Fires* reports "a strong correlation between Indian burning practices in the Oregon Coast Range and subsequent Great Fire events; however, it has not demonstrated a cause and effect relationship between the two." My own research at Oregon State kept returning to how numbers and models mislead the people who rely on them. I have rarely seen a scholar draw that line so plainly.

Bob has paid a price for this work. Few people can argue with his evidence, because there is so much of it and it fits together. That does not mean they like being proven wrong.

It took me far too long to apply his lesson to my own land. I bought my tree farm west of Pedee in December 1989. It had just been logged, and I paid for it by maxing out my credit cards. In 1990 I planted about 25,000 Douglas-fir seedlings on it, mostly by myself on weekends, at 22 cents a seedling. My own management plan said the land "was homesteaded around the turn of the century." I believed it.

This October, Bob and I went looking for the farm's first records, a story he tells in his preface. They did not agree with my plan. Only about 7 of the farm's 211 acres were ever homesteaded. Of the 23 trees the surveyors marked at corners on and near the farm in 1854 and 1855, 15 were oaks. Only one was a Douglas-fir. In 1855 two pioneer families, the Tedrows and the Johnsons, lived about 400 feet apart on what is now my tree farm. An aerial photograph from 1955 shows most of the place as open grass with scattered trees.

I had owned that land for almost thirty-seven years and had never read a word its first surveyors wrote about it. Every one of those records was public, and most of them were free.

That is where this guide and its website came from. Bob has spent thirty years teaching students to do this kind of work. Once we saw what a few evenings with the records did for 211 acres near Pedee, we wanted anyone to be able to do the same for their own land. The website *Your Land History* gathers the scattered records for a piece of Oregon land. This guide teaches what the website cannot: how to read them the way Bob does. Start with the original. Learn how it was made. Check it against the others. Go and look. Say plainly what you know and what you don't.

Like most really good ideas, it is simple and obvious in retrospect, but not necessarily obvious to start with.

Pick a piece of land you care about, find out what its first surveyor wrote, and see whether the story you were told holds up.

Dave Sullivan
Pedee, Oregon
October 2026

Preface

On October 1, 2026, I asked my friend Dave Sullivan a simple question: whether the AI tools he uses could find the original survey notes and the old aerial photographs for his tree farm near Pedee. The survey notes and maps came back the same day. The photographs came soon after.

The records did not agree with the farm's own management plan. For years the plan had said the land "was homesteaded around the turn of the century." That could not be right for most of it. Settlers could no longer start donation land claims after 1855, and the Homestead Act was not passed until 1862. A second look at the records found that homesteading accounted for about 7 of the farm's 211 acres. Most of the rest came from two pioneer land claims surveyed in the summer of 1855. The computer found and assembled the records. Reading them took practice.

I am a forest and wildfire historian. I earned my doctorate in environmental sciences at Oregon State University, and I have spent decades with the records of Pacific Northwest forests: survey notes, old maps, aerial photographs, the journals of early travelers, and the memories of people who knew the land before me. In 1996 I helped found Oregon Websites and Watersheds, a nonprofit that shows students how to use those records to understand their own watersheds. The habits in this guide come from four of my studies, which Chapter 4 describes.

Most of the records about a piece of land are public. They are also scattered among dozens of offices and websites, and many are written in old handwriting, old units and the language of another century. A skilled researcher knows which ones matter, but gathering them by hand is slow. A computer can gather them quickly, but without someone who knows what they mean, it produces a heap of paper that makes no sense to anyone. This guide is for the person in between: the owner, neighbor or student who wants to know the story of one place and is willing to learn how.

It shows how the work is done, which records exist, where they are kept, and how to read them. Dave's tree farm is the example in every chapter, because it is a place where every kind of record turned up something, and because its owner agreed to let it be the example. It is also where the idea for this guide and its website began. Dave calls this eating your own dog food, a software term for using what you build. The method is general. Your land has its own story.

If you try this on your own land, I would like to hear what you find, and where this guide let you down. Send corrections and additions through the Your Land History site: the About page, or the "That's wrong" link beside any record.

Bob Zybach
October 2026

Acknowledgments

Two Oregon organizations made this guide possible: Oregon Advocates for School Trust Lands and Oregon Websites and Watersheds. Much of the information in it comes from their work and their collections.

Dave Sullivan did the computing, built the website Your Land History that goes with this guide, and offered his own tree farm near Pedee as the example that runs through every chapter.

The records come from public agencies and libraries, and from the people who keep them: the Bureau of Land Management's Oregon State Office; the National Archives; the Oregon State Archives; the Oregon State University Libraries' Special Collections and Archives Research Center and Oregon Digital; the University of Oregon Libraries, for Historic Oregon Newspapers and the aerial photograph collection; the Oregon Historical Society; the Oregon Department of Geology and Mineral Industries; the U.S. Department of Agriculture's Natural Resources Conservation Service; the U.S. Geological Survey; the Library of Congress; and the Polk County Clerk, Assessor and Surveyor. Their records are open to everyone, and that is the reason this guide can exist.

Any mistakes are mine.

How to use this guide

Read Part I first. Its five short chapters explain how to begin, how to describe your land the way the records do, where the approach comes from, and how the website Your Land History fits in.

Then go where your question leads. Part II covers the sources, grouped by the four kinds of evidence: written documents, images, the land itself, and living memory. Each source is described the same way:

- **What it tells you**
- **Where to find it**
- **How to read it**
- **What it costs**
- **A caution**
- **On the tree farm**, an example from the farm near Pedee

You do not need to read Part II in order, and you do not need all of it.

Part III puts the pieces together. It shows how to organize what you find and weigh it, follows the tree farm from beginning to end, tries the same method on a house in town and a wheat field, suggests what to do next, and ends with a directory of Oregon offices and websites, with addresses and costs.

A few conventions run through the book. A term printed in **bold** inside a sentence is explained in the glossary at the back. Small raised numbers lead to the notes at the back, which give the source of every fact; you never need them to follow the story. Measurements are in feet, miles and acres; where an old record uses chains and links, the guide converts them. Web addresses were checked in October 2026. If one fails, search for the name of the office or the collection, which lasts longer than the address. Most sources are free. Where a source needs a free account, charges a fee or must be visited in person, the guide says so.

The examples are in Oregon, and the directory is Oregon's. The method works anywhere, and Chapter 3 explains what changes in states that were never surveyed on the federal grid.

About this edition

This edition of *Knowing Your Land* is written for a curious adult reader with no training in history, surveying or law, at about the level of a good high-school textbook.

Two more editions are planned. A Young Readers' Edition will tell the same story for young readers and their teachers; it will be written anew, in shorter sentences and with more pictures, not simply set in larger type. A Research Edition will add fuller citations and the technical detail that surveyors, foresters, archivists and title researchers need. All three use the same method and the same running example, a tree farm near Pedee, Oregon, so a family can read them side by side.

This is version 1.1. Records move, offices change their hours, and web addresses break. The guide will be revised as readers report what has changed.

PART I

How land history is researched



Detail of Figure 1.1.

CHAPTER 1

Every piece of land has a story

Most of the farm began as two pioneer claims, not a homestead.

For years the management plan for a 211-acre tree farm just west of Pedee, in the Coast Range foothills of Polk County, Oregon (Figure 1.1), said the land “was homesteaded around the turn of the century.”¹ It was a reasonable thing to believe, and it stood in the plan, unchallenged, for years.

In October 2026 a few evenings with public records told a different story. Homesteading accounts for about 7 of the farm’s 211 acres. Most of the rest is two pioneer land claims surveyed in the summer of 1855, and much of what remains passed to a railroad under a federal land grant.² In March 1854 a government surveyor walking the line between Sections 28 and 33, which runs through the farm, wrote “Leave prairie & enter Timber” in his notebook.³ And of the 23 trees that surveyors marked at corners on and near the farm in 1854 and 1855, 15 were oaks. Only one was a Douglas-fir.⁴

None of that was hidden. All of it was in public records, most of them free and online. It was scattered among offices and websites, written in old handwriting and old units, and filed by township and range rather than by address. This guide shows how to find records like these, read them, and put them together for your own land.



Figure 1.1. The Sullivan tree farm from the air, about 2002. Almost all of what you see inside the farm is Douglas-fir plantation, planted about 1976 and again in 1990. In 1955 most of the same ground was open grass with scattered trees; Chapter 22 follows the change through aerial photographs of 1936, 1955 and 1978. *From the owner's files.*

“homesteaded around the turn of the century”

The tree farm's management plan, 2012

What a piece of land remembers

Every property has a past that is longer than its paperwork. Before the current deed there were earlier owners. Before them came the surveyors who first measured the land, and before the surveyors came the people who had lived in the country around it for thousands of years. Under all of that are the rock, the soil, the water and the weather, which decided what could grow there and what could be built.

A good history of a piece of land starts with the place as it is today, then goes back to the beginning and follows those layers, usually in this order:

- **The ground.** The rock underneath, the soil on top, the shape of the slopes.
- **Water and weather.** The streams and wells, the floods and the hard winters.
- **The people before the surveyors.** Who lived there before American settlement, and which nations are their descendants today.
- **The surveyors.** What the first government surveyors saw and wrote down.
- **The first owners.** How the land passed out of federal hands, to whom, and under which law.
- **The families.** Who owned it, lived on it and worked it afterward.
- **Seen from above.** What aerial photographs have shown since the 1930s.
- **Getting there.** The trails, roads and railroads that changed what the land was worth.

The website *Your Land History* tells its reports in the same order (Chapter 5), and Chapter 22 follows the tree farm through it from beginning to end.

What you can learn

With a few evenings of work, you can often learn:

- what the land is made of, and why its soil is what it is;
- what grew there before the present forest, field or lawn, and when that changed;
- which Native people lived in the valley, how the land passed out of their hands, and which tribes are their descendants today;
- when the land was first surveyed, and what the surveyor wrote about it;

- who first received title from the government, when, and under which law;
- what was built, farmed, logged or moved, and roughly when;
- what earlier owners and neighbors remember.

What this guide is not

This guide is about history. It can tell you who owned a piece of land in 1877. It cannot tell you who owns it now, where a boundary runs today, or whether anyone else has a right to cross it. Those are questions of title and survey, and they belong with a title company, a licensed surveyor or an attorney. Old records can explain a great deal about a property. They cannot settle a dispute about it.

What it costs

Most of the records in this guide are public, and most can be seen free online. Some need a free account, such as FamilySearch for census pages and filmed deed books. Some are kept in an office and cost a trip, a copy fee or a letter. A few cost real money. A scan of an old aerial photograph from the University of Oregon's collection, for example, cost \$35 to set up an order plus \$12 an image in October 2026.⁵ Each source in Part II says what it costs. The largest cost is time.

Four kinds of evidence

The evidence about any piece of land falls into four groups, and Part II takes them one at a time.

- **Written documents.** Survey notes, land **patents** (the government's first deeds), later deeds, tax rolls, census pages, newspapers, diaries and letters.
- **Images.** Survey maps (called **plats**), topographic maps, county atlases, photographs, aerial photographs and satellite images.
- **The land itself.** The rock, soil, water and climate of the place, what grows and lives on it, and the marks people left: old trees, stumps, fence lines, foundations and road grades.
- **Living memory.** What people who have known the place can tell you, and the papers and photographs families keep.

No single source gets the last word. Each record was made by one person, for one purpose, on one day. A surveyor in 1854 was measuring a line, not describing a farm. A county assessor was valuing

a property, not dating its barn. The strongest answers come when sources that did not copy each other agree. When a traveler's journal, a surveyor's notes and an old neighbor's memory all describe the same open prairie, you can rely on it more than on any one of them. When they disagree, write the disagreement down, because it tells you where to look next.

Records also lead to each other. The township, range and section of your land open the survey notes and the patents. A patent names the first owner, and that name opens the deed index, the census and the cemetery records. A date in a deed sends you to the aerial photograph taken nearest that year. Chapter 19 follows the whole chain.

On the tree farm On the farm near Pedee, three records made at different times, by different people, for different reasons, tell one story. The first is the surveyors' notes of the 1850s. In 1855 a deputy surveyor described one of the two land claims that cover most of the farm as valuable for "the timber on Luckiamute river and the rich prairie," and the trees he and the surveyor of 1854 marked at corners were mostly oaks: 15 of 23.⁶ (The township plat that letters "Level prairie and soil 1st rate" across Section 33 does not count as a second witness, because it was drawn from the same notes; see Figure 1.2.⁷) The second is an aerial photograph of 1955, which shows open grassland with scattered trees. The third is the owner's management plan, which says the land was fenced and grazed by cattle before he bought it.⁸ Today the farm is almost entirely Douglas-fir plantation, planted about 1976 and again in 1990.⁹ What kept the prairie open in the 1850s, and exactly when the trees closed in, the records gathered so far do not say.



Figure 1.2. The first map of the place, 1855. Find the small black squares labeled “Pedroe,” “Johnson” and “Taylor”: settlers’ houses that the surveyor sighted in March 1854. Then find “Level prairie and soil 1st rate” curving up from Section 33, where most of the farm lies. The large numbers are sections. The small figures along the lines, such as 80.07, are lengths in chains. *General Land Office plat of Township 9 South, Range 6 West, Willamette Meridian, approved at Salem May 1, 1855 (detail). Bureau of Land Management, Oregon State Office. Public domain.*

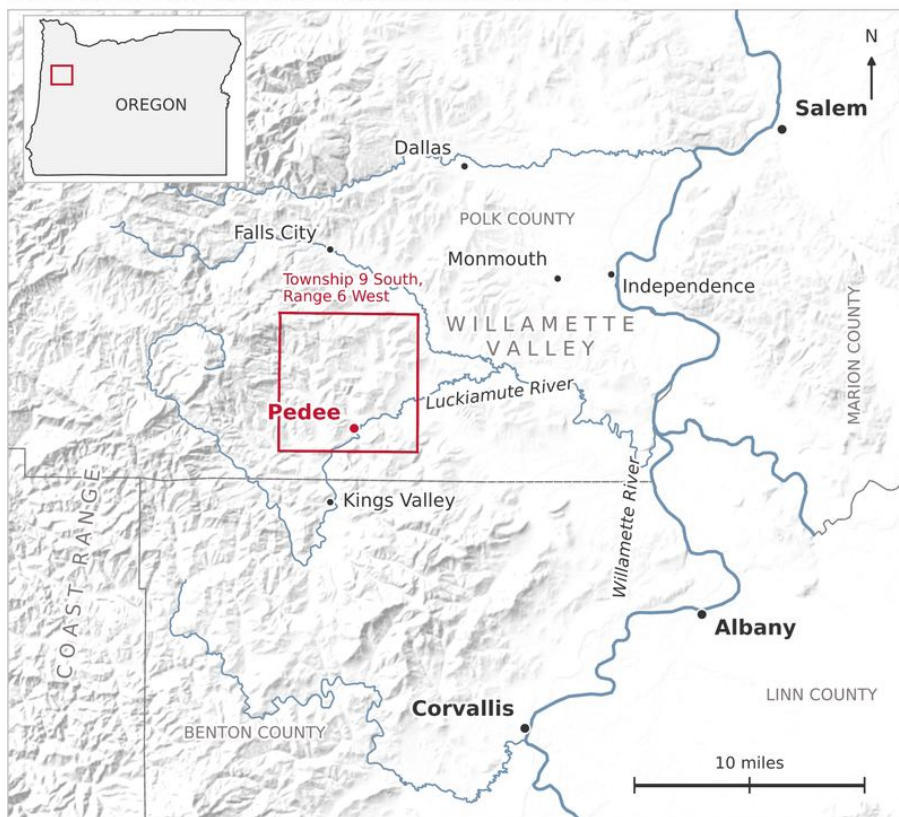
One farm runs through the whole guide

The running example is the Sullivan tree farm: about 211 acres of forest in Sections 28 and 33 of Township 9 South, Range 6 West, Willamette Meridian, in Polk County. It lies in the Coast Range foothills just west of the small community of Pedee. Monmouth is 15 miles to the northeast and Philomath 10 miles to the south. The west side of the farm drains to Pedee Creek and the east side straight to the Luckiamute River.¹⁰ Dave Sullivan bought it in December 1989.¹¹

It was chosen because it is ordinary in the best way. It has the kinds of records much western Oregon land has: survey notes from the 1850s, land claims, a railroad grant, a homestead, aerial photographs from 1936 on, and a long gap in the middle where the deeds have not yet been traced. It also has an owner who agreed to have its story told in public, address and all: the farm is at 12875 Kings Valley Highway. Figure 1.3 shows where it is.

Where Pedee is: Polk County, Oregon

The red outline is Township 9 South, Range 6 West, Willamette Meridian.



Sources: USGS 3DEP elevation, National Hydrography Dataset, and GNIS; U.S. Census Bureau TIGERweb; BLM PLSS (CadNSDI).

Figure 1.3. Where the running example is. The red square is Township 9 South, Range 6 West, a block of land 6 miles on a side in the Coast Range foothills of Polk County. The tree farm lies inside it, just west of Pedee on the Luckiamute River. *Drawn for this guide from U.S. Geological Survey elevation, stream and place-name data, U.S. Census Bureau boundaries, and Bureau of Land Management survey-grid data.*

There is one more reason. The idea for the website *Your Land History* came from working out the history of this farm.¹²

Every chapter of this guide includes a box called “On the tree farm,” which shows that chapter’s method at work there. Two other places appear in Chapter 23, where the same method meets different records: a house in one of Albany’s historic districts, where fire insurance maps and city directories lead the way, and a dryland wheat field near Moro, in Sherman County, where soils, rainfall and crop records lead.

Start with your place and your question

The oldest answer about what grew here is four words long.

What was this land like before it was a tree farm? That was one of the two questions behind the research on the farm near Pedee, and the oldest answer is four words long. In March 1854, 15 **chains** (990 feet) along the line between Sections 28 and 33, deputy surveyor Daniel Murphy wrote in his notebook: “Leave prairie & enter Timber.”¹ (A chain is the surveyor’s measuring chain, 66 feet long. Chapter 6 explains the rest of his units.)

A small question can be answered. “Tell me everything about this property” has no stopping point. “Was this forest once open ground?” does, because a single record might answer part of it.

Begin with one question

A good first question is small enough that one record might answer part of it. Some examples:

- Was this open field once forest, or was this forest once an open field?
- When was the house built, and who built it?
- When did the road move to where it is now?
- Who received this land from the government, and when?
- What did the first surveyor see when he crossed this ground?

Write the question down. It will change as you work, and that is normal. Keep the earlier versions, so you can see how your thinking moved.

Start from today and work back

The surest way into the past starts with what is already in your own files: the deed, the tax statement, any survey of the land, old photographs, a management plan, the names of earlier owners. Each of these gives you a key to an older record. A deed names the seller, who bought the land from someone else. A survey cites older surveys by number. A tax statement gives the numbers the county uses to file everything about the land.

“Leave prarie & enter Timber”

Daniel Murphy, field notes, Township 9 South, Range 6 West, March 1854 (his spelling)

Say where the place is

Every record is filed by location, so you need to describe your place the way the records do. Different records use different descriptions.

The description	Records filed this way
A street address	City directories, fire insurance maps, most online map viewers
Township, range and section	Land surveys, land patents, many county records
A tax lot or account number	County assessor and tax records
Latitude and longitude	Climate, soil, geology and satellite data

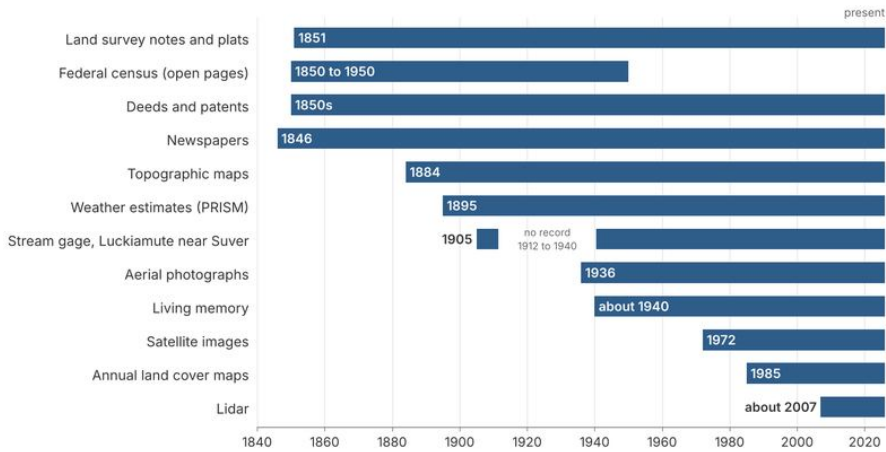
You do not need all four on the first day. Chapter 3 shows how to find them.

Decide what an answer would look like

Before you search, name the kind of record that would settle the question. A dated aerial photograph could show that a field was open in a given year. A deed could show that a named person bought the land on a given date. An interview could show what a person remembers, and where that memory becomes uncertain.

Then check that the record you have in mind reaches back far enough. In western Oregon, newspapers begin in 1846 and the land surveys in 1851. Aerial photographs begin in the 1930s, and the memories of people living today reach back to about the 1940s (Figure 2.1). A

How far back each kind of record usually reaches (western Oregon)



Start dates are typical for western Oregon and differ from place to place.
Compiled for this guide. The Suver stream gage start and gap are from the U.S. Geological Survey record for station 14190500.

Figure 2.1. How far back each kind of record usually reaches in western Oregon. Before the 1850s the written record is thin; after the 1930s it is thick. Find the years your question is about, and read down the chart to see which kinds of record can help. *Compiled for this guide. The stream gage dates are from the U.S. Geological Survey record for station 14190500, Luckiamute River near Suver.*

question about the 1880s will not be answered by an aerial photograph. A question about the 1950s may be answered by one in an afternoon.

Keep a research log from the first day

For every item you find, write down what it is, who made it, its date, where you found it, and the date you looked. Copy the exact words that matter. Then, in a separate line, write what you think they mean, and at least one other thing they could mean. Keeping the record's words apart from your reading of them is the most useful habit in this guide. Months later it lets you tell what you found from what you guessed.

A plain notebook or a simple spreadsheet is enough (Figure 2.2). Chapter 19 explains the log in full, and Chapter 24 has a form you can copy.

On the tree farm The owner's own files held a 2012 management plan and a 1993 survey of the land.² The plan raised the first question: was the land really "homesteaded around the turn of the century"? The second question was older and wider: what grew there before the Douglas-

Research log: one entry

My question	What was this land like before it was a tree farm?
The place	Township 9 South, Range 6 West, Willamette Meridian; line between Sections 28 and 33
What the source is, and who made it	Field notes of the section lines, Daniel Murphy, deputy surveyor, General Land Office
Where I found it	Bureau of Land Management land records, volume R0029, page 331
Date of the observation	1854
Date the record was made	1854
Exact words	"Leave prairie & enter Timber"
What I think it means	Part of this township that is forest now was open prairie in 1854.
What else it could mean	The prairie may have been small, or only along this line.
Next step	Download the 1855 plat and the notes for the neighboring lines.

An example entry for the guide's worked example, Township 9 South, Range 6 West, Polk County, Oregon.

Figure 2.2. One entry in a research log. The surveyor’s exact words sit in one row and the researcher’s reading of them in another, with a second possible reading beside it. The last row says what to do next. *Drawn for this guide from Daniel Murphy’s field notes of 1854, Bureau of Land Management, Oregon land records, volume R0029, page 331.*

fir?³ Each question pointed to a different record. A homestead leaves a federal patent, so the first question went to the Bureau of Land Management’s patent records (Chapter 7). The second went to the survey notes of the 1850s. They gave the four words above, and on the same page, compass sightings on “Mr Tedroe’s dwelling” and on a corner of Mr. Johnson’s claim. Settlers were already living there when the surveyor came through.⁴ The log entry in Figure 2.2 records the first of those finds, and its last line says where the work went next: “Download the 1855 plat and the notes for the neighboring lines.”



Detail of Figure 3.2.

CHAPTER 3

Find your legal description, tax lot and acreage

A survey of 1993 still found its way by land claims of 1855.

In 1993 the main tract of the tree farm near Pedee was surveyed and divided into three parcels. The surveyor's map says the land lies "in the John Tedrow DLC #54 and John Johnson DLC #53," and its description begins at "a brass capped monument at the Northwest corner of the John Tedrow D.L.C. No. 54."¹ DLC stands for **donation land claim**, one of the grants of land Congress offered to early settlers of Oregon under an act of 1850.² A hundred and thirty-eight years after Thomas Hutchinson surveyed those two claims, a modern survey still found its way by them (Figure 3.2).

That is the first lesson about how land is described. The old descriptions do not go away. They are the keys to the records.

Three numbers, three jobs

Every piece of land carries three descriptions, each made for a different job.

- The **legal description** says, in the words of a deed, exactly which land is meant. It appears in deeds and surveys, and it is the key to the survey notes, the patents and the deed books.
- The **tax lot** or account number is how the county assessor tracks the land for taxes. It is the key to the assessor's maps and records.
- The **acreage** is how big the land is, and it often comes in more than one version: the assessor's figure, a surveyor's figure, and the figure in an old patent.

Write all three in your log once, and go on. This step is useful, but it is not where the history starts.

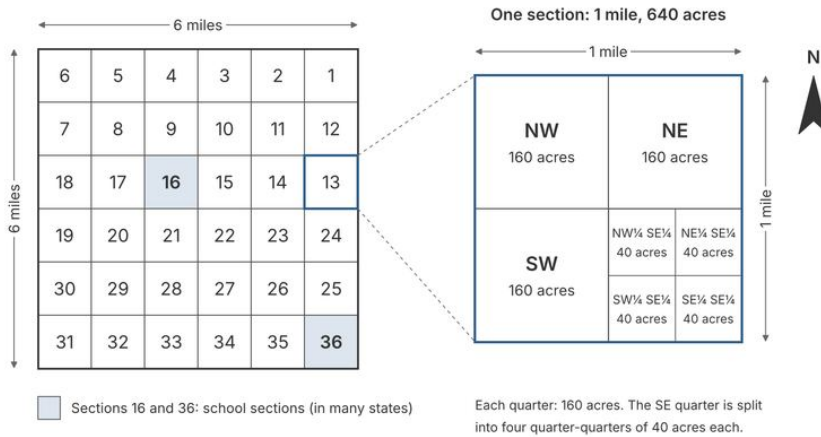
Where to find them

- Your deed gives the legal description.
- Your property tax statement gives the account number, usually the map and tax lot, and the acreage the county taxes.
- The county assessor's online property search gives all three for most land. In Polk County it is called Property Search Online; in Benton County, the Property Account Search. Chapter 25 lists both.
- ORMAP, Oregon's statewide tax lot map, shows every county's tax lots in one viewer.³
- For counties outside Oregon, the national directory at publicrecords.netronline.com lists assessor and recorder websites.

Township, range and section

Most federal land in the West and South was measured on a grid of squares under a plan that began with the Land Ordinance of 1785.² The grid covers major portions of 30 southern and western states, though not Texas.⁴ It starts from a **principal meridian**, a north-south line, and a **base line**, an east-west line, which cross at a fixed point. Oregon's survey started on June 4, 1851, at a point on a ridge in what are now Portland's West Hills. The Willamette Meridian and base line that run from that point were chosen to survey all of what is now Oregon and Washington.⁵

A township, its 36 sections, and the parts of a section



Numbering follows the federal statute (43 U.S.C. 751): Section 1 in the northeast corner, then west and east in turn to Section 36. Real sections vary in size.

Figure 3.1. A township, its 36 sections and the parts of a section. Sections are numbered from the northeast corner, back and forth like a plowed field, so Section 1 and Section 36 sit in opposite corners. A quarter section is 160 acres, and a quarter of a quarter is 40. Sections 16 and 36, shaded, were the school sections in Oregon and many other states. *Drawn for this guide.* Numbering follows the federal law for the rectangular surveys, 43 U.S.C. 751.

From that starting point the land is divided into **townships**, squares 6 miles on a side. A township is named by counting. Township 9 South is the ninth row of townships south of the base line, and Range 6 West is the sixth column west of the meridian. Each township holds 36 **sections**, each about a mile square, or 640 acres.⁶ The sections are numbered from the northeast corner, back and forth across the township, so that Section 1 and Section 36 sit in opposite corners (Figure 3.1).⁷

Real sections are seldom perfect. On the 1855 plat of the farm's township, section lines that should each be 80 chains, a mile, measure 79.87, 80.07 and 80.33 chains.⁸ When a record gives an acreage, use the record's figure rather than the ideal 640.

A section divides into four **quarter sections** of 160 acres, named by direction (the northeast quarter is written NE¼), and each quarter into four quarters of 40 acres. Read a description from the end back to the beginning. "The SE¼ of the NW¼ of Section 33, Township 9 South, Range 6 West, Willamette Meridian" means: find the township, then Section 33, then its northwest quarter, then the southeast 40 acres of that quarter.

Lots and claims: when the grid was not empty

In Oregon, many settlers arrived before the surveyors. Donation land claims were laid out to fit the settlers' farms, not the grid, so they cut across section lines. Where a claim line and a section line left a scrap of land between them, the surveyors numbered the scrap as a small "lot."⁹ A description that names "Gov't Lot 1" is naming one of those scraps, and the lot number is the key to how it left federal hands.

Metes and bounds

Some land cannot be described by quarters. A claim, a lot along a river, or a parcel split off by a later survey is described by **metes and bounds**: a starting point, then a series of compass bearings and distances around the edge until the line comes back to the start. The 1993 survey of the tree farm does it this way. From the brass cap at the Tedrow claim's corner, its description runs "thence along the north claim line S 89°46'39"E 324.59 feet to a 1/2" iron pipe," and on around the land.¹ Read each bearing as directions for a walk. Face south, turn 89 degrees and 46 minutes toward the east, which is almost due east, and walk 324.59 feet.

*"thence along the north claim line S 89°46'39"E
324.59 feet to a 1/2" iron pipe"*

Partition plat of the tree farm's main tract, 1993

Texas, Hawaii, and the eastern states from Maine to Georgia, with Kentucky, Tennessee and West Virginia, were never surveyed on the federal grid.⁴ Land there is described by metes and bounds from the start, and the federal land records described in Chapters 6 and 7 do not cover it.

Reading an Oregon tax map number

Oregon tax maps are numbered by township, range and section, so a tax lot number already contains half a legal description. On the 1993 survey, the tree farm's county map is numbered 9-6-33: Township 9, Range 6, Section 33.¹

Letters after the section number name smaller pieces of the section. The first letter names a quarter section of 160 acres, and a second

letter names a quarter of that quarter, 40 acres.¹⁰ In the lettering the U.S. Geological Survey uses for locations in Oregon, A is the northeast quarter, B the northwest, C the southwest and D the southeast. The county's own map index shows its lettering on a drawing of the section, and it has the final word. The last five digits of the number are the tax lot itself. A city handout in Columbia County gives this example:¹¹

Part of the number	What it means
3N2W	Township 3 North, Range 2 West
12	Section 12
DB	The map page: read with the Geological Survey's lettering, the northwest quarter (B) of the southeast quarter (D)
01600	Tax lot 1600

Written out, that is 3N2W12-DB-01600. The same number may be written in slightly different ways, with or without dashes, letters and leading zeros, but the parts come in the same order.

A CAUTION A tax lot is a unit for collecting taxes. It is not a legal description, and tax lot lines are not survey lines. The acreage on a tax statement is the county's figure for taxes, not a measurement. Looking these numbers up is for finding records. It does not settle who owns what or where a line runs.

On the tree farm The farm's legal descriptions sit in its deeds and in the 1993 survey, which describes the main tract as lying "in the South 1/2 of Section 28, and in Section 33, T9S, R6W, W.M., Polk County, Oregon."¹ The county taxes the farm as four tax lots, assessed at 211 acres. When the old claim and patent lines are laid over the county's map layers, the pieces add up to about 207 acres. The difference is a reminder that map layers are not surveys.¹² In the farm's northeast corner lies a 6.93-acre scrap of Section 33 that no claim covered. The claim plat numbered it as a lot, and the 1993 survey still labels it "Gov't Lot 1." Chapter 7 tells how it probably left federal hands, and why "probably" is the right word.¹³

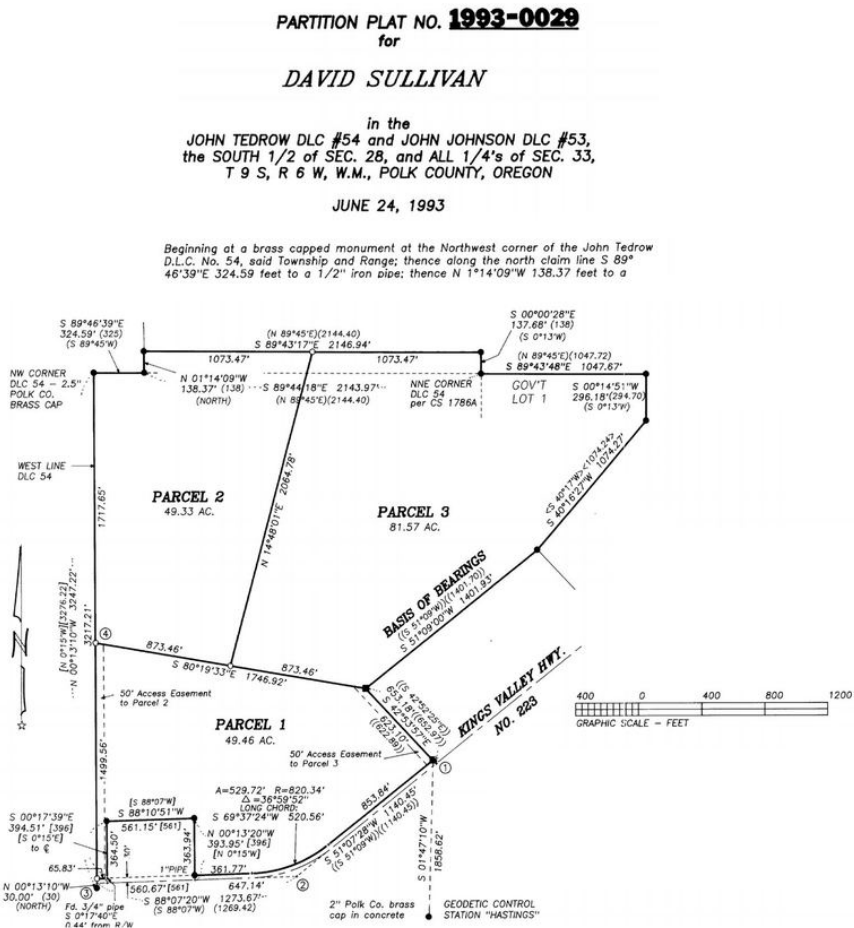


Figure 3.2. A modern survey that still uses the 1855 claims. The title says the land lies “in the John Tedrow DLC #54 and John Johnson DLC #53.” The surveyor’s description starts at a brass cap set at the Tedrow claim’s northwest corner, at the upper left of the drawing, and “Gov’t Lot 1” is at the upper right. The numbers along the lines are bearings and distances in feet. *Partition Plat No. 1993-0029, June 24, 1993 (detail: the title, the opening of the surveyor’s description and the drawing; the certificates and signatures are left out).* Polk County Surveyor, survey CS 12769.



Detail of Figure 4.1.

CHAPTER 4

The four studies behind the approach

Over Alsea in 1948, the survey lines of the 1850s still showed.

On June 29, 1948, an airplane photographed the town of Alsea, in the Oregon Coast Range. The photograph is crossed by long straight lines: roads, fences and field edges. Many of them follow the section lines and land claim lines that surveyors ran across the valley in the early 1850s, still plain to see a century later (Figure 4.1).¹ A straight edge in the trees usually has a reason. Finding the reason is the kind of work this guide teaches.

The approach in this guide comes from four studies by Bob Zybach. Each one shows one part of the work especially well. They covered whole valleys and a mountain range; this guide applies the same habits to a single property. All four are free to read online, and the notes give the addresses.



Figure 4.1. Alsea from the air, June 29, 1948. Look for the long straight lines of roads, fences and field edges. Many follow section lines and land claim lines of the early 1850s, still visible a century later. From Bob Zybach, *The Great Fires* (2003), Figure 2.03. Photograph courtesy of the University of Oregon Knight Library.

Oral histories: Soap Creek Valley, 1999

Using Oral Histories to Document Changing Forest Cover Patterns: Soap Creek Valley, Oregon, 1500-1999 was a master's thesis at Oregon State University about a valley north of Corvallis. It was built on recorded interviews. The people chosen had first-hand knowledge of the valley and had lived or worked there a long time, and the oldest were interviewed first whenever possible. Interviews were often held at the places where events had happened, with maps, aerial photographs and old objects on hand to prompt memory. When those memories were tested against documents, the study found, in most instances,

“striking degrees of consistency in detail.”² It is the model for Chapter 18, on interviews. Start with pages 18 to 62.

Maps and surveys: Coquille Trails, 2013

Coquille Trails: Early Historical Roads and Trails of Ancestral Coquille Indian Lands, 1826-1875, written with Don Ivy for the Coquille Indian Tribe, set out “to locate and document, so near as possible, the exact locations of the earliest historical trails, named landmarks, private landowners, and important events.”³ Near Port Orford the authors compared an 1875 township survey map, a geological map of the 1890s and a 1941 ownership map of the same ground. All three are drawn on the same survey lines, so they line up. On their own maps the authors drew roads and trails that still exist as solid lines, and routes that were predicted, or documented but no longer mapped, as dotted lines. Then they went to look, and visited about 80 percent of the study area.⁴ It is the model for Chapter 11, on maps. Start with Volume I, Part 1, pages 7 to 16.

Land-based evidence: Tiller, 2011

The *Tiller Pre-Contact Reference Condition Study* set out to describe the forest of the South Umpqua headwaters as it stood 200 years ago. Its four overlapping steps were “archival research and literature review, predictive field map construction, ‘ground-truthing’ the predictive map (field research), and synthesis.”⁵ From the records, Zybach marked where old ridgeline trails met and where camps and springs were named, as likely places to find stone tools or plants that people had tended. Then he visited them. The report says such evidence “was readily found at each of these exact locations.”⁶ It is the model for Chapter 17, on reading the ground. Start with Chapter II, pages 8 to 37.

All four kinds of evidence together: The Great Fires, 2003

The Great Fires: Indian Burning and Catastrophic Forest Fire Patterns of the Oregon Coast Range, 1491-1951, a doctoral dissertation at Oregon State University, weighed travelers’ journals, survey notes, maps, photographs and living memory across a whole mountain range. Its rule is the rule of this guide: “research questions are answered based on the ‘weight of evidence’ from multiple sources.”⁷ It is the model for

Chapters 19 and 21, on putting the pieces together. Start with Chapter 2, from page 52.

What the four have in common

Each study checked one kind of evidence against another: maps against the ground, memories against documents, journals against surveys. Each went outdoors or to the people. And each said plainly what was known, what was inferred, and what was not yet known. Those habits are the method of this guide.

On the tree farm The Soap Creek study reaches into the farm's own history. Its appendix lists 45 people by name from the Grand Ronde reservation census rolls of 1860 and 1888. Twenty-seven appear under the heading "Chapanafa Nation," which the study explains as the Marys River people, and 18 under "Luckymute Nation," the Luckiamute, the people of the river that runs past Pedee.⁸ With the Luckiamute leaders who signed the treaty of 1855 (Chapter 16), those names are as close as the records yet come to the people who lived along this stretch of the river before 1856. No record found so far ties a named person to the farm itself.

How the site Your Land History fits with this guide

The farm's survey notes and maps were gathered in a single day.

As the preface tells, the survey notes and maps for the tree farm near Pedee were gathered by computer in a single day in October 2026, and the old aerial photographs soon after. The website Your Land History, at YourLandHistory.org, grew out of that work. For any piece of Oregon land, it does the part of the research a computer can do on request, and it writes what it finds in plain English.

What the site does

You start on the front page by saying where your land is: by township, range and section; by county and tax lot; or by street address. If you have none of those, you can find the land on a map (Figure 5.1). The site then gathers the records it can fetch on your behalf, among them the federal survey plats, field notes and patents for your township; the geology, soils, elevation and streams; rainfall and temperature since 1895; topographic maps; and modern aerial photographs. It assembles them into a report that opens with the land as it is today and then tells its story in order, in the layers listed in Chapter 1. The record behind every paragraph is one click away. Anyone with a report's link can open it, and nobody can find it without the link.

What the site cannot do

Much of a land's history cannot be fetched by a computer. The county deed books before the online index begins, the files behind the patents at the National Archives, most of the old aerial photographs, estate files, family papers, the walk on the ground and the memories of people who know the place all need a person. Some records the site does fetch, such as handwritten survey notes, still need a person to

Your Land History [Sample report](#) [How this works](#) [The books](#) [My land](#) [Larger text](#)

Every piece of land has a story.

This is how you find yours.

Where is your land?

☒ Legal description
 ☐ Tax lot
 ☐ Street address

Township Example: 9 South

Range Example: 6 West

Section Example: 33

Part of the section (optional)
 the whole section of the whole section

or a claim or lot, as your deed writes it
 Example: Claim 54, or Lot 3

Willamette Meridian. All of Oregon is surveyed from it.

Or paste the description from your deed

[Don't have any of those? Find it on a map.](#)

[See a sample report: the Sullivan tree farm near Pedee, Oregon.](#)

What a report can show you

- [The government's first survey map of your township, with your land on it.](#)
- [The trees the surveyors marked at your land's corners, often in the 1850s.](#)
- [Who first got the land from the United States, and when.](#)
- [The people who lived here before the surveyors, and the treaty that ceded the land.](#)

Your Land History is a project of Dr. Bob Zybach and Dr. Dave Sullivan. The research method comes from Oregon Websites and Watersheds; the idea began in the library of Oregon Advocates for School Trust Lands.

Every piece of land has a story. This is how you find yours.

[How this works](#)
[The books](#)
[Everything we can look for](#)
[About](#)

YourLandHistory.org · A working prototype, October 2026.

Figure 5.1. The front page of Your Land History. The page asks one question, “Where is your land?”, and offers three ways to answer it: a legal description, a county and tax lot or account number, or a street address. For anyone who has none of those, a map is offered just below. *YourLandHistory.org, version 1.1, October 2026.*

read them closely. And every history needs judgment that no search can supply: which record to trust when two disagree, and how sure to be.

Using the two together

Start with the site, and let it do the first evenings of gathering. Then use this guide in two ways. Use it to understand what the site hands you: what a plat is, how to read a bearing tree, why a patent is not today’s title. And use it to go after everything the site cannot fetch. Near its end, every report on the site has a section called “If you’re hooked: what to do next.” Chapter 24 of this guide is the long version. A companion book, *Your Land History: The User’s Manual*, explains every screen of the site.

On the tree farm The site's public sample report is the same farm, the Sullivan tree farm near Pedee, with its sections in the order Chapter 1 describes. What the site cannot do for the farm is the farm's own list of next steps: trace the deeds from the patents of 1877 to the sale of 1989; read the claimants' sworn statements in the donation land claim files; order the homesteader's case file from the National Archives; look at the 1934 drawings of the John Johnson house at Pedee; walk the old corners and house sites with the survey notes in hand; and talk to the people who know the place.¹ That list is the work of the rest of this guide.

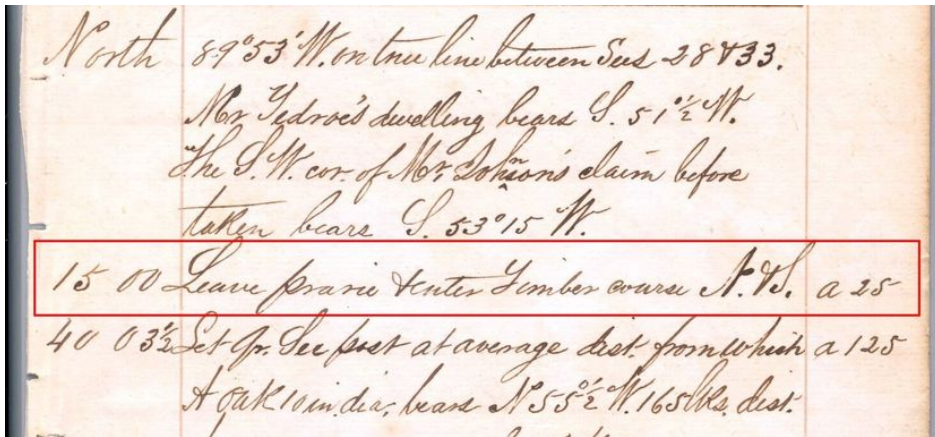
PART II

The sources

Part II takes the sources one kind at a time, in the four groups Chapter 1 describes: written documents, images, the land itself, and living memory. Each chapter says what a source tells you, where to find it, how to read it and what it costs, and shows it at work on the tree farm.

Written documents

Written documents name people and give dates. The five chapters that follow take them in rough order of time, from the first survey to the newspapers and the gravestones.



Detail of Figure 6.1.

CHAPTER 6

The first survey: what the surveyor wrote

In 1854 a surveyor set a post “in dooryard,” 26 feet from a house.

In March 1854 a deputy surveyor named Daniel Murphy set a post halfway down the west side of Section 33, in the hills just west of Pedee. It stood “in dooryard,” 39 links (about 26 feet) from “Mrs Gillam’s dwelling.”¹ The government had not yet issued that family a patent, but they were already living on the land, and the government’s own surveyor wrote down where their house stood.

Before the United States granted land to anyone, it sent surveyors to measure it. For most land in the western states, their **field notes** are the earliest written description of the ground. They are free and online, and an evening is enough to learn to read them.

How the survey was run

The survey worked from the outside in. In the tree farm's township, surveyors ran the outer lines of the 6-mile square in 1852 and 1853.² Then a deputy surveyor divided the township into sections. Murphy ran the lines around what is now the Sullivan tree farm from March 13 to 16, 1854, and Figure 6.1 is one page of his notes.³ At every section corner he set a post, and he set another at each **quarter corner**, halfway along a section line.⁴

He measured with a **chain**, 66 feet long and divided into 100 **links**, so a link is just under 8 inches (7.92 inches). Eighty chains make a mile, and a section is about 80 chains on a side.⁴

The settlers' claims came next. In Oregon many families had chosen their land before the surveyors arrived. Each **donation land claim**, a free grant to an early settler under an act of 1850, got a survey of its own (Chapter 7). In the farm's township that work fell to Thomas H. Hutchinson in the summer of 1855.⁵ Land in western Oregon may need both sets of notes, for the section lines and for the claim lines.

Texas, Hawaii, and the eastern states from Maine to Georgia, with Kentucky, Tennessee and West Virginia, were never surveyed this way (Chapter 3).⁶

What it tells you

A surveyor's notes follow the line as he walked it. Every few chains he noted what he met: a creek, a trail, a fence, a field, a house, the edge of a prairie or of timber.⁷ At each corner he described the post and the trees around it, which is how Figure 6.2 could be drawn. At the end of each mile he summed up the land, its soil, its timber and its undergrowth. The printed instructions of 1855 asked for soil to be rated "first, second, or third rate" and for trees to be listed "in the order in which they predominate."⁸

The page in Figure 6.1 shows that summary for the mile between Sections 28 and 33. Murphy counted 15 chains of prairie on the line and called the "Residue Timber": "Fir Maple & oak," with an undergrowth of "Hazel cherry & Fern." He rated the soil "2d Rate."⁹

Claim surveys add a closing paragraph about the claim as a whole. On the Tedrow claim, Hutchinson wrote in August 1855 that "the other half is covered with fir & oak timber of good quality" and that "the Luckiamute river runs through the south part." He added that "there is but little improvement on the claim" (Figure 6.3).¹⁰

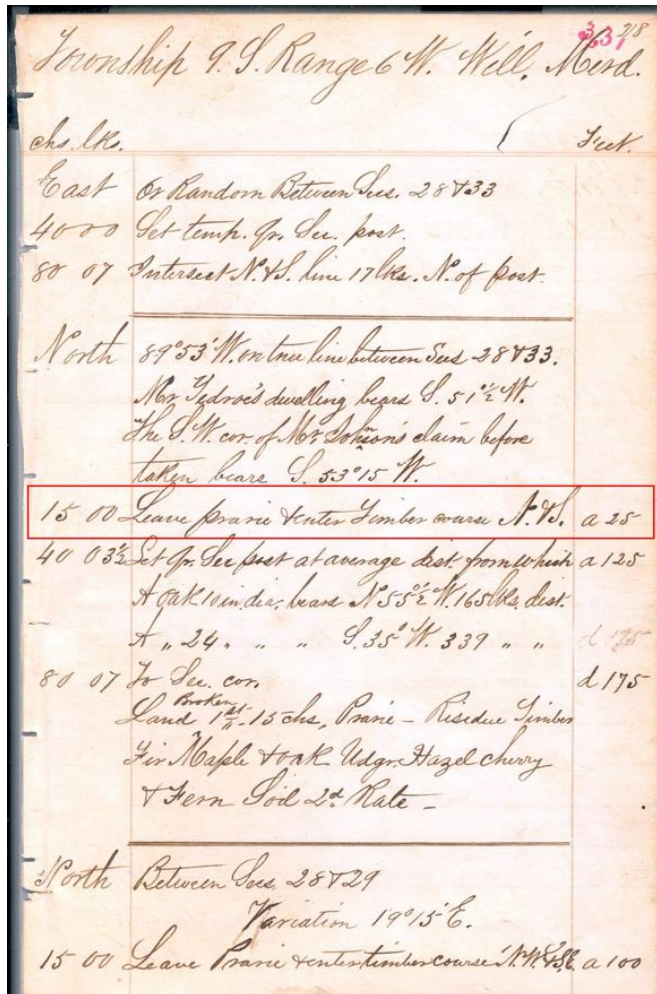


Figure 6.1. A page of Daniel Murphy's field notes, March 1854. The outlined entry, 15 chains along the line between Sections 28 and 33, reads "Leave prairie & enter Timber." Just above it Murphy sights "Mr Tedroe's dwelling"; below it he sets a quarter-section post and sums up the mile. Daniel Murphy, field notes of Township 9 South, Range 6 West, Willamette Meridian, 1854. Bureau of Land Management, Oregon land records, volume R0029, page 331. Public domain. Outline added.

Settlers' houses are the prize. The same instructions told surveyors to take bearings on a dwelling in sight of the line from two points along it.⁸ Murphy's page reads "Mr Tedroe's dwelling bears S. 51½° W."⁹ A sighting like that, from a corner that can still be found, lets you work out roughly where a house of 1854 stood.

"Mr Tedroe's dwelling bears S. 51½° W."

Daniel Murphy, field notes, Township 9 South, Range 6 West, March 1854

Sullivan Tree Farm: bearing trees at the survey corners on and near the property lines

Red: the farm's tax lots 200, 206, 207 and 304. Green dots: bearing trees, from Murphy's 1854 section-line notes and Hutchinson's 1855 claim notes. 1k = links (1 link = 0.66 feet). DLC = donation land claim. Bearings run from the corner to the tree. The 1,203-link tree at C7 is unusually far; it is plotted as written.

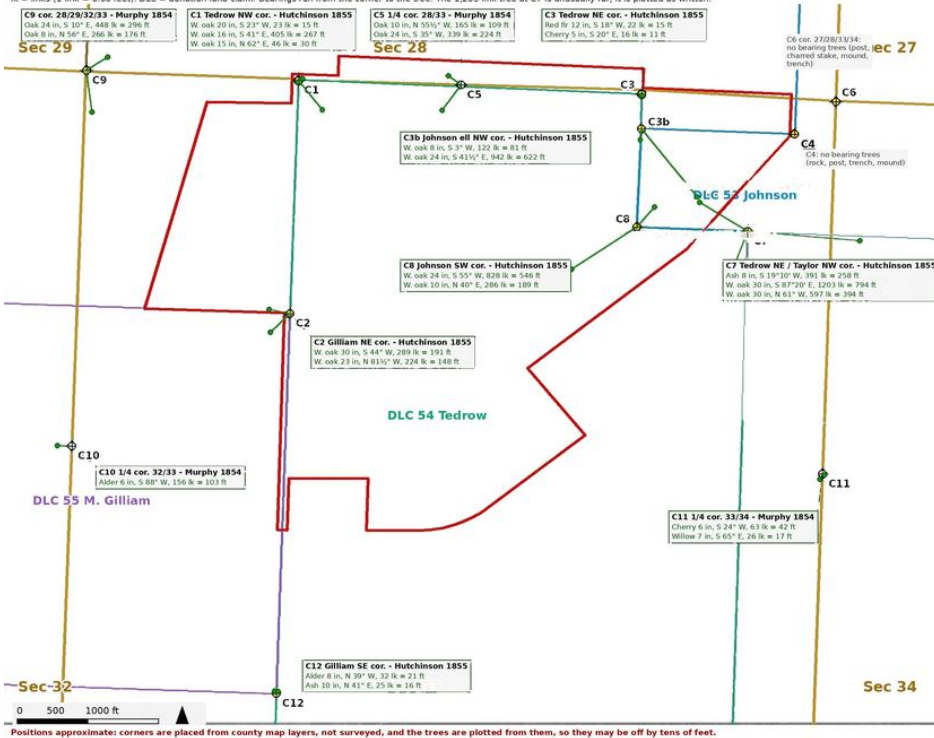


Figure 6.2. The bearing trees of 1854 and 1855 on and near the tree farm. Each dot is one tree the surveyors recorded, plotted from its corner by the bearing and distance in their notes. Count the oaks: 15 of the 23. Positions are approximate, and most of these trees are surely long gone. *Plotted from the field notes of Daniel Murphy (1854) and Thomas H. Hutchinson (1855), BLM volumes R0029 and D0022, on Polk County map layers. After A History of the Land (2026), Figure 6, with the 1855 house sites and the air photograph underneath left off.*

Where to find it

For Oregon and Washington, start with the land records site of the Bureau of Land Management's Oregon State Office. Choose your township and range. Its survey index lists every plat and every set of field notes for that township, with dates, and the notes open as page scans.¹¹ Do not stop at the first survey. The index for the farm's township lists 60 field-note records, from the outer lines of 1852 to a resurvey of 2020.¹²

For every public-land state, the BLM's General Land Office Records website holds survey plats and field notes as well as millions of land patents.¹³ Chapter 25 gives both addresses.

D0022 p.351 — Hutchinson 1856: DLC 54 description and dates

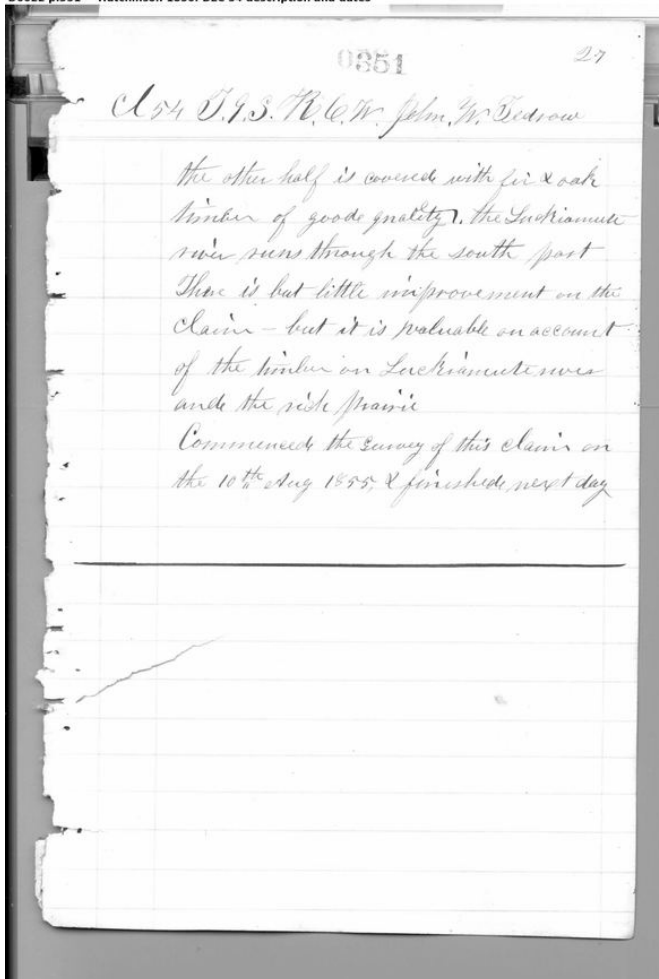


Figure 6.3. The last page of Thomas H. Hutchinson's survey of the Tedrow claim, August 1855. Read down for "fir & oak timber," "but little improvement" and "the rich prairie," then the date the survey began, "10th Aug 1855." The label printed above the page says 1856, the year in the BLM's index; the notes say 1855. *Thomas H. Hutchinson, donation land claim field notes, Township 9 South, Range 6 West. Bureau of Land Management, Oregon land records, volume D0022, page 351. Public domain.*

How to read it

Download the notes for every line around your sections, and read them with a pencil in hand.

The layout. On most pages the left column gives the distance along the line in chains and links, and the wide column beside it says what was there. On Murphy's page, "15 00" means 15 chains and no links: 990 feet from the corner where the line began.⁹

The units. Multiply chains by 66 to get feet, and links by 0.66.

Bearings. A bearing gives a direction as an angle measured from north or from south. Read "S 51½° W" as: face south, then turn 51½ degrees toward the west. A line that reads "Variation 19°15' E." records

how far the compass needle pointed east of true north where the surveyor stood. Murphy's page has one.⁹

Random and true lines. Many lines were run twice. On the page in Figure 6.1, Murphy first ran a trial line east "on Random," set a temporary quarter-section post, and came out "17 lks. N. of post" at the far corner. Then he turned and ran back west on the "true line," setting the permanent quarter-section post "at average dist."⁹ The description you want is the one on the true line.

Short forms and dittos. "Qr. Sec." is quarter section, "cor." is corner, "dia." is diameter, "chs." and "lks." are chains and links, and "Udgr." is undergrowth. Ditto marks repeat the words above them: Murphy's second tree at the quarter corner is written almost entirely in dittos (Figure 6.4).⁹ After "Leave prairie & enter Timber" he wrote "course N & S," the direction the edge of the timber ran where he crossed it, as the instructions asked.⁸

The handwriting. Learn the writer's letters from words you already know, such as the township heading. Copy every word as written, misspellings included ("Tedroe," "prarie"), with the volume and page.¹⁴

Bearing trees. At each corner the surveyor blazed nearby **bearing trees**, also called witness trees, and recorded each one's kind, diameter, bearing and distance from the corner (Figure 6.4). The first tree at the northwest corner of the Tedrow claim was a white oak, 20 inches through, "S 23° W, 23 links." From the corner, face south, turn 23 degrees toward the west and walk 23 links (about 15 feet) to the tree. From the tree, reverse it: the corner lies N 23° E, 23 links away.¹⁵ Where no tree stood near, the notes describe a post, a charred stake or a rock, a trench and a mound, as at two corners on and near the farm.¹⁵

What it costs

Nothing. The index, the plats and the scanned notes are free to search, view and download.¹¹

A CAUTION The notes describe what the surveyor saw along the line he walked, not what lay between the lines.¹⁶ And the trees a surveyor marked were the ones handy to his corner. A count of bearing trees is a strong clue to the old forest, not a measurement of it.¹⁷ Read the trees beside the summary of the mile. Murphy's two quarter-corner trees on the line between Sections 28 and 33 were oaks, yet he listed the timber of that mile as "Fir Maple & oak," fir first.⁹ Fir was probably the commonest tree in that timber.

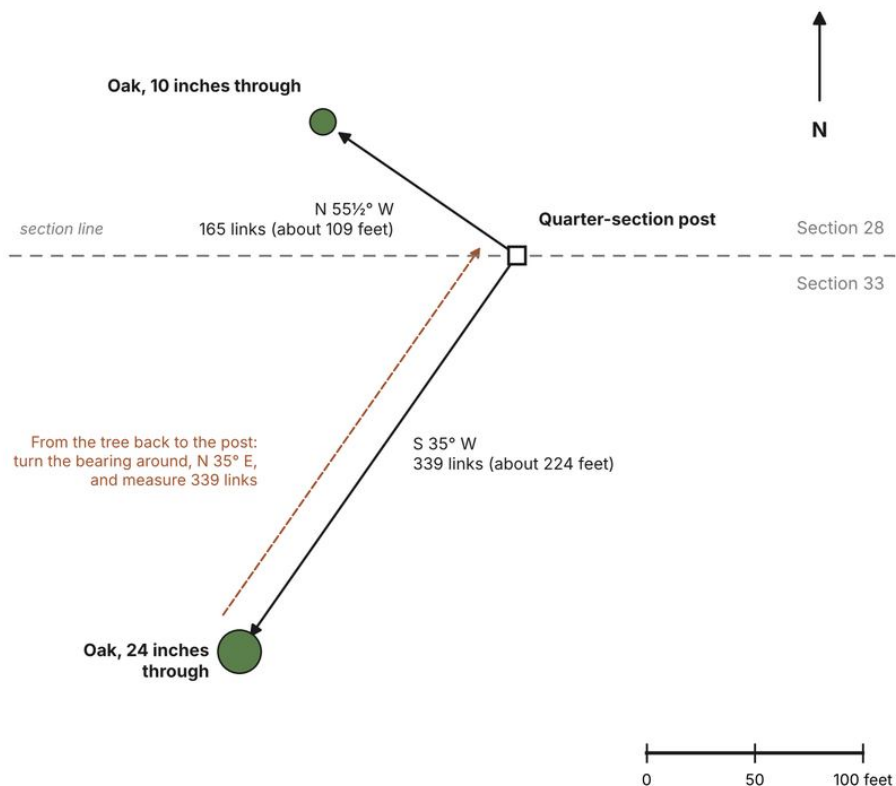
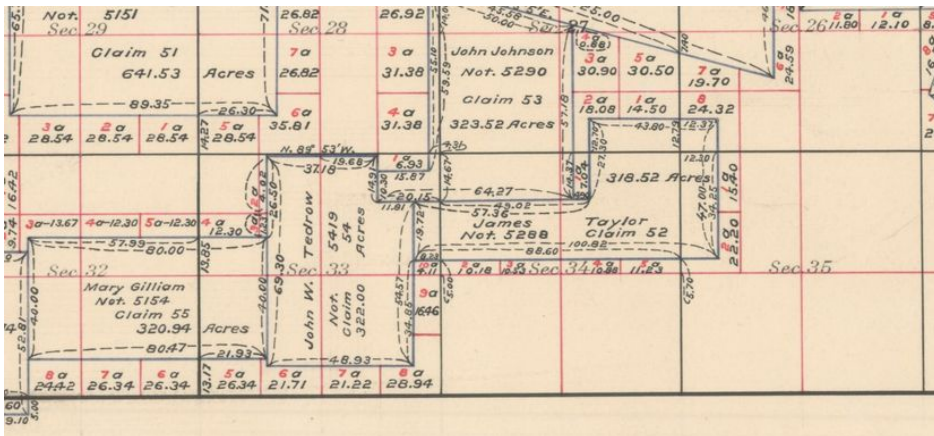


Figure 6.4. How a corner is found from its bearing trees. At the quarter corner on the line between Sections 28 and 33, Murphy recorded two oaks. One, 10 inches in diameter, stood N 55½° W, 165 links (about 109 feet) from the post; the other, 24 inches, stood S 35° W, 339 links (about 224 feet). Find either tree or its stump, turn its bearing around (S 55½° E or N 35° E), and measure the same distance back to the corner. *Drawn for this guide from Daniel Murphy's field notes, 1854, BLM volume R0029, page 331.*

On the tree farm Of the 23 trees that Murphy and Hutchinson marked at 13 corners on and near the farm, 15 were oaks: 11 white oaks and 4 noted only as “oak.” The rest were 2 each of ash, alder and cherry, 1 willow and 1 “red fir,” the surveyors’ name for Douglas-fir.¹⁸ Count only the 16 trees at corners on or beside the farm’s own lines, and the pattern holds: 13 oaks and one fir. Three of the oaks were 30 inches through, and one stood 546 feet from its corner.¹⁸ Today the same ground is almost entirely Douglas-fir plantation. Figure 6.2 shows where the trees stood.

The notes also check themselves. Fifteen chains (990 feet) along the line between Sections 28 and 33, Murphy wrote “Leave prairie & enter Timber.” His summary of that mile counts the same 15 chains of

prairie.¹⁹ His two sightings on the Tedrow dwelling, taken from two different points, agree within about 2 degrees.²⁰ Nobody has yet walked the corners with the notes in hand, looking for the oaks or their stumps.²⁰



Detail of Figure 7.1.

CHAPTER 7

How the land left the government

Three homestead entries were cancelled before a patent in 1900.

Along the north edge of the Sullivan tree farm runs a strip of land about 138 feet wide.¹ Three homestead entries were made on the tract it belongs to, in 1881, 1886 and 1887. All three were cancelled, the last in October 1894, and the federal index names no one. Then came Charles W. Pagett. On October 12, 1900, he received a patent for 104.35 acres there, and the strip passed into private hands.²

What it tells you

Every acre of public land left the government under some law, on some date, to someone. The record of that first transfer is the **patent**, the government's first deed to the land. Behind many patents is a file of sworn statements by the settler and the neighbors.³ And as the north strip shows, the tries that failed left records too.

The ways land left federal hands

Donation land claims. Oregon's earliest grants were **donation land claims**, free land for settlers under an act of Congress approved September 27, 1850.⁴ Because settlers chose their land before the surveyors came, claim lines often cut across section lines (Figure 7.1). A married couple's claim was divided between them. The patent for the Welch claim, in the same township as the farm, gives "the north half" of its 641.02 acres to Andrew J. Welch and "the south half" to "his wife the said Martha Welch," his half to his heirs and hers to hers (Figure 7.2).⁴ No new claims could be started after 1855.⁵

Homesteads and cash sales. After the donation claims came **homesteads**, under the Homestead Act of 1862, and cash sales of public land.⁶ A homestead began as an entry and ended, if all went well, with a patent. An entry could also be cancelled, like the three on the farm's north strip.²

Railroad and wagon road grants. Congress also paid for railroads and wagon roads with land.⁶ In 1866 it made a **land grant** to promote the rapid completion of two railroads in western Oregon. Much of that land was deeded to the Oregon and California Railroad Company, the O&C. In 1916 Congress took back, or **revested**, the title to about 2.9 million acres of it, because the company had broken the grant's terms. Under the O&C Act of 1937 the Bureau of Land Management (BLM) still manages the O&C lands, more than 2.4 million acres of forest.⁷ A railroad's patents sit in the federal records like anyone else's.

“sections numbered sixteen and thirty-six in every township of public lands in said State”

Act of Congress admitting Oregon, February 14, 1859

School sections. When Congress admitted Oregon as a state on February 14, 1859, it offered the new state “sections numbered sixteen and thirty-six in every township of public lands in said State” for the use of schools. Where one of those sections had already been sold or otherwise disposed of, the state was to get other land “equivalent thereto.” Oregon accepted on June 3, 1859.⁸ Many other states received similar school grants.⁶ If your land lies in Section 16 or 36 (Figure 3.1), its first private owner may have bought it from the State of Oregon, not the United States. Records of the state’s school land sales are at the Oregon State Archives.⁹ If a settler’s claim already covered the section, the state took other land instead, and the federal records will show the claim.

The file behind the patent

A patent is a single page. The file behind it may hold the settler’s own sworn statements and those of neighbors.³ For Oregon’s donation claims, those files are on National Archives microfilm M815, free to view on FamilySearch. They can settle questions no other record answers: when a couple married, which of two men with the same name held the claim.¹⁰ Homestead and cash entry case files are kept by the National Archives and ordered from it.¹¹

Where to find it

- The BLM’s General Land Office Records website has the patents, searchable by name or by township. It tells you who received each piece, when, and how many acres.¹²
- The BLM Oregon State Office’s land records site has a Historical Index for each township. It is the place to find the entries that failed and the patents that were later changed.¹²
- The Genealogical Forum of Oregon keeps an index of Oregon’s donation land claims.¹³
- FamilySearch has the donation claim files (microfilm M815) and many filmed land records.

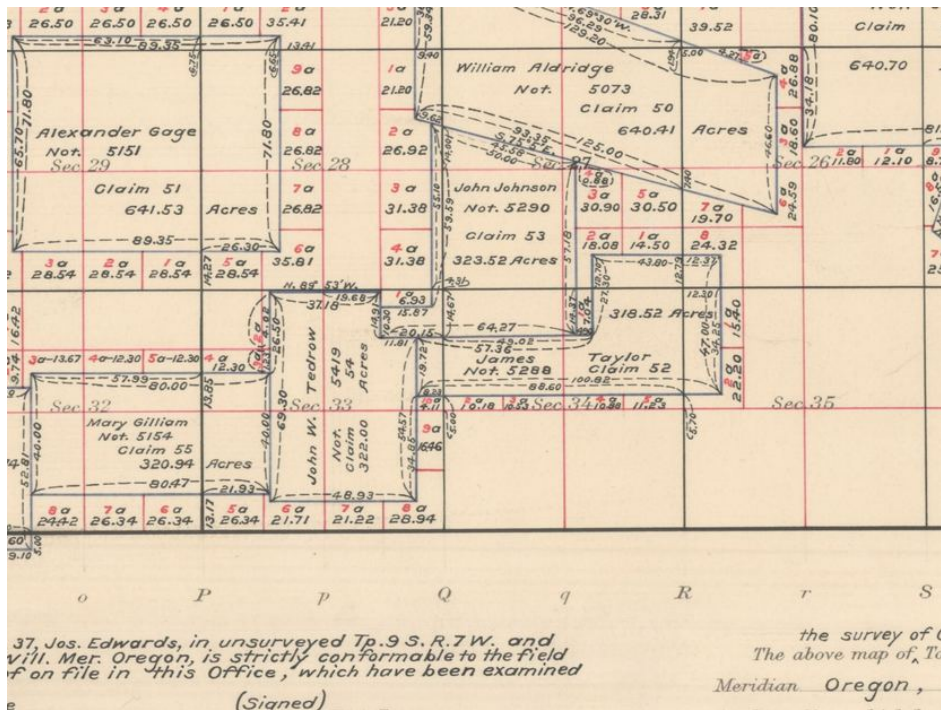


Figure 7.1. The donation land claims of Township 9 South, Range 6 West. Each claim carries its owner's name, number and acreage. Find John W. Tedrow's claim, No. 54, running up the middle, and John Johnson's, No. 53, to the northeast. The claims ignore the section lines, and the scraps left between claim lines and section lines are numbered as lots. The small lot marked 6.93 acres, just right of the top edge of the Tedrow claim, now lies in the tree farm's northeast corner. *General Land Office donation land claim plat of T9S R6W, Willamette Meridian. Bureau of Land Management, Oregon State Office. Public domain.*

- The National Archives has the homestead and cash entry case files.
- The Oregon State Archives has the records of state school land sales.

Chapter 25 gives the addresses.

How to read it

A patent names the law, the person, the land and the date (Figure 7.2). For a donation claim the land is described by metes and bounds, a starting point and then a walk around the edge by bearings and distances. The Welch patent begins “at a point two and eighty-eight-hundredths chains north of the southwest corner of said Section twelve.”⁴ Copy the certificate number and the patent number. They are the keys to the file.

Read every index entry for your township, not only the ones with your section in them. A claim can cross into a neighboring section, and an entry can describe a lot by number rather than by quarter. Watch for the words “cancelled,” “reconveyed” and “revested.” They mean the land did not stay where the first entry put it.¹⁴

To check whether your land was school land, look at the section number. Sections 16 and 36 sit in opposite corners of the township (Figure 3.1).

What it costs

The BLM’s patent records and indexes are free, and so is the Genealogical Forum’s claim index. The claim files on FamilySearch need only a free account. A case file from the National Archives is ordered for a fee. An image of a patent that has not been scanned can be requested from the BLM Oregon State Office’s public room.¹⁵

A CAUTION These records show only the first transfer. Everything after it is in the county (Chapter 8). A patent is a historical record. It tells you who first received the land from the government, not who owns it now.¹⁶

On the tree farm The farm’s 211 acres left federal hands under three different laws, by five patents and probably a sixth.¹⁷ About 150 acres lie in the Tedrow claim, No. 54, whose patent was issued on June 14, 1877. About 12 acres on the east side lie in the Johnson claim, No. 53, patented the same year.¹⁷ Thirty-one acres on the west side went to the O&C Railroad by patents of January 30, 1897, and November 29, 1899. The northeast lot, the 6.93-acre scrap that no claim covered, appears to have gone to the railroad too, by O&C patent No. 2 of July 12, 1871. “Appears” is the right word. The federal index says that patent was

Certificate No. 4345

4-1040-R.

The United States of America,

To all to whom these presents shall come, Greeting:

WHEREAS, there has been deposited in the General Land Office of the United States a Certificate numbered 4345 of the Register and Receiver at Oregon City, Oregon, whereby it appears that under the provisions of the Act of Congress approved the 27th day of September, 1850, entitled "An Act to create the office of Surveyor General of the Public Lands in Oregon and to provide for the survey and to make donations to settlers of the said public lands," and the legislation supplemental thereto, the claim of Andrew J. Welch and his wife Martha Welch, notification No. 5075, has been established to a donation of one section or six hundred forty acres of land, and that the same has been surveyed and designated, as claim No. 41 situate in Sections eleven, twelve, thirteen and fourteen in Township nine south of Range six west of the Willamette Meridian, Oregon, according to the Official Plat of Survey, returned to the General Land Office by the Surveyor General, more particularly bounded and described as follows: Beginning at a point two and eighty-eight-hundredths chains north of the southwest corner of said Section twelve; thence, running south eighty-eight degrees east sixty-nine and fifty-seven-hundredths chains; thence, south one degree twenty-four minutes west eighty and twenty-hundredths chains; thence, north eighty-eight degrees west forty and twenty-two-hundredths chains; thence, north fifty-one degrees thirty minutes west sixteen and forty-six-hundredths chains; thence, south twelve degrees forty-five minutes west nine and eighty-four-hundredths chains; thence, north eighty-eight degrees west twenty-six chains; thence, north one degree twenty-four minutes east eighty chains; thence, south eighty-eight degrees east eleven and six-hundredths chains to the place of beginning containing six hundred forty-one and two-hundredths acres:

NOT KNOWING, That the UNITED STATES OF AMERICA, in consideration of the premises, and in conformity with the provisions of the Act aforesaid, HAS GIVEN AND GRANTED, and by these presents DOES GIVE AND GRANT, unto the said Andrew J. Welch, and to his heirs the north half of the tract of land above described, and unto his wife the said Martha Welch, and to her heirs the south half of the land above described; TO HAVE AND TO HOLD the said tract, with the appurtenances unto the said Andrew J. Welch and his wife Martha Welch, and to their heirs and assigns forever, their respective portion as aforesaid.

IN TESTIMONY WHEREOF, I, Warren G. Harding,

President of the United States of America, have caused these letters to be made

Patent, and the seal of the General Land Office to be hereunto affixed.

GIVEN under my hand, in the District of Columbia, the THIRTY-FIRST

(SEAL)

day of MAY In the year of our Lord one thousand

nine hundred and TWENTY-TWO and of the Independence of the

United States the one hundred and FORTY-SIXTH.

By the President

By

Secretary,

Recorder of the General Land Office.

RECORD OF PATENTS; Patent Number 865382

4-1040

Figure 7.2. A patent, the government's first deed. This one passes the Welch donation claim, 641.02 acres in the tree farm's township, to Andrew J. Welch and his wife Martha: "the north half" to him and "the south half" to her. Find the act of September 27, 1850, near the top, and the patent number, 865382, at the bottom left. The patent is dated May 31, 1922. For most Oregon patents of the 1870s only the index entry is online, not an image like this one. Bureau of Land Management, General Land Office Records, patent 865382. Public domain.

partly reconveyed in 1887 and partly revested in 1916 without saying which land, and nobody has yet looked at the patent itself.¹⁸ Only the 7-acre north strip was homestead land, so the management plan's "homesteaded around the turn of the century" was wrong for about 97 percent of the farm.¹⁹ The farm lies in Sections 28 and 33, so none of it was ever school land.

Deeds, tax rolls and the chain of owners

Someone sold this land and kept rights. Volume 27 will say who.

When the main tract of the Sullivan tree farm was surveyed in 1993, the surveyor listed three old rights that still went with the land. The first reads: “Reservation of mineral rights, water rights, and rights-of-way per Vol. 27, Page 70, Polk Deed Rec.” It touches only the part of the farm in Section 28 (Figure 8.1).¹ Somebody, at some time, sold that land and kept those rights back. The survey does not say who or when. The deed in Volume 27 of the county’s deed records, at page 70, will.

Deeds are the thread that runs from the first patent to today. Each one names a seller and a buyer, and each points back to the one before it.

What it tells you

A **deed** records the passing of land from one owner to the next. The seller is the **grantor** and the buyer the **grantee**.² Along the way deeds mention prices, family relationships, buildings, roads, water rights, timber sales and rights the seller kept back.² A right kept back by a seller is a **reservation**. A right that lets someone else use the land, such as a road, a spring or a power line, is an **easement**.

The county assessor’s records tell a different part of the story. They give the land’s present description, its acreage, its recent sales, and the year the assessor believes each building was built. Old assessment rolls list who paid tax on which land, year by year, and they can fill gaps in a chain of deeds.³

EXISTING EASEMENTS

(not plotted – no specific location in deed record)

1) Reservation of mineral rights, water rights, and rights-of-way per Vol. 27, Page 70, Polk Deed Rec. (effects only portion in Section 28)

2) Access to an existing spring per Vol. 138, Pg. 76, said Deed Rec. (effects portion in NE 1/4, Sec 33)

3) 20' wide powerline easement adjacent to north R/W of Hwy 223 per BOR 166, Pg 552. (effects portion of DLC #54 in SE1/4, NE1/4, Sec 33)

Figure 8.1. Three old rights listed on a modern survey. The 1993 survey of the tree farm cites each one by book and page: a “Reservation of mineral rights, water rights, and rights-of-way” in Volume 27, page 70; “Access to an existing spring” in Volume 138, page 76; and a 20-foot powerline easement in Book of Records 166, page 552. None is drawn on the map, because the deeds give “no specific location.” Each book and page is a door into the county’s deed records. *Partition Plat No. 1993-0029, June 24, 1993 (detail, “Existing easements”). Polk County Surveyor, survey CS 12769.*

“Reservation of mineral rights, water rights, and rights-of-way per Vol. 27, Page 70, Polk Deed Rec.”

Partition plat of the tree farm’s main tract, 1993, “Existing easements”

Where to find it

Deeds are recorded in the county where the land lies, by the **county clerk** (in some counties called the recorder). The clerk keeps indexes by the grantor’s name and by the grantee’s name, year by year. Each index entry gives a book and page.²

How far back you can search from home depends on the county.

- **Polk County.** The clerk’s index runs online from 1984 to the present, and scanned deed books and index books cover the county’s earlier years. They open through the county’s Digital Research Room, which asks you to accept a disclaimer first.⁴
- **Benton County.** The online index runs from 1966 to the present, and it is an index only: the deeds themselves come by request or in person. The deed index for 1848 to 1966 can be searched only in person.⁵

Some counties have no online index at all; none was found for Linn County, where you ask in person or by mail.⁶ Where the county has none, try FamilySearch, which has filmed deed books for many counties. A free account is needed. Its full-text search can find names in handwritten deeds, though it often misreads them.⁶

For the assessor, start with the county's online property search (Chapter 3). For old assessment rolls in Oregon, the Oregon State Archives' County Records Guide says which years survive for each county and where they are kept.³ If the chain breaks at an owner's death, look for an estate. The Archives' Oregon Historical Records Index covers estates, early censuses and tax rolls.⁷ Chapter 25 lists all of these offices.

How to read it

Work backward, one owner at a time. Start with the current deed. Find the seller's name, then look in the grantee index for the deed by which that seller acquired the land. Repeat. For each deed write down the date, both names, the book and page, and anything said about the land. When you reach the patent, the chain is complete.⁸

Read what each instrument is. Not every recorded paper is a sale. A correction deed, a mortgage or an easement may sit in the same index under the same names.⁹ Read the heading before you add it to your chain.

Expect the books to change names. One survey of the tree farm cites the same county's records as "Vol. 27," "Book 232, Page 314, Polk County Book of Records" and "BOR 166."¹ Ask the clerk's office which series covers which years.

Follow every piece. Land put together from several first owners has several chains, one for each piece, until they meet under one owner. On the tree farm the county's tax lots and the first owners line up like this:¹⁰

Tax lot (today)	First owner after the United States	Patent	Acres (about)
Most of 200, 206 and 207	John W. and Rachel Tedrow, donation land claim 54	1877	150
East part of 207	John Johnson, donation land claim 53	1877	12
304	Oregon and California Railroad	1897 and 1899	31
"Gov't Lot 1," inside 207	Oregon and California Railroad (inferred)	1871	7

Tax lot (today)	First owner after the United States	Patent	Acres (about)
North strip of 206 and 207	Charles W. Pagett, homestead	1900	7

The acreages are estimates from county map layers. That is 5 chains to trace, not one.

Read the assessor’s dates with care. The assessor’s “year built” is often an estimate. Check it against deeds, maps and newspapers.³

What it costs

Searching an online index is free. Copies of recorded documents carry a fee, set by each county. Indexes that are not online cost a trip to the courthouse or a letter.⁵

A CAUTION A history of ownership is not a title search. It will not find every lien, easement or defect, and it should not be used for a sale or a dispute.¹¹ It tells you who owned the land. It does not tell you who owns it now, or what rights others hold in it; for that, see a title company.

On the tree farm In 1993 the main tract of the farm, then tax lot 200 on county map 9-6-33, was surveyed and divided into three parcels. They are today’s tax lots 200, 206 and 207. Lot 304, the railroad land on the west side, is a separate tract.¹² That survey hands a researcher the first links of the chain. It names the deed by which the land was conveyed to Dave Sullivan: “Book 232, Page 314, Polk County Book of Records.” It also cites a county survey of 1960 that controlled most of the old boundary, and the three older rights by book and page.¹ The management plan carries the story back a few more years. Publishers Paper sold the land to WTD Industries in 1988. WTD logged nearly all the merchantable timber in the spring of 1989 and that December sold the land to Dave Sullivan.¹³ One later record is easy to misread. The county’s 1996 instrument for the farm is a correction deed, not the purchase.¹⁴ Between the patents of 1877 and the sale of 1989 lies more than a century that nobody has traced yet. Who bought the land from the Tedrows is still unknown.¹⁵

The census

What it tells you. The census shows who lived on or near a property every ten years: names, ages, birthplaces and occupations. In some years it also says whether a family owned or rented and whether it lived on a farm.² The page in Figure 9.1 was written on June 22, 1880, in the Luckiamute and Buena Vista precincts of Polk County.³

Where to find it. Census pages from 1790 through 1950 are open to the public. Each census is released 72 years after it was taken, so the 1950 census was released on April 1, 2022.⁴ Most of the 1890 census was destroyed after a fire in 1921.² FamilySearch has the pages free with a free account, and many public libraries offer the large commercial genealogy sites free to their users. The National Archives' own 1950 census website is free and searchable by name or by location.⁵

How to read it. Search for a known owner in the census nearest the years that person owned the land. Open the image of the page, not only the typed index. Then read the families listed above and below. Census takers went door to door, and the numbers in the first columns give the order of the visits, so the families around yours were usually the neighbors.² Copy the **enumeration district**, the census taker's assigned area, and the page number with every entry, so you can find the page again.³

A caution. A census records where people lived, not what they owned. Names were often misspelled, and an age in one census may not fit the next.⁶

Newspapers

Where to find it. Historic Oregon Newspapers, from the University of Oregon, is free. It holds more than 3.5 million pages from 1846 to 2026, among them papers from Dallas, Independence, Monmouth, Falls City, Corvallis and Albany.⁹ Chronicling America, now part of the Library of Congress website, covers the whole country, and other states have programs of their own.⁷

How to read it. The search depends on a computer's reading of old print, and it misses words. Try every spelling of every name. The 1938 interview quoted in Chapter 18 spells the town "Peedee."¹⁰ Then browse the issues around a known date, page by page.⁷

A caution. A notice shows that someone reported something on a certain date. Check it against another record before you build on it.

Journals, diaries and letters

What they tell you. A journal tells what one person saw, close to the time it happened: the first sight of a valley, a flooded crossing, a hard winter. For the years before the first survey, an eyewitness journal may be the only written description of a place.¹¹

Where to find them. Published journals of explorers, missionaries and emigrants are in libraries, and many older editions are free at the Internet Archive and HathiTrust. Unpublished ones are at state historical societies such as the Oregon Historical Society, in university special collections, in county museums and in family attics.¹¹

How to read them. Search by the name of your river, your valley or the nearest early settlement. Copy the passage, the date it was written and where the writer was, as nearly as you can tell. Ask who was writing and whether that person saw the thing or heard about it. Then look for the same place in the survey notes and in what people remember. Where a journal, a survey note and a remembered account agree, you have three kinds of evidence for one fact.¹¹ Chapter 21 shows that weighing done across a whole mountain range.

County histories

County, town and family histories give names and stories that make other records easier to find. Many older ones are free at the Internet Archive and HathiTrust. Treat what they say as a lead to check. In the county histories of the 1880s to the 1910s, families often paid to be included.¹²

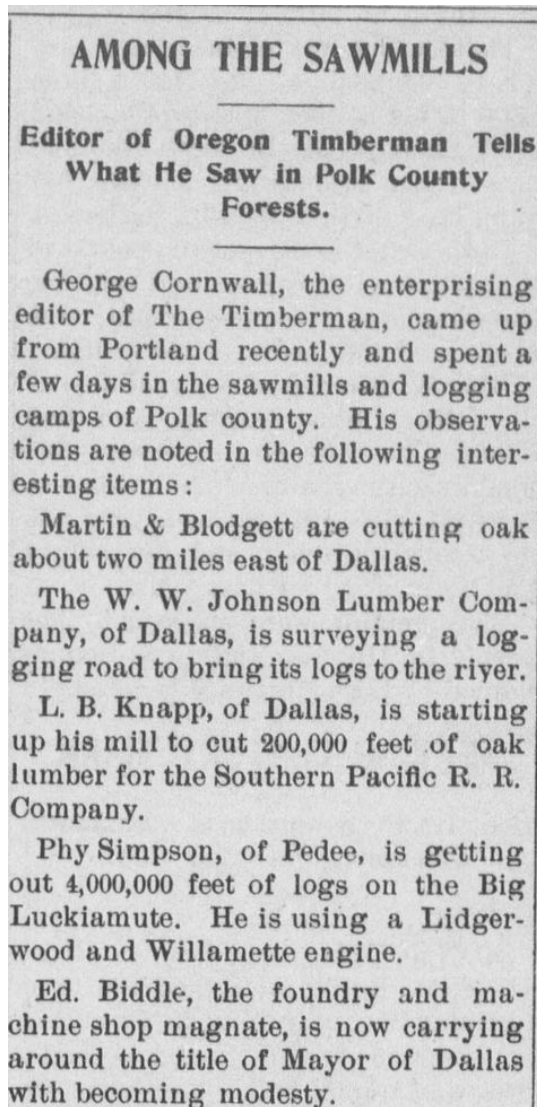


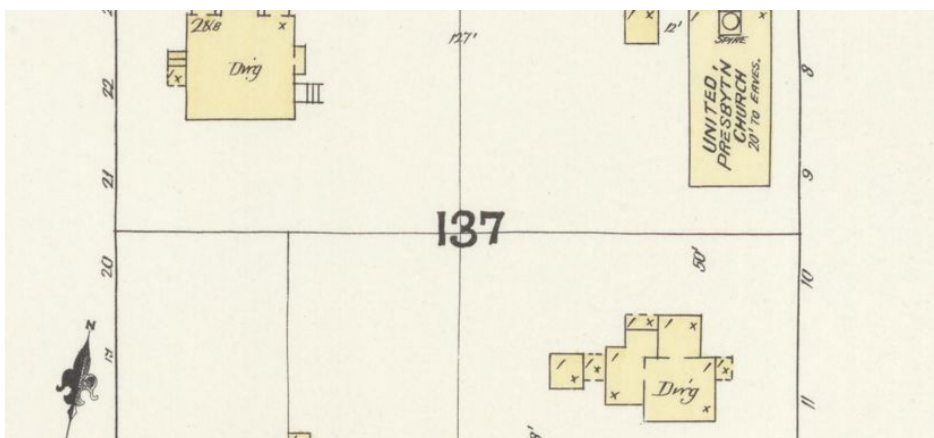
Figure 9.2. Logging news from Pedee, 1905. A Dallas weekly printed what the editor of The Timberman, a lumber paper from Portland, saw in the sawmills and logging camps of Polk County. The fourth item reads: "Phy Simpson, of Pedee, is getting out 4,000,000 feet of logs on the Big Luckiamute." A notice this small can put a date on a logging operation. *Polk County Observer* (Dallas, Oregon), May 26, 1905, "Among the Sawmills." *Historic Oregon Newspapers, University of Oregon.* Public domain.

What it costs

Almost nothing. The census, the newspapers and the old county histories are free online, the census with a free FamilySearch account. An unpublished diary costs a visit to the archive that keeps it, or a copy fee.

A CAUTION Records filed by name find people, not acres. A census page puts a family in a precinct, and a newspaper puts a logger “on the Big Luckiamute.” Neither says which land. Tie each name to the ground through a patent, a deed or a survey before it goes into your history.

On the tree farm The people of the farm’s first years are known mostly through volunteer-compiled cemetery records. They describe a John J. Johnson buried near Pedee, born in New York in 1816, a farmer who died in 1877, the year his claim’s patent was issued. A census entry they quote gives him an age that does not fit.¹³ That he is the John Johnson of Claim 53 is an inference, though a strong one.¹³ A great-niece’s interview of 1938 remembers him as “captain of the train”; Chapter 18 gives her words in full.¹⁴ The Tedrows are harder to follow. One family account says J. W. and Rachel Tedrow, both born in Ohio, came over the Oregon Trail in 1852 and were in Douglas County by 1860. An online family tree has them marrying in Ohio, where the family account says Illinois. Neither has been checked against a record.¹⁵ The claimants’ own sworn statements, in the donation claim files on FamilySearch, should settle the marriage and confirm which John Johnson held Claim 53.¹⁶



Detail of Figure 10.1.

CHAPTER 10

Buildings, cemeteries and place names

In 1934 the John Johnson house was recorded in 16 drawings.

In 1934 the Historic American Buildings Survey recorded the John Johnson house at Pedee in 16 drawings, which are now at the Oregon Historical Society.¹ Johnson's donation claim reaches onto the Sullivan tree farm, and in 1855 a surveyor tied "Johnson's house" to a claim corner there. Whether the house drawn in 1934 is the house sighted in 1855, nobody knows yet. Johnson's claim reached into two other sections.²

Buildings, graves and names are records too. Each one was made by someone, at some date, and each can be found and read.

Buildings and house history

What it tells you. The records of a building tell when it went up, who built it, how it changed and who lived in it. For a house in town this is the main line of research.³

Where to find it.

- **Sanborn fire insurance maps.** Detailed maps of towns, made for insurance companies from the 1880s to the 1950s. They show each

building's outline, height and material. The Library of Congress has many free online. They cover towns, not farms.³

- **City directories.** Yearly lists of residents by name and, in later years, by street address. Local libraries and museums hold them, and many are online.³
- **The Oregon Historic Sites Database.** Buildings that have been surveyed, listed by address, with an estimated date and style.⁴
- **National Register of Historic Places nominations.** If a building or its district is listed, the nomination file is a short researched history with its sources.³
- **Drawings and photographs of rural buildings.** Collections such as the Historic American Buildings Survey reached into the country, as the Johnson house shows. Search the Oregon Historical Society's catalog and Archives West (Chapter 25) by the family name and the community.

How to read it. On a fire insurance map, "Dwg" marks a dwelling, and the number inside the outline gives its stories (Figure 10.1).⁵ Lay two editions side by side. A change in a building's outline from one map to the next dates an addition.³

What it costs. The maps, the database and the nominations are free online. Collections in a research library cost a visit; admission to the Oregon Historical Society's research library is free.⁶

A caution. A date in an inventory or on a tax record is often an estimate. Check it against deeds, maps and photographs (Chapter 8).⁷

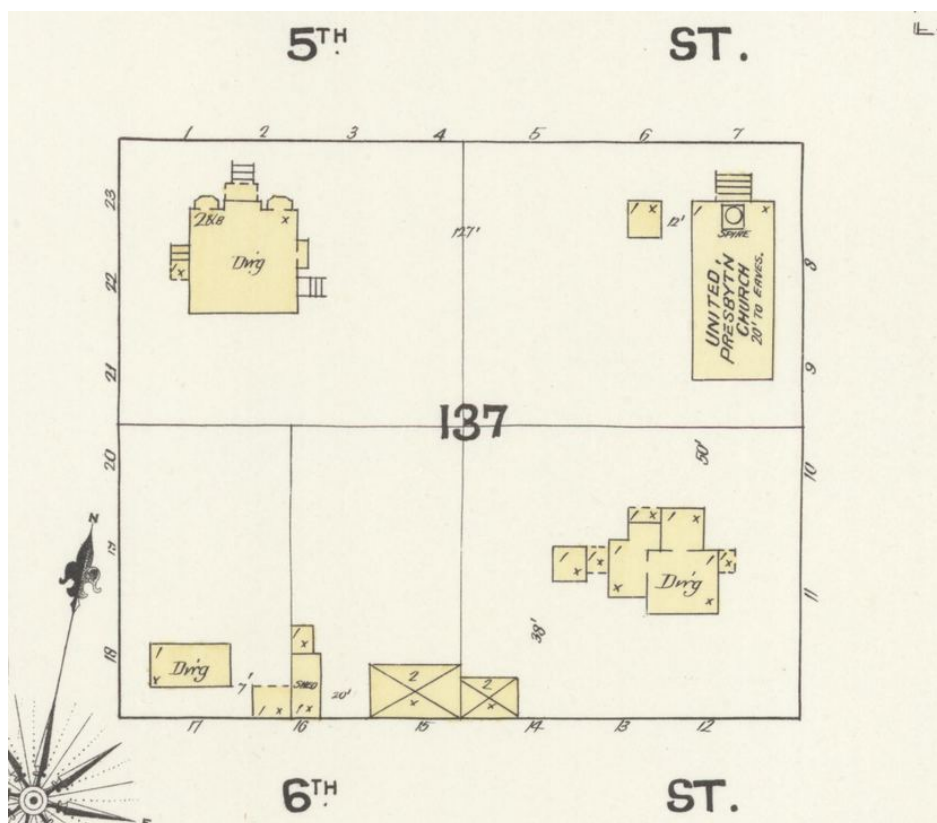


Figure 10.1. One block of Albany on the fire insurance map of 1890. Each building is drawn in outline. “Dwg” marks a dwelling, and the number inside gives its stories. Find the same block on a later edition, and any change in an outline dates an addition. Sanborn Map Company, Albany, Oregon, 1890, sheet 8. Library of Congress. Public domain.

Cemeteries and burial places

What they tell you. Gravestones give names and dates, and family plots show who belonged together (Figure 10.2). Small family cemeteries on farms are common, and some are forgotten.⁸

Where to find them. Find a Grave is a free index of more than 265 million memorials, with photographs, made by volunteers since 1995. BillionGraves is another. Oregon’s Historic Cemeteries Program keeps a list of historic cemeteries by county.⁹ Some counties also have volunteer groups that record their old cemeteries; Polk County’s is one.¹⁰

How to read them. Copy every word on the stone, and photograph the stones on either side. A volunteer’s transcription is a lead, not proof: check it against the stone itself, a death record or a newspaper notice.¹⁰



Figure 10.2. Headstones of the 1870s at Providence Cemetery, Linn County. A stone gives names and dates, and the stones around it show who was buried together. Gary Halvorson, Oregon State Archives. CC BY 4.0.

A caution. Visit a cemetery on someone else's land only with permission. If you believe there are burials on your own land, ask the Historic Cemeteries Program or the county before doing any work nearby. Native burial places are protected by law, and their locations are never published (Chapter 16).⁸

Place names and community places

The names of creeks, roads and crossroads are records too. *Oregon Geographic Names* explains thousands of them.¹¹ Old schools, post offices, churches and granges mark where a neighborhood had its center, and their records name the families nearby (Figure 10.3).¹¹



Figure 10.3. Ballston School, a one-room schoolhouse in Polk County, photographed in 2014. A rural school was the center of a neighborhood, and its records name the families who sent children there. Gary Halvorson, *Oregon State Archives*. CC BY 4.0.

“Mrs Gillam’s dwelling”

Daniel Murphy, field notes, Township 9 South, Range 6 West, March 1854

On the tree farm The name of the nearest town is a record in itself. *Oregon Geographic Names* says Pedee took its name from Pedee Creek, which Cornelius Gilliam or his family named for the Pee Dee River of the Carolinas.¹² The name turns up in the farm’s survey notes too. In 1854 Murphy’s dooryard post stood beside “Mrs Gillam’s dwelling,” and in 1855 Hutchinson surveyed Mary Gilliam’s claim.¹³ Whether she belonged to the family that named the creek, the records gathered so far do not say. Two graves tie families to the farm. John and Phebe Johnson share a monument in Taylor Cemetery, about half a mile southwest of the Pedee store. A Charles W. Pagett (1841 to 1905) is buried in Montgomery Cemetery, just southwest of Pedee, and he is likely, though not proven, to be the man who homesteaded the farm’s north strip.¹⁴ On the east side of the farm stood a dirt-floored dwelling of about the 1930s. It had collapsed by 1990 and is now lost under blackberry. Who built it and who lived there, the records found so far do not say.¹⁵

Images

Images show what a place looked like, or how it was laid out, at one time. The next two chapters start with maps and go on to photographs taken from the ground, from the air and from space.



Detail of Figure 11.1.

CHAPTER 11

Maps and survey plats

The first map of this ground called it prairie. Today it grows fir.

On the township plat approved at Salem on May 1, 1855, the map-maker lettered a verdict across Section 33, just west of Pedee: “Level prairie and soil 1st rate.” That ground is Douglas-fir plantation today (Figure 1.2).¹ The plat was drawn from Daniel Murphy’s survey notes of 1854, so it is not a second witness to the prairie.² It is the first map of the place, and most later maps of the township are drawn on the same lines.³

What it tells you

A map shows where things were in relation to each other at one time. A series of maps of the same ground, in date order, shows change.⁴

“Level prairie and soil 1st rate”

Plat of Township 9 South, Range 6 West, approved at Salem, May 1, 1855

Kinds of maps

- **Survey plats.** The plat is the map drawn from the first government survey (Chapter 6). It shows section lines, streams, prairies, trails, roads, fields and houses that the surveyor noted. One plat covers one township (Figure 11.1). Claim plats show the donation land claims (Chapter 7).⁴
- **Topographic maps.** A **topographic map** shows the shape of the land with lines of equal elevation, along with streams, roads, railroads and buildings. The U.S. Geological Survey has published them since the 1880s.⁴
- **County ownership maps and atlases.** Maps that print the owner's name on each parcel. In the Northwest the Metsker company published them for most counties from the 1920s on. Libraries hold them; few are free online.⁴
- **Fire insurance maps.** Maps of buildings in towns (Chapter 10).
- **Highway and road maps.** State highway departments published county maps for decades. Oregon's are in the Oregon Digital collection and at the State Library.⁴
- **Special maps.** Geologic maps, soil maps, forest type maps and railroad maps (Chapters 13, 15 and 20).

Where to find them

- USGS topoView holds the Geological Survey's Historical Topographic Map Collection: more than 178,000 maps printed between 1884 and 2006, free to view and download.⁵
- The BLM's land records sites hold the survey plats (Chapter 6).
- The David Rumsey Map Collection is free online, with more than 150,000 maps, and Old Maps Online searches many libraries' maps by place.⁶
- The Library of Congress map collections, your state archives and your state university's map library hold many more.⁶

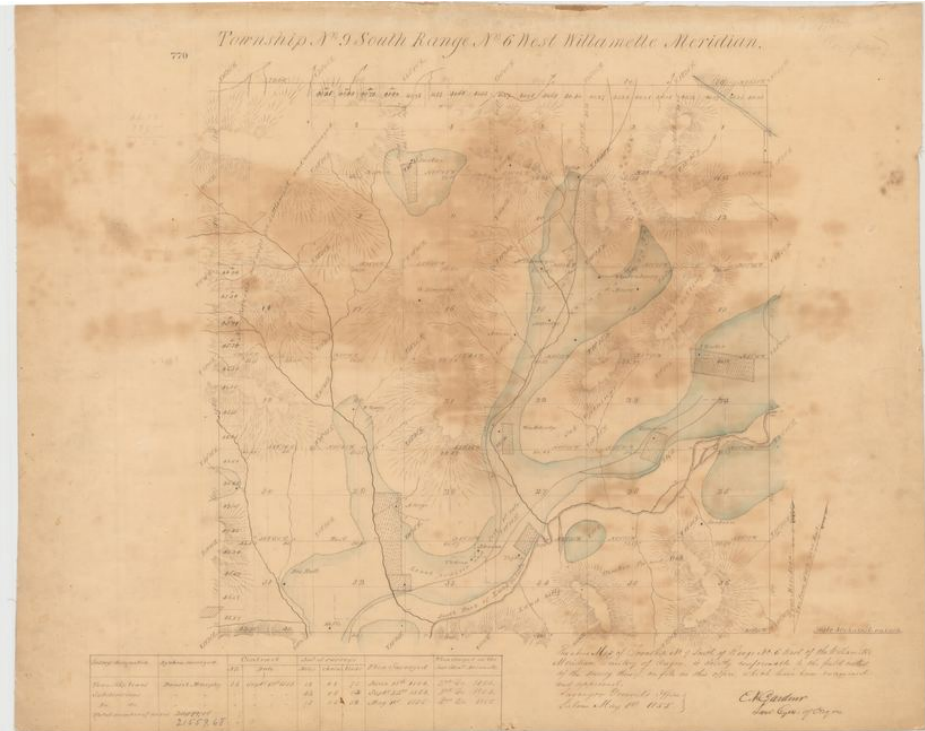


Figure 11.1. The first map of a whole township, 1855. The plat of Township 9 South, Range 6 West shows its 36 numbered sections, its streams, and the prairie and timber the surveyor crossed. Small squares mark the houses he sighted. The figures along the lines are lengths in chains, most of them close to 80, a mile. Figure 1.2 shows the part around the tree farm up close. *General Land Office plat of T9S R6W, Willamette Meridian, approved at Salem May 1, 1855. Bureau of Land Management, Oregon State Office. Public domain.*

- The county surveyor's office keeps the surveys filed in the county and is usually glad to help the public.⁶

Chapter 25 gives addresses.

How to collect them

Gather every map you can find that covers your land. For each one, write down the title, the maker, the date, the scale and where you found it. Save the whole sheet, including the legend and the margins, not only the part with your land.⁷ The legend and the margins hold the date, the scale and the maker, and without them a map cannot be weighed.

How to read it

Check five things on every map.⁸

1. **Who made it, and why.** A highway map, an ownership map and a timber map of the same square mile will each leave out what the others show.
2. **The date.** The date printed on a map may be years later than the fieldwork behind it. Look for both. The farm's township plat was approved in May 1855, but Murphy walked its section lines in March 1854.⁹
3. **The legend.** The **legend** is the map's key. A solid line and a dotted line mean different things, and a dotted road may be a trail, a proposed road or a guess.
4. **The scale.** The **scale** tells how much ground an inch of map covers. At 1:62,500, an inch is about a mile; at 1:24,000, an inch is 2,000 feet. A map of a whole state cannot be trusted about one fence corner.
5. **What is left off.** A building left off a map may not have existed, or the mapmaker may not have cared about it.

How to compare maps

In the 30 states surveyed on the federal grid, most maps are drawn on the same framework of township and section lines. That shared framework is what lets you line up maps made a century apart.³ Find your section on each map. Then follow one feature, such as a road, a creek crossing or a house, from the earliest map to the latest. Note when it first appears, when it moves and when it disappears (Figure 11.2).³

When you draw your own map of what you have found, keep what you observed apart from what you inferred.³ Bob Zybach and Don Ivy showed one way in *Coquella Trails* (Chapter 4). Near Port Orford they lined up three maps of the same ground: an 1875 township survey map, a geological map of the 1890s and a 1941 ownership map. All three are drawn on the same survey lines. On their own maps they drew the roads and trails that still exist as solid lines. Routes that were predicted, or documented but no longer mapped, they drew as dotted lines. Then they went to look, and visited about 80 percent of the study area.¹⁰ A reader can tell at a glance which routes are on the ground today and which are reconstructions.

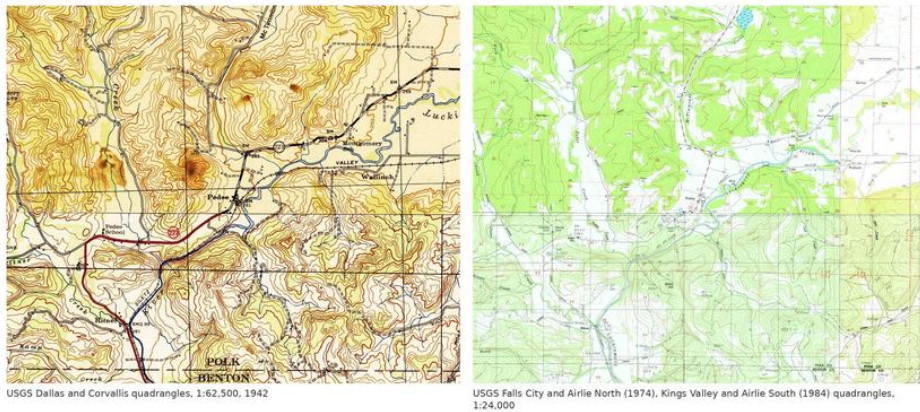


Figure 11.2. The same six by five miles around Pedee on topographic maps of 1942 (left) and of 1974 and 1984 (right). Follow the highway and the railroad from one map to the other, and find Pedee on both. The green tint for forest appears only on the later maps, and they are drawn at a larger scale, 1:24,000 against 1:62,500, so they show more. A change in the map is not always a change in the land. *U.S. Geological Survey, Dallas and Corvallis quadrangles (1942); Falls City and Airlie North (1974) and Kings Valley and Airlie South (1984) quadrangles. From topoView. Public domain.*

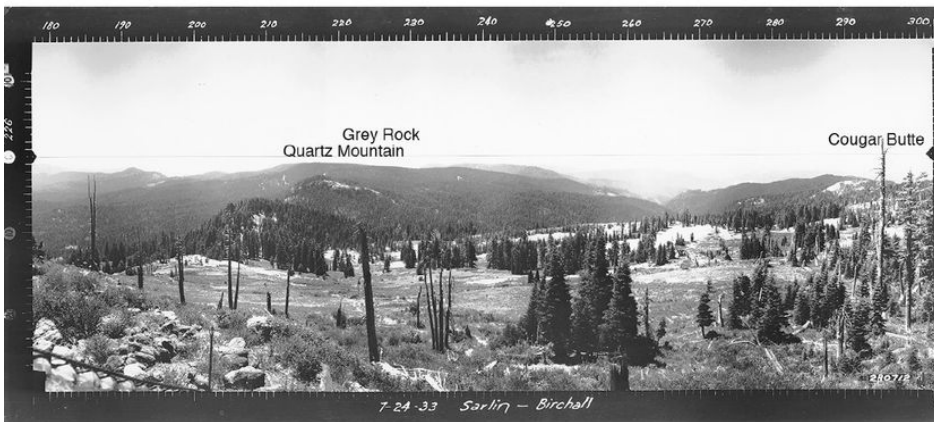
What it costs

Most of these maps are free to view and download. Ownership atlases are mostly on library shelves, which costs a visit.

A CAUTION An old map is not a boundary survey. Survey corners have been reset, roads have moved and creeks have shifted. If the question is where a line runs today, hire a licensed surveyor.¹¹

On the tree farm Three maps of the farm's ground, made decades apart, each tell the truth about their own year. The township plat of 1855 carries the surveyors' measurements along its lines: 79.87, 80.07 and 80.33 chains. A chain is 66 feet and 80 chains make a mile, so each line is about a mile and none is exactly one. Murphy's own figure for the line between Sections 28 and 33, which runs through the farm, is 80.07 chains (Figure 6.1).¹² The Geological Survey's map of 1942 shows Pedee, the highway and the railroad, with no green tint for forest anywhere. The editions of 1974 and 1984 add the tint (Figure 11.2).¹³ A blank on the 1942 map is not evidence of open ground: the air photograph of 1936 shows dark tree clumps on the same land (Chapter 12).¹⁴ And today's county map layers still carry the Tedrow and Johnson claim lines that Hutchinson ran in 1855.¹⁵ The 1993 survey of the farm starts from one

of their corners (Chapter 3). What no map yet found shows is where the prairie's edge ran inside the sections. The plat only repeats what Murphy saw along his lines.



Detail of Figure 12.1.

CHAPTER 12

Photographs from the ground, the air and space

Two photographs of one prairie view were taken 111 years apart.

In the 1930s the Forest Service photographed the view from hundreds of its fire lookouts. On July 24, 1933, one of those cameras looked southwest from Abbott Butte, in the headwaters of the South Umpqua River (Figure 12.1). It looked across open meadows and scattered trees to the timbered ridges beyond.¹ The prairies below that lookout have been photographed again and again. Two photographs of the same view were taken 111 years apart, in 1899 and 2010.²

A photograph records what was in front of the camera on one day. It is strong evidence for that day, and weaker evidence for any other.³ Put photographs of one place in date order, and they become a record of change. The tree farm's own record of change begins with the aerial photograph of 1936 in Figure 12.2.

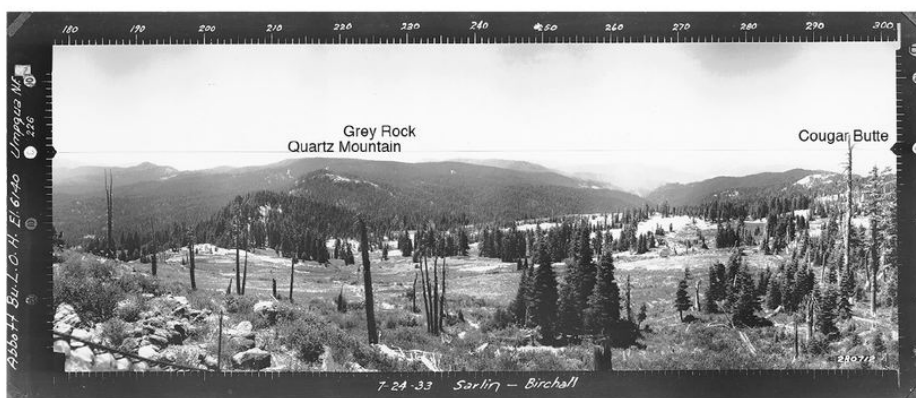


Figure 12.1. The view southwest from the Abbott Butte fire lookout, July 24, 1933. The scale across the top gives compass bearings, from 180 degrees (due south) on the left to 300 on the right. The label at the left edge gives the lookout's elevation, 6,140 feet. Look for the open meadows in the foreground and the timber around them. The place names were added later. *U.S. Forest Service photograph, as printed in Bob Zybach, Tiller study (2011), Figure 2.05.*

Photographs taken on the ground

What they tell you. Buildings, fences, trees, crops, roads and people, in a detail no map gives.³

Where to find them. Look in family albums first. Then try the county historical society, the state historical society and university collections. In Oregon the Oregon Historical Society, Oregon Digital and the Salem Public Library's historic photograph collection are all searchable online. For forest country, the lookout panoramas of the 1930s are scattered among several archives.⁴

How to read them. For each photograph, write down who took it, when, from where and in which direction, as far as anyone knows, and copy anything written on the back. If the date is unknown, the kind of photograph helps. The Graphics Atlas website explains how to tell a tintype from a cabinet card from a later print.⁴ Chapter 18 says more about family photographs.

Repeat photography

Repeat photography means taking an old photograph's view again from the same spot. Find the place where the old picture was taken, ask permission if it is not your land, and take the same view today. Write down the date and your exact position. Take it in the same season if you can, so that a difference in leaves is not mistaken for a difference in the land.⁵ The pairs from Abbott Butte show what the method can do (Figure 12.3).²

Aerial photographs

What they tell you. For most rural land in the United States, **aerial photographs** begin in the 1930s. They are the clearest record of clearing, planting, logging, building and regrowth over the last ninety years.⁶

Where to find them.

- EarthExplorer, from the U.S. Geological Survey, has federal aerial photographs from 1937 on, for the whole country. Viewing is free, and downloading needs a free account.⁷
- Oregon State University holds aerial photographs of Benton, Lincoln, Linn, Marion and Polk counties from 1936 to 1979, with index sheets online at Oregon Digital.⁶ Oregon Digital's mid-Willamette collection lists more than 1,200 items for Polk County alone.⁸
- The University of Oregon holds about a million aerial images of Oregon, the earliest from 1929 and most from the 1930s through the 2000s. Scans are ordered for a fee (Chapter 1 gives an example).⁹
- The National Archives holds the original film of the farm program flights of the 1930s to the 1950s.⁶
- Google Earth Pro shows a series of recent decades with its historical imagery slider. Google has said the desktop program will not be offered for new downloads after June 25, 2027, though copies already installed will keep working.¹⁰

How to read them. Find the earliest photograph that covers your land, then one from every decade after. For each, write down the date, the agency and the frame number. Pick out two or three fixed points, such as a road junction or a creek bend, and find them in every photograph before you compare anything else. On Figure 12.2 a circle inked on the print marks a section corner, a ready-made fixed point.¹¹

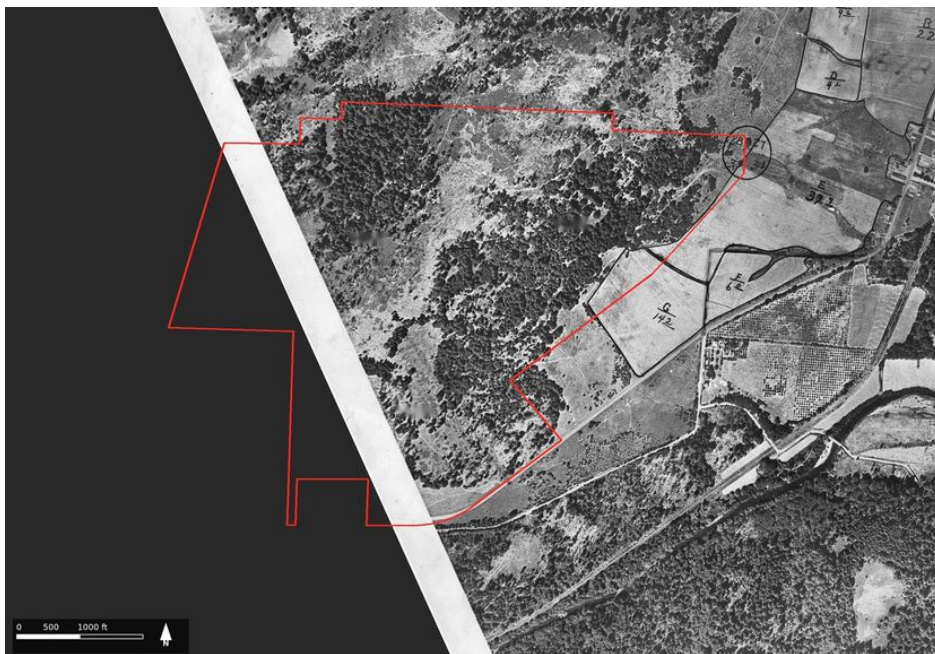


Figure 12.2. The earliest aerial photograph of the tree farm, 1936. The red line is the farm's outline, and the west side of the farm runs off the print. Inside the outline, look for the patchwork of dark tree clumps and lighter open ground. East of it are fields with acreages inked on them, orchard rows, the railroad toward Pedee, and a circle inked on the section corner beside the farm's northeast corner. *U.S. Department of Agriculture aerial photograph, 1936. Oregon State University Libraries, through Oregon Digital. Outline approximate, fitted to within about 100 to 250 feet.*

A single frame is not a map. Its edges are stretched, so distances cannot be measured from it without correction.¹¹

Old lines from the air. Survey lines of the 1850s often stay visible for more than a century as roads, fences, field edges and the edges of logged areas. In a photograph of Alsea taken in 1948, the section lines and claim lines of the early 1850s can still be picked out (Figure 4.1).¹² Look for the same thing on your own land. A straight edge in the trees usually has a reason.

Satellite images

What they tell you. Satellites have photographed the whole earth again and again since the 1970s. Their pictures are coarser than aerial photographs, but they come often. That makes them good for dating a change: the year a field was cleared, a stand was cut or a fire burned.¹³

Where to find them. EarthExplorer holds the pictures taken by the Landsat satellites, more than 40 years of them, along with others.¹³ A Landsat picture shows fields and forest stands, not single buildings.

Lidar

Lidar is not a photograph, but it belongs with images. It is a laser survey from an aircraft that shows the bare ground under the trees. Old road grades, ditches, terraces and building sites that no photograph shows often stand out clearly.¹⁴ Chapter 13 explains how to find it and read it.

What it costs

Viewing is free at Oregon Digital, EarthExplorer and most historical society websites, and downloads from EarthExplorer need only a free account. Scans from the University of Oregon's collection carry a fee, and publishing one needs the library's permission and a use fee.⁹

A CAUTION A photograph that is free to view is not always free to publish. Oregon Digital marks its USDA aerial photographs "In Copyright," so ask the holder before you print a copy, or order the same frame from a public-domain source.¹⁵ And a photograph is a record of one day. Do not read a single frame as the way the land always looked.

On the tree farm The earliest aerial photograph of the farm was taken in 1936, and it covers only about two-thirds of the land (Figure 12.2). It shows a patchwork of dark tree clumps and lighter open ground. East of the farm are fields, orchard rows and the Valley and Siletz Railroad running toward Pedee.¹⁶ Each photograph was fitted to today's map by matching roads, and even so the farm's outline fits this one, and the later ones, only to within 100 to 250 feet. That is close enough to show what grew where. It is nowhere near close enough to find a corner or a tree.¹⁷ The photographs of 1955 and 1978, which show the open grass of the

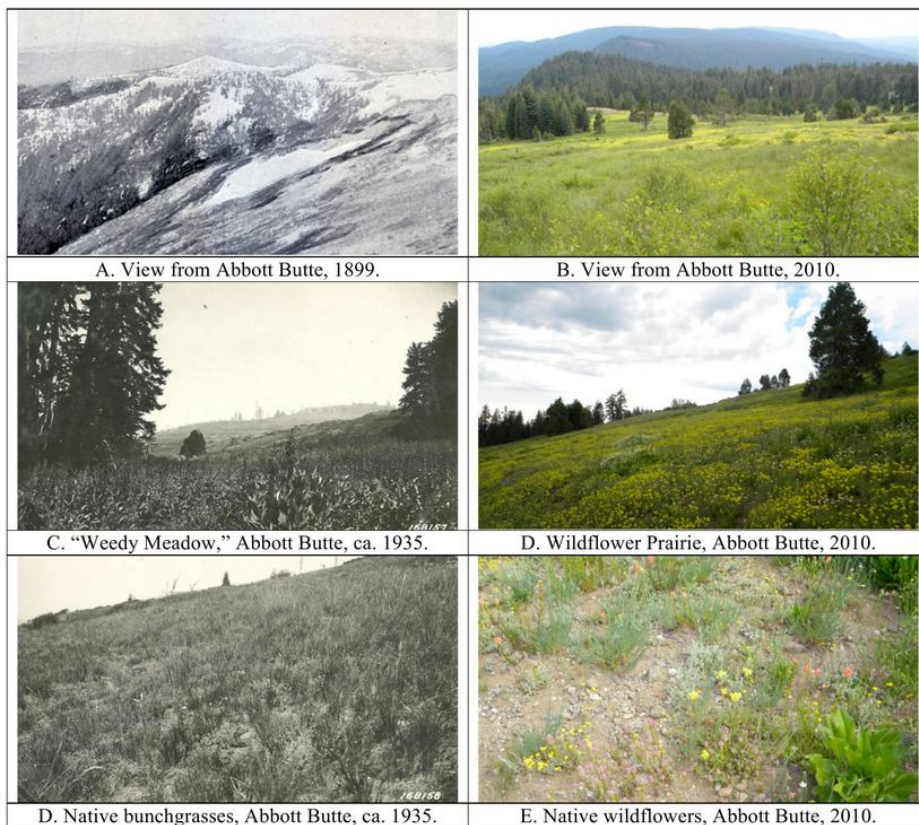
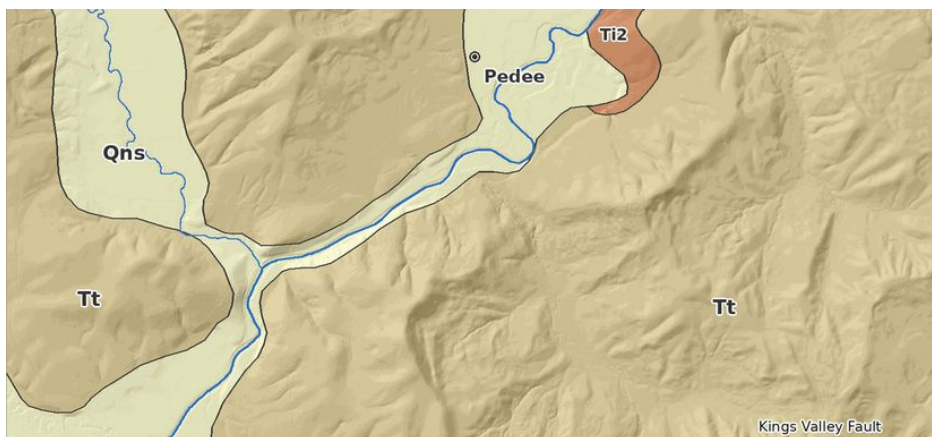


Figure 12.3. The prairies of Abbott Butte in 1899, about 1935 and 2010. The top pair is the same view, 111 years apart. Compare the open ground and the timber, then look down the page at the meadows photographed about 1935 and again in 2010. *Bob Zybach, Tiller study (2011), page 32, Table 2.03.*

grazing years and then the young plantation, carry the story on. Chapter 22 reads them in order.¹⁸

The land itself

The land keeps records of its own, in rock and soil, rain and rivers, plants, and the marks people left on the ground. The next five chapters read them from the oldest layer up: the rock, the weather and water, what grew there, the first people, and what you can still see on a walk.



Detail of Figure 13.1.

CHAPTER 13

Rock, soil and the shape of the land

The tree farm grows on a sea floor about 50 million years old.

The tree farm near Pedee grows on an old sea floor. Most of the upland for 4 miles around Pedee is Tyee Formation sandstone, sand laid down on the bottom of an ancient sea about 50 million years ago.¹ Today the farm's south-facing slopes are almost entirely Douglas-fir plantation.² Between the old sea floor and the young forest lie the soil, the shape of the hills and the slides that have moved them. Each has left a record that anyone can look up.

Rock, soil and slope are the oldest part of a property's history. They decide where water runs, which soils form, where a road or a house can go, and why one slope holds while the next one slides. The maps that describe them are free.

Geologic maps

What it tells you. A geologic map names the rock under a place, gives its age and says how it formed. Geologists map rock in named units called **formations**, each a body of rock of one kind and age, such as the Tyee Formation.

Where to find it. In Oregon, use the Oregon Geologic Map viewer of the Oregon Department of Geology and Mineral Industries, known as DOGAMI. Click any spot to see the rock unit and the map it came from. For any state, the U.S. Geological Survey's National Geologic Map Database holds the published geologic maps. Behind the statewide maps stand older, more detailed maps of single districts. The hills on the west side of the Willamette Valley, for example, were mapped in 1954.³ Chapter 25 gives the addresses.

How to read it. Write down the rock unit, its age, and the map it came from: title, author, year and scale. A statewide map draws in broad strokes what a local map draws in detail, so keep the most detailed map that covers your land. Figure 13.1 shows the lookup for the country around Pedee.

Lidar: the ground under the trees

What it tells you. Lidar finds what a forest hides. In the Luckiamute River gorge southwest of Pedee, a narrow, even bench shows along the river in a lidar image. In an aerial photograph of the same ground, it disappears under the trees. Older maps label a railroad grade there (Figure 13.2).⁴ **Lidar** is a laser survey flown from an aircraft. It can be drawn as bare ground, with the trees and buildings taken away, and old roads, ditches, terraces and landslides often show clearly.⁵

Where to find it. DOGAMI's Lidar Data Viewer covers about 99 percent of Oregon, free.⁵ In other states, ask the state geological survey.

How to read it. Use the shaded bare-ground view. Straight lines and level benches across a slope are usually the work of people. Write down what you see before you decide what it is. Then look for the same line on the earliest aerial photograph (Chapter 12) and on the old maps (Chapter 11).

Soils

What it tells you. Soil keeps a record of the past. A deep prairie soil under a stand of trees suggests that the trees came later.⁶ Soil also decides what land can grow, how water moves through it and what

Mapped geology around Pedee, Polk County, Oregon

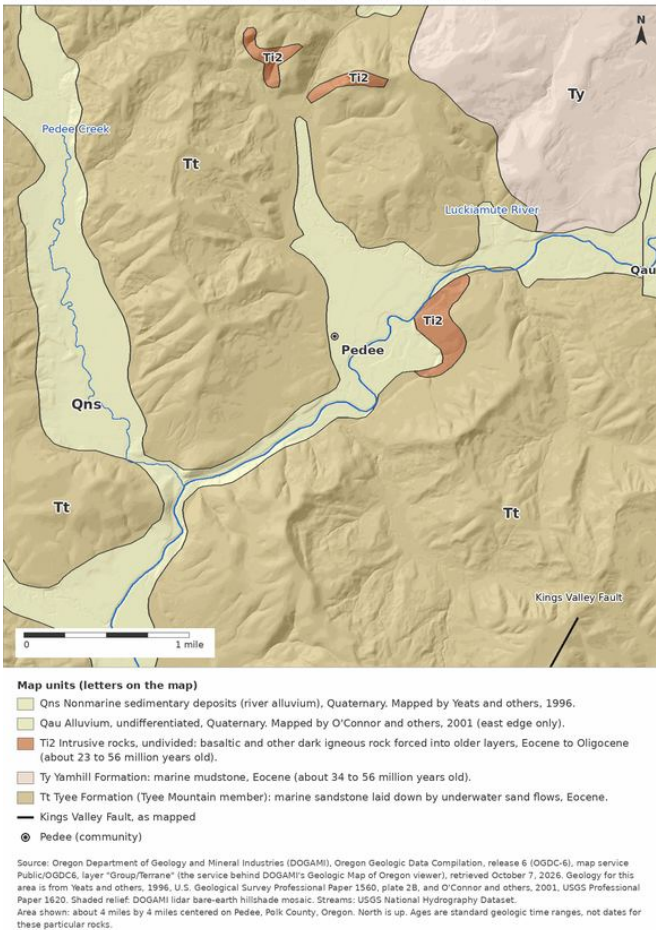


Figure 13.1. The rock under the Pedee country. Most of the upland is Tye Formation sandstone. The flat valley floor along the Luckiamute River is river deposits. *Oregon Department of Geology and Mineral Industries (DOGAMI), Oregon Geologic Data Compilation, over lidar shaded relief, about 4 miles around Pedee. Assembled for this guide, October 2026.*

can be built on it. A **soil survey** maps the soils of a county and describes each one: its depth, texture and drainage, and what it is suited for.

Where to find it. Web Soil Survey, from the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS), has official soil maps for more than 95 percent of the nation's counties.⁷ The same agency's Official Soil Series Descriptions describe each named soil in full, and SoilWeb, from the University of California, Davis, shows the maps on a phone. Many counties also have printed surveys from the early 1900s that describe the farming of their time. The Conservation Service is moving them to the Internet Archive.⁶ All are free (Chapter 25).

How to read it. In Web Soil Survey, draw a line around your land. The Soil Map tab lists each soil and its acres. The Soil Data Explorer

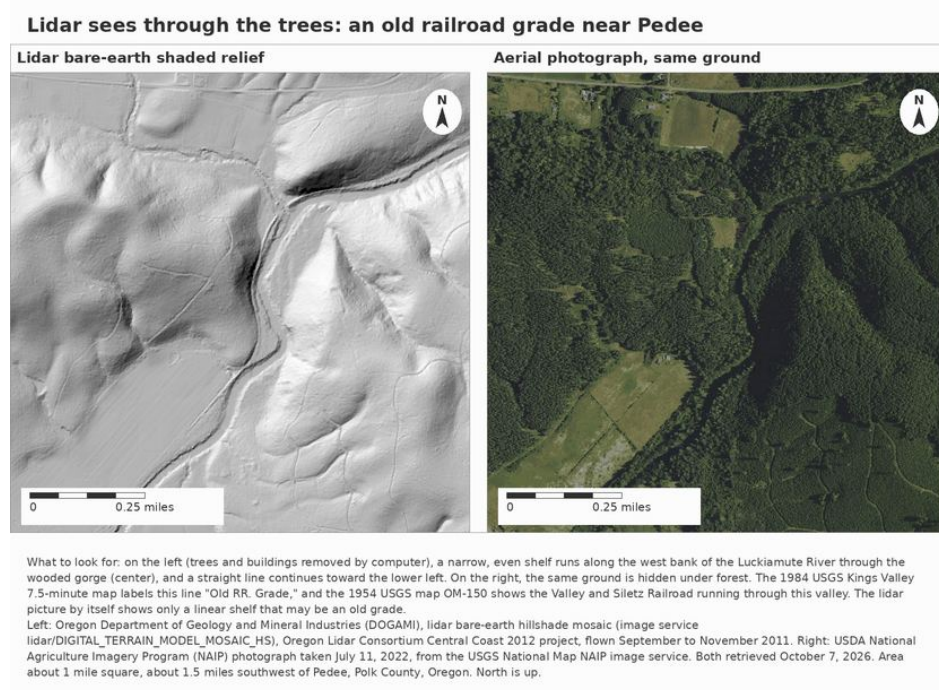


Figure 13.2. What lidar shows that a photograph hides. One square mile of the Luckiamute River gorge southwest of Pedee, in bare-ground lidar on the left and an aerial photograph on the right. Follow the narrow bench along the river on the left, then look for it under the trees on the right. *Lidar: DOGAMI and the Oregon Lidar Consortium, flown in 2011. Photograph: USDA National Agriculture Imagery Program, July 11, 2022, public domain.*

gives ratings, such as how well a soil suits a road or a stand of trees. The “shopping cart,” despite its name, makes a free printable report.⁷ Each outlined area on the map is a **map unit**, labeled with a symbol (Figure 13.3). Most map units are named for a **soil series**, a kind of soil described once and mapped wherever it is found. Read each series in the Official Soil Series Descriptions. Figure 13.4 shows one series, Jory, as a slab cut from the ground.



Figure 13.4. A slab of Jory soil, Oregon's state soil, prepared for a Smithsonian exhibit. The deep red clay is typical of the foothills around the Willamette Valley. *USDA Natural Resources Conservation Service; photograph by Chip Clark, Smithsonian Institution. Public domain.*

Mapped landslides around Pedee, Polk County, Oregon

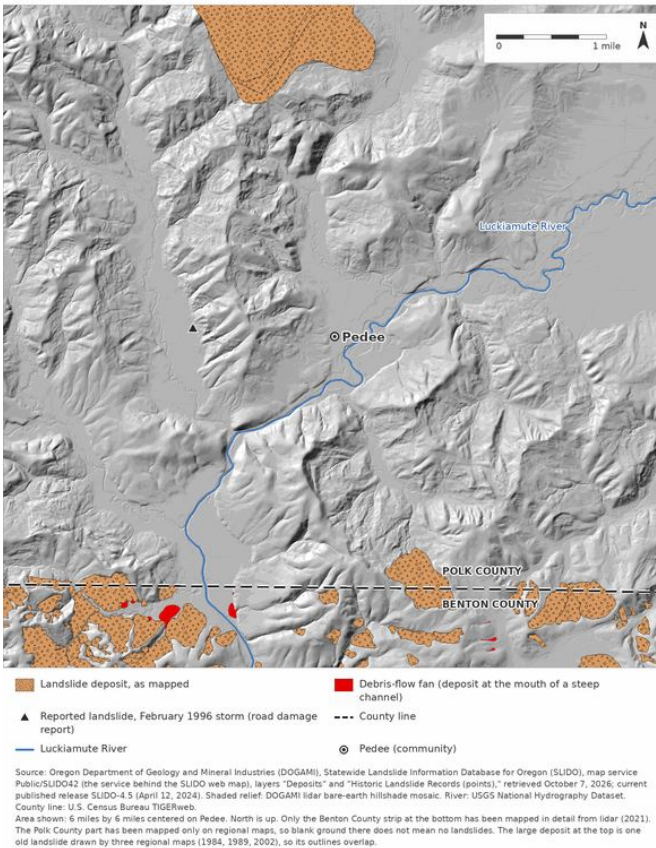


Figure 13.5. Mapped landslides for about 6 miles around Pedee. Almost all of them lie along the south edge, where one detailed study was done. The blank areas are not known to be free of slides; they have simply been studied less. *DOGAMI, Statewide Landslide Information Database for Oregon (SLIDO), release 4.5, over lidar shaded relief. Assembled for this guide.*

A CAUTION These maps were made at different times, at different levels of detail and for different purposes, and two of them can disagree at the same spot. A soil map is drawn from samples, not from a hole dug on your land, and small patches are not shown.⁶ None of these maps replaces a visit by a geologist or a soil scientist. None of them says whether a slope is safe to build on.

On the tree farm The farm sits in sandstone country. Around Pedee the state's geologic map shows mostly Tyee Formation sandstone, with Yamhill Formation mudstone, small bodies of dark rock that cooled underground, and river deposits along the Luckiamute. Older rock in the region is sea-floor basalt, the Siletz River Volcanics.¹⁰ The soil map for 2 miles around Pedee, which takes in the farm, shows 42 map units. Jory and Peavine soils cover more than half of that area, on the uplands,

and Waldo and Chehalis soils lie on the valley floor.¹¹ Jory, a deep red clay of the foothills, has been Oregon's state soil since 2011.¹² One step has not been taken yet: listing the map units inside the farm's own lines. It is a 10-minute lookup in Web Soil Survey, and the next thing to do.



Detail of Figure 14.2.

CHAPTER 14

Rain, rivers and the weather people remember

The biggest Luckiamute flood on record came in 1964, not 1996.

The biggest flood on record on the Luckiamute River came on December 22, 1964. The flood of February 1996, the one many people remember, ranks only fifth at the gage near Suver (Figure 14.3).¹ Memory and measurement each keep part of a land's weather history, and they do not always agree. This chapter shows where the measurements are kept and how to set them beside what people remember.

Rain and temperature since 1895

What it tells you. Climate is the long-run pattern: how much rain falls, how warm it gets, how long the growing season lasts. Weather history is the list of events that people remember and that left marks on the land: floods, freezes, windstorms, droughts and ice. Both help explain what grew, what failed and what fell down.²

Where to find it. All of these are free, and Chapter 25 gives the addresses.

- PRISM, from Oregon State University: estimates of rainfall and temperature for any point in the lower 48 states, by month from 1895 to the present, with 30-year averages.³
- Climate at a Glance, from the National Oceanic and Atmospheric Administration (NOAA): yearly figures for each county since 1895 (Figure 14.1).⁴
- NOAA Climate Data Online, and SC-ACIS from the Regional Climate Centers: the daily records and averages of single weather stations.²
- The U.S. Drought Monitor: weekly drought maps since 2000.²

How to read it. In PRISM's Explorer, click your land and download the monthly record. Note the wettest and driest years. Then find the nearest weather station with a long record and compare. Write down each station's years of record beside its average, because an average means little without the years it covers. Rainfall can change sharply over a few miles. At Dallas, on the western edge of the Willamette Valley, the average for 1971 to 2000 was about 49 inches a year.⁵ A 2004 assessment of the Luckiamute watershed mapped average yearly precipitation across that one river basin from Oregon State University's 103-year data. Its classes run from 40 to 45 inches at the low end to 151 to 202 inches at the high end, rising from the valley into the Coast Range.⁶

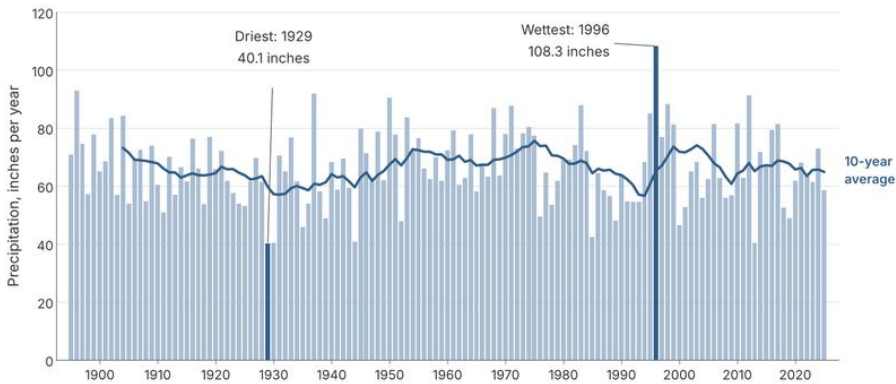
Storms people remember

What it tells you. A storm with a name is a fixed point. It dates the marks it left: a blowdown, a washed-out road, a stand of trees that all grew back at once. It also gives people something to remember by. The Columbus Day Storm of October 12, 1962, is one such point (Figure 14.2).⁷

Where to find it. NOAA's Storm Events Database lists storm reports by county from 1950. Before 1996 it lists only tornadoes, thunderstorm

Yearly precipitation, Polk County, Oregon, 1895 to 2025

Bars: each calendar year. Line: average of that year and the 9 before it. Long-term average: 66.5 inches.



Source: NOAA National Centers for Environmental Information, Climate at a Glance, county time series, Polk County, Oregon (a county-wide average, not a reading at one place).

Figure 14.1. Rain in Polk County, year by year, 1895 to 2025. Find the tallest bar, 1996, at 108 inches, and the shortest, 1929, at 40. The dark line is a 10-year average, and the long-term average is 66.5 inches. These are averages for the whole county, not readings at one place. *Data: NOAA National Centers for Environmental Information, Climate at a Glance, county time series, Polk County, Oregon. Chart drawn for this guide.*

winds and hail, so older floods and freezes must come from newspapers (Chapter 9).² Make a list of the big events for your county, and look each one up.

Rivers, floods and stream gages

What it tells you. Water decided where people camped, built, farmed and ran mills. A **stream gage**, a station that measures how much water a stream carries, can show how the stream behaved in flood and drought for a century or more. For a landowner its most useful record is the **peak flow**, the highest flow of each year.²

Where to find it. All of these are free.²

- USGS Water Data for the Nation: the records of the U.S. Geological Survey's stream gages, including each year's peak flow.
- USGS StreamStats: click a stream to outline the land that drains to it.
- FEMA's Flood Map Service Center: flood maps by address.
- The National Wetlands Inventory, through the Wetlands Mapper of the U.S. Fish and Wildlife Service: mapped wetlands. It is not a legal finding that a wetland is there.



Figure 14.2. Timber blown down by the Columbus Day Storm of October 12, 1962, near Seaside, Oregon. A storm that people remember by name helps date what they tell you, and it dates the forest that grew back where the old one fell. *U.S. Forest Service, Pacific Northwest Region. Public domain.*

How to read it. Find the gage nearest your land on the same stream and download its list of yearly peak flows. Flow is measured in cubic feet per second, the volume of water passing the gage each second. Sort the list from highest to lowest, and note the gaps: the gage near Suver kept no record from 1912 to 1940.¹ Then set the list beside what people remember. If the flood everyone talks about is not the biggest in the list, ask what made it memorable: what it damaged, whom it touched, how recent it was.

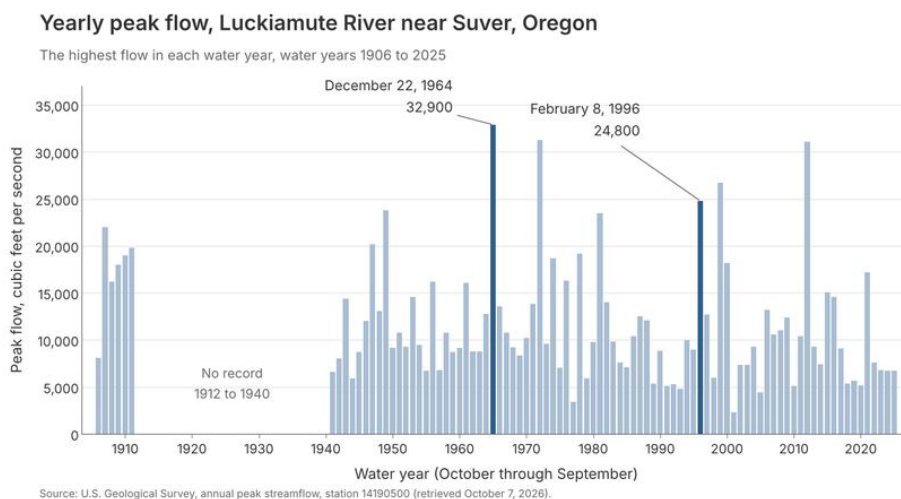


Figure 14.3. The highest flow of each year on the Luckiamute River near Suver. The tallest bar is the flood of December 22, 1964, at 32,900 cubic feet per second. The flood of February 8, 1996, at 24,800, ranks fifth. Notice the gap: no record from 1912 to 1940. *Data: U.S. Geological Survey, annual peak streamflow, station 14190500, retrieved October 7, 2026. Chart drawn for this guide.*

Wells and water rights

What it tells you. A well report gives the date a well was drilled, its depth, the layers the driller passed through, and the owner at the time. A **water right**, the state's permission to use water from a stream, spring or well for a stated purpose, shows how water was used and by whom. Cancelled rights count too, because they show uses that have stopped.⁸

Where to find it. In Oregon, the Water Resources Department has put scanned well reports and water right files online, free. Well reports can be searched by township, range and section, by county or by owner's name (Chapter 25).⁹

Logging and streams

Loggers once used the creeks themselves to move timber. A **splash dam** was a temporary dam that held back a creek; when loggers released the water, the flood carried their logs downstream (Figure 14.4).¹⁰ Historical records indicate that there were 80 to 100 splash dams on the Luckiamute River, with some major ones on Pedee Creek and Ritner Creek.¹¹ That number comes from a watershed assessment written for the Luckiamute Watershed Council in 2004. Ask the watershed council for your own river whether it has one.



Figure 14.4. A splash dam on the North Fork Willamette River, 1924. Loggers stored water behind dams like this one and released it to carry logs downstream. *U.S. Forest Service photograph by T. H. Gill. Public domain.*

A CAUTION PRISM figures are estimates on a grid, not measurements on your land, and a county's yearly figure describes the county, not your hillside. The nearest weather station may sit at a different elevation. Small creeks rarely have gages, and the well locations in older reports are approximate.²

On the tree farm In 1996 Polk County had its wettest year since 1895, 108 inches, against a long-term average of about 66. Its driest year was 1929, with 40.¹² The farm drains west to Pedee Creek and east straight to the Luckiamute.¹³ A gage on the river at Pedee ran from 1940 to 1970. At both it and the gage near Suver, the highest flow on record came on December 22, 1964.¹ The events a long-time resident would name include the freeze of November 1955 and the Columbus Day Storm of October 12, 1962. They also include the flood of December 1964 and the ice storm of February 2021.¹⁴ The farm's water has its own records. The 1993 survey of the main tract says that "there are water rights appurtenant to this property," meaning rights that go with the land. It gives two certificate numbers, 17385 and 40289, and lists an older easement for "access to an

existing spring.”¹⁵ Neither record has been looked up yet. The certificate numbers open the water rights in the state’s files, and the easement is in the county deed books. And the creeks carry an older story: some of the major splash dams on the Luckiamute were on Pedee Creek.¹¹

“there are water rights appurtenant to this property”

Partition plat of the tree farm’s main tract, 1993



Detail of Figure 15.2.

CHAPTER 15

What grew there: plants, forests, fire and crops

Of 23 trees the surveyors marked, 15 were oaks, one a Douglas-fir.

Of the 23 trees that government surveyors marked at corners on and near the tree farm in 1854 and 1855, 15 were oaks. Only one was a Douglas-fir.¹ Today the same ground is almost entirely Douglas-fir plantation.² The records of what grew on a piece of land reach back further than any photograph, and they can show a change that no one now living has seen.

Herbarium records

What it tells you. A camas plant pressed at Monmouth on April 22, 1894, still testifies to what grew in the Polk County countryside more than 130 years ago (Figure 15.1).³ A **herbarium** is a library of pressed plants. Each sheet records what was collected, where, when and by whom. Taken together, they show which plants grew in an area before roads, logging and farming changed it.⁴

Where to find it. All of these are free.⁴

- The Consortium of Pacific Northwest Herbaria: more than 3 million specimen records from 55 herbaria in Oregon, Washington, Idaho, Montana, Alaska and western Canada.
- OregonFlora, from the Oregon State University Herbarium: about 4,700 kinds of plants, with a mapper that lists what has been recorded in an area you draw.
- GBIF, a worldwide index of specimens, and iNaturalist, dated photographs taken by the public, with the locations of rare species blurred on purpose.
- USDA PLANTS, which tells you whether a plant is native or was brought in.

How to read it. In the Consortium's specimen search, draw a box around your area or choose your county, and sort the results by date. Note the oldest collections, the collector, and what each label says about the place. Then list the plants on your own land and compare. Plants of open ground, such as camas and oak, deserve special attention, because they can persist long after trees close in around them (Figure 15.2).⁴

A caution. Old labels are often vague ("near Dallas"), and collectors favored roadsides and easy ground. A plant missing from the records was not necessarily missing from the land.⁴

Forests, prairies and fire

What it tells you. The Willamette Valley that the surveyors walked in the 1850s held wide prairies and oak **savanna**, grassland with scattered oaks. Researchers who mapped its vegetation from the survey notes found that prairie and savanna dominated the southern and central valley, and that every kind of vegetation except conifer forest has shrunk since 1850.⁵ The burning that Native people did had kept much of that ground open, and after the 1850s much of it filled in with trees.



Figure 15.1. Camas collected at Monmouth, Oregon, on April 22, 1894. Read the label for the plant, the place, the date and the collector, here W. J. Spillman. A sheet like this is a dated record of what grew where. *University of Minnesota, Bell Museum herbarium, specimen MIN 89465. CC0.*

The records show what kind of forest stood where, when it burned and when it was cut.⁶

Where to find it. All of these are free online.⁶

- The original survey notes (Chapter 6). Surveyors of the 1850s named the **bearing trees** at each corner, the trees they marked and measured to so that the corner could be found again. They also noted where a line left prairie and entered timber.
- **Old forest maps.** A 1914 map by the Oregon State Board of Forestry and a federal survey of the 1930s mapped forest types, tree sizes, burns and logged land. The 1930s maps now have a digital version (Figure 15.3).



Figure 15.2. Camas in bloom at William L. Finley National Wildlife Refuge, in the Willamette Valley. Camas is a plant of open ground, and a patch of it can outlast the prairie around it. *George Gentry, U.S. Fish and Wildlife Service. Public domain.*

- **Maps of the vegetation of the 1850s.** In Oregon, the state's biodiversity information center has mapped the vegetation the surveyors described.
- **LANDFIRE,** federal modeled maps of today's vegetation and of the vegetation before settlement.
- **Fire records.** Monitoring Trends in Burn Severity maps large fires since 1984, and the Oregon Department of Forestry publishes fire statistics for the lands it protects.
- **Aerial photographs** (Chapter 12), the clearest record of logging and regrowth since the 1930s.

How to read it. Start with the survey notes for the section lines nearest your land. Add the 1914 and 1930s forest maps, then the earliest aerial photograph. Put them in date order and note where the edge between open ground and trees moved.⁶ In the notes, count the bearing trees by kind. A corner witnessed by oaks tells a different story from one witnessed by firs.

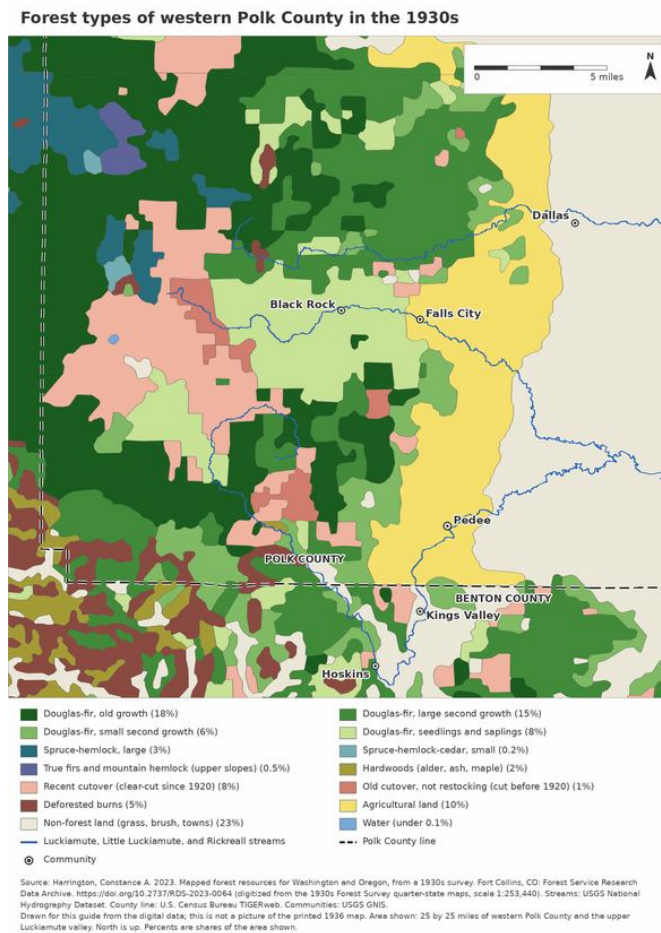


Figure 15.3. Forest types in western Polk County and the upper Luckiamute, as a federal survey mapped them between 1930 and 1936. A map like this shows the pattern for a county. Do not trust it for one property. *Drawn for this guide from the U.S. Forest Service digital version of the 1930s forest type maps (2023). Public domain.*

A caution. Regional maps are general. They can be right about a county and wrong about your property.⁶

Wildlife

What it tells you. Which animals were present, which were hunted or trapped out, and which have come back. Early evidence is mostly in journals, newspapers and interviews (Chapters 9 and 18). Recent evidence is online.⁷

Where to find it. eBird covers birds by county and by place, iNaturalist every kind of animal, and VertNet museum specimens. In Oregon, the Department of Fish and Wildlife's Compass map shows habitats and ranges at a broad scale. All are free.⁷

A caution. Online sightings cluster where people like to go. A lack of records does not mean a lack of animals.⁷

Crops and farming

What it tells you. What was grown or grazed on a piece of land, how the work was done, and how that changed with markets, machines and transportation. Farming leaves records at three levels: the county, the neighborhood and the single farm.⁸ The machines changed fast. Near Walla Walla in 1902, a combine drawn by 33 horses cut, threshed and sacked wheat. In Whitman County in 1941, a tractor pulled the combine (Figures 15.5 and 15.6).⁹

Where to find it.

- The Census of Agriculture: county totals for crops, livestock and farm sizes from 1840 to 2012 in its online archive.
- **The farm schedules of the federal census, 1850 to 1880.** For those four censuses, the census taker listed each farm by the farmer's name, with its acres, livestock and crops. Oregon's are on microfilm at the Oregon State Archives and the State Library.
- CroplandCROS, which replaced CropScape: a satellite map of what was grown in each field, year by year, in recent years.
- Old soil surveys and Extension bulletins, the farm advice pamphlets of the state agricultural college. Both describe the farming of their time in plain detail.⁸

How to read it. Find the name of the person who owned or farmed the land in 1850, 1860, 1870 or 1880 (Chapters 7 to 9). Look for that name in the farm schedule for the same year, and read across the line (Figure 15.4). For the county picture, pull the Census of Agriculture tables for several years and note what rose and fell.⁸

A **caution.** County totals describe the county, not your field. The farm schedules list the farmer, who may have been a renter.⁸



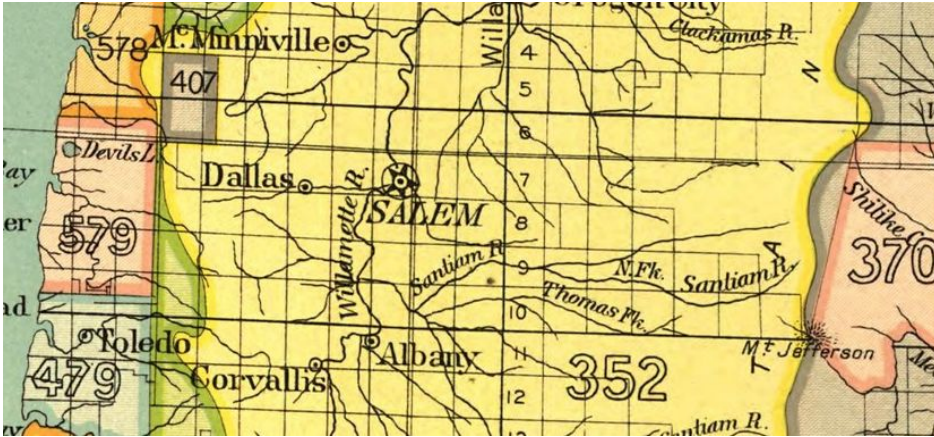
Figure 15.5. A combine drawn by 33 horses, cutting, threshing and sacking wheat near Walla Walla, Washington, 1902. One machine did three jobs, pulled by a field full of horses. *Underwood and Underwood stereograph, Library of Congress. Public domain.*

“Three fourths of this claim is rich level prairie, one fourth is timbered.”

Thomas H. Hutchinson, field notes of John Johnson's donation land claim, September 1855



On the tree farm The surveyors' bearing trees give the oldest picture of what grew on the farm. At 13 corners on and near it, Daniel Murphy in 1854 and Thomas Hutchinson in 1855 recorded 23 trees. Eleven were white oaks and four more were oaks of a kind not stated. The rest were two each of ash, alder and cherry, one willow, and one "red fir," the surveyors' name for Douglas-fir.¹ Hutchinson's own words fill in the picture. On the Tedrow claim, which takes in most of the farm, he wrote that "the other half is covered with fir & oak timber of good quality." The claim was valuable, he added, "on account of the timber on Luckiamute river and the rich prairie." Of the Johnson claim next to it: "Three fourths of this claim is rich level prairie, one fourth is timbered."¹⁰ The picture that forms is mixed country: rich prairie dotted with oaks, and stands of fir and oak. Hold it loosely. It rests on a small sample of trees that surveyors chose to mark corners, not on a survey of the vegetation. Nor do the records say which parts of the two claims became the farm's acres.¹¹ From the same countryside come the camas collected at Monmouth, 15 miles northeast, in 1894, and the 52,000 acres of wheat Polk County farmers were harvesting by 1879.¹²



Detail of Figure 16.1.

CHAPTER 16

The first people on the land

In 1851 the Luckiamute were asked to move east of the Cascades.

On May 1, 1851, at Champoege, three men spoke for the Luckiamute, the people of the river that runs past Pedee, and for their neighbors, the Marys River people. The two nations together were down to 44 men, women and children. Federal commissioners asked them to move east of the Cascade Mountains. Scho-la-que, also called “John,” answered that they “did not wish to leave the country where they had always lived.”¹ Then he and the other two, Daboe, called “Jim,” and Yuh-kow, signed an agreement to sell their land for \$20,000. It took in most of Benton and Polk counties, and they were to keep a small reserve near present-day Airlie. The Senate never ratified the agreement, which means it never approved it, so it never took effect.²

People have lived in North America for many thousands of years, and on almost any piece of land the written record covers only the last small part of that time.³

The long human past

What it tells you. Archaeology is the study of people in the past through what they left behind: tools, hearths, house sites, trails, and the changes they made to the land. Regional studies can tell you how long people have lived in your area, how they lived, and what kinds of places they used.³

Where to find it. For Oregon, *Oregon Archaeology*, by C. Melvin Aikens, Thomas J. Connolly and Dennis L. Jenkins (Oregon State University Press, 2011), covers the whole state. The University of Oregon Museum of Natural and Cultural History is the state's official home for archaeological collections. The Oregon State Historic Preservation Office has plain-language guidance for landowners, including a short bulletin, *Archaeological Sites on Private Lands*.⁴

“did not wish to leave the country where they had always lived”

Record of the council at Champoege, May 1, 1851, giving the answer of Scho-la-que

What you will not find. You will not find a public map of archaeological sites. Their locations are kept confidential, because sites that are published get looted. Each state's historic preservation office keeps the records, and Oregon's site records are open only to professional archaeologists and researchers who qualify.⁵ This guide follows the same rule. Research at the scale of a valley, a river or a township is right. Publishing the location of a site or a burial is not.

If you find something on your land

Leave it where it is. Oregon's preservation office asks you not to move or collect an artifact. Photograph it in place beside something for scale, such as a coin, a pen or a ruler, and send the picture and its location to the office's archaeologists at arch.permits@oprdrd.oregon.gov. In Oregon, a state permit is needed to dig or collect at an archaeological site on any land that is not federal, private land included.⁶ Keep the location private.

If you find what may be human remains, stop work and call the state police. Oregon law requires that remains thought to be Native be reported to the state police, the State Historic Preservation Officer,

the appropriate tribe and the Commission on Indian Services.⁷ Other states have similar laws. This is general information, not legal advice.

The history the records keep

What it tells you. Who lived on the land before American settlement, how it passed out of their hands, and which nations are their descendants today. In the Willamette Valley much of that history is written down, and the records name people.

The Luckiamute were one of the Kalapuyan peoples of the Willamette Valley. They lived along the Luckiamute River and its creeks, from about Rickreall south to Corvallis.⁸ Their neighbors were the Marys River people, also called the Chapanafa, whose homeland took in present-day Corvallis. Sickness, probably malaria, struck the valley in 1831 and 1832 and killed a great many Kalapuyans. By 1841 only a few hundred were left in the whole valley.⁹

The **treaty** that took in most of the valley was made at Dayton in January 1855. Joel Palmer, the federal superintendent of Indian affairs, signed it for the United States. The Senate ratified it on March 3, 1855, and the President proclaimed it on April 10.¹⁰ In it the bands ceded, or gave up, nearly the whole Willamette Valley (Figure 16.1). The United States promised yearly payments for 20 years, starting at \$10,000 a year, and the bands agreed to move to a permanent home to be chosen later.¹¹ In the winter of 1855 to 1856 the valley's bands were forced to move to Grand Ronde. An order of President James Buchanan of June 30, 1857, made Grand Ronde a reservation.¹²

A law passed in 1954, the Western Oregon Indian Termination Act, ended the federal government's relationship with the Grand Ronde tribes in 1956. A law signed on November 22, 1983, restored it.¹³ The Confederated Tribes of Grand Ronde today list the Luckiamute and the Mary's River bands among the bands of the 1855 treaty.¹⁴ The federal record of the land ceded in 1855 names two more nations today, the Confederated Tribes of Siletz Indians and the Confederated Tribes of Warm Springs.¹⁵ The Coast Reservation of 1855, where the federal Siletz Agency stood, was meant in part for Willamette Valley peoples.¹⁶

Where to find it.

- **The tribes themselves.** Most tribes have a cultural resources office or a Tribal Historic Preservation Office. For the Luckiamute country, the Confederated Tribes of Grand Ronde keep their Cul-

tural Resources Department and Historic Preservation Office at the Chachalu Museum and Cultural Center. The Confederated Tribes of Siletz Indians keep a cultural program at Siletz (Chapter 25). The national directory of tribal preservation offices is at nathpo.org. In Oregon, the Legislative Commission on Indian Services can tell you which tribes to contact for each part of the state.¹⁷

- **Treaties.** The texts are printed in Charles J. Kappler's *Indian Affairs: Laws and Treaties* and transcribed in the Tribal Treaties Database of Oklahoma State University. The signed original of the 1855 treaty is in the National Archives as Ratified Indian Treaty 282.¹⁸
- **Cession maps.** Charles C. Royce's *Indian Land Cessions in the United States* (1899) numbers each area given up by treaty. The Willamette Valley cession of 1855 is area 352 (Figure 16.1).¹⁹
- **Histories by tribal scholars.** For western Oregon, David G. Lewis's *Tribal Histories of the Willamette Valley* (2023) and his online *Quar-tux Journal*. The Oregon Encyclopedia adds short signed articles, among them Henry Zenk's "Kalapuyan Peoples," Melinda Jette's "Kalapuya Treaty of 1855" and Lewis's "Confederated Tribes of Grand Ronde."²⁰
- **Native voices in the record.** In 1913 and 1914, William Hartless, a Marys River man born about 1844 where Corvallis now stands, dictated Marys River Kalapuya stories to the anthropologist Leo Frachtenberg. Melville Jacobs published them in *Kalapuya Texts* (1945).²¹
- **Native Land Digital** (native-land.ca), a map of traditional territories, which says plainly that it does not show official or legal boundaries.²⁰

How to go about it. Find the treaty that covers your area and read it. Read at least one history written by, or with, the tribes concerned. Note what the early surveyors and travelers recorded about trails, camps and burned or open ground in your township (Chapter 6). If your questions go beyond the published sources, write to the tribe's cultural resources office and ask, and accept that some knowledge is not shared. Work at the scale of the valley, the river or the township. Never publish the location of a site or a burial. Treat each tribe as the authority on its own history.²⁰

What it costs. Nothing but a library visit, or a letter or email to a tribe's cultural office.

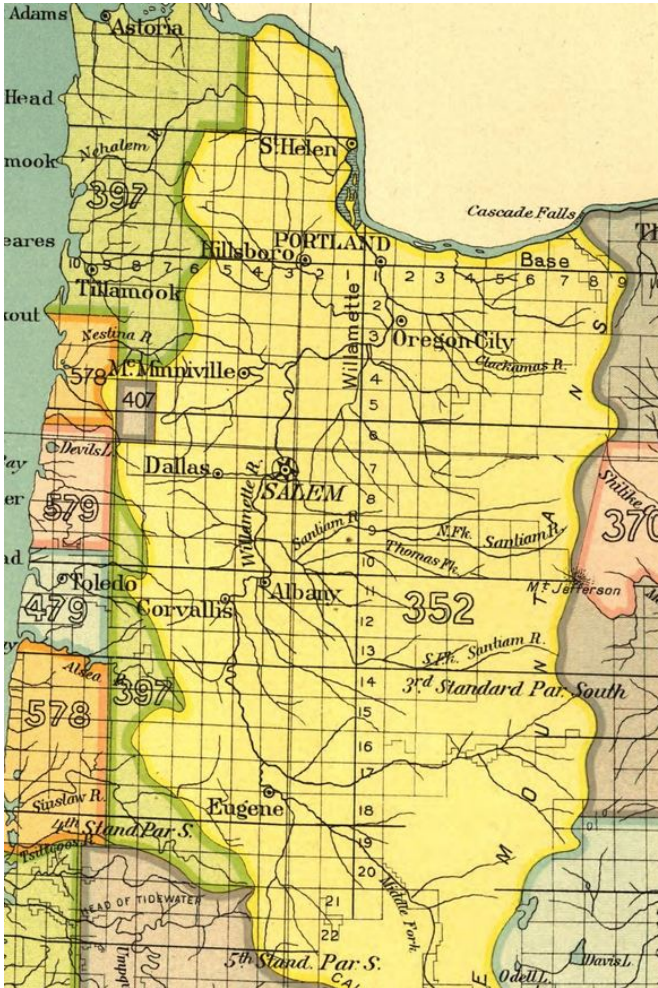


Figure 16.1. The Willamette Valley cession on an 1899 federal map. The yellow area numbered 352 is the land ceded in the treaty of January 22, 1855, from the Columbia River south past Eugene. The lines are the ones the United States drew, not where people lived. Charles C. Royce, *Indian Land Cessions in the United States* (1899), detail. Library of Congress. Public domain.

A caution. A cession map shows lines that the United States drew, not where people lived. Councils, treaties and rolls were written down by government clerks, who spelled names as they heard them. Dabo of 1855 may be the Daboe of 1851, or he may not.²² Government records describe Native people from the outside, so read them beside the histories the tribes keep.

On the tree farm The farm's own files said almost nothing about its first people. Its 2012 management plan says only that Native people "undoubtedly lived in the general area near the Luckiamute River" and that no artifacts have been found on the property.²³ The records of the river say more. On January 4, 1855, three men signed the treaty

for the “Cheluk-i-ma-uke band,” which the historian David G. Lewis identifies as the Luckiamute: “Dabo, or Jim, first chief”; “Sco-la-quit, or John, second chief”; and “Yah-kow, or Kompetine, third chief.”²⁴ On March 14, 1855, two Polk County settlers agreed to let the band stay on about 25 acres of their land claims. Lewis places the 25 acres on the Luckiamute between Pedee and Monmouth, and he says the exact spot is his assumption.²⁵ The Luckiamute reached Grand Ronde in February or March 1856, and a census there that year lists John as principal chief of a Luckiamute band of 22 people.²⁵ The reservation rolls of 1860 and 1888 name 18 “Luckymute” people, among them Samanthy Wheeler, born about 1816; Peter Wheeler, called “Luckiamute Pete”; and James Durbin, called “Luckiamute Jim.”²⁶ No record found so far ties any of them to the farm itself. The Luckiamute are among the peoples of the Confederated Tribes of Grand Ronde, and that nation is the one to ask.²⁷



Detail of Figure 17.1.

CHAPTER 17

What you can see on the ground

In 1993 a surveyor looked for the 1855 oaks and found a fence.

In July 1855 Thomas Hutchinson marked the northeast corner of Mary Gilliam's land claim with two white oaks, 30 and 23 inches through. The corner lies on what is now the west line of the tree farm's main tract.¹ In 1993 a surveyor dividing the main tract went looking for that corner. All he found was a fence corner, "there being no bearing tree evidence that I could accept." He set his marker on the line at the fence corner, but he would "not call it the DLC corner," the corner of the donation land claim.²

The ground is a record too. Much of what the old records describe can still be found on it, and some things on the ground appear in no record at all.

What to look for

- **Old trees.** A tree with wide, low limbs grew up in the open, even if it stands in a forest now (Figure 17.1). A line of old trees may mark a fence, a road or a property edge.
- **Stumps.** Their size, height and state of decay suggest when a stand was cut and how. A notch cut into an old stump held a **springboard**, the plank early loggers stood on to saw above the swell of the trunk

(Figure 17.2). On a fresh stump you can count one ring for each year of growth.

- **What grows where.** Patches of plants that belong to open ground, to wet ground or to old gardens often outlast the conditions that brought them. Fruit trees, lilacs and daffodils in the woods usually mean a house stood nearby.
- **Fence lines and corners.** Old wire grown into trees, rock piles at field corners, and survey markers.
- **Marks on trees.** Blazes and old signs, such as the trail marker in Figure 17.3.
- **Road and railroad grades.** A level bench cut across a slope, often clear in lidar even where brush hides it (Chapter 13).
- **Building sites.** Foundation stones, a filled well, a level pad, bricks or glass.
- **Water works.** Ditches, ponds, spring boxes and the remains of dams.
- **On a town lot.** A change in the foundation or siding where a room was added, a hitching ring at the curb, a date stamped in the sidewalk.³

“there being no bearing tree evidence that I could accept”

Surveyor’s narrative, partition plat of the tree farm’s main tract, 1993

How to record what you find

Photograph each thing in place, with something in the picture for scale. Record where it is, the date, and which way you were facing. Write down what you see first. Then, in a separate sentence, write down what you think it means, and at least one other thing it might mean.³ “A wide-crowned oak, about 30 inches through, standing among young firs” is an observation. “It grew up in open prairie” is one reading of it. “It grew up beside an old field” is another.

Leave it where it is

An object taken from the ground loses most of what it could tell anyone. If something may be very old, or may be a grave, stop and ask (Chapter 16).³



Figure 17.1. Old, wide-crowned oaks in a meadow near Coyote Point, in the South Umpqua headwaters, May 25, 2010. Notice the low, spreading limbs, the shape of a tree that grew up in the open, and the younger conifers closing in behind them. Bob Zybach, *Tiller Pre-Contact Reference Condition Study* (2011), Figure 3.01.

Predict, then look

The best use of a walk is to test what the records say. Mark on a map where the survey notes, old maps and aerial photographs say something should be: a corner, a trail, a house, the edge of a prairie. Then go and look. When the ground and the records agree, you can trust both more.³

Bob Zybach's study of the South Umpqua headwaters near Tiller, Oregon, worked this way. It moved through four overlapping steps: "archival research and literature review, predictive field map construction, 'ground-truthing' the predictive map (field research), and synthesis."⁴ From the records he marked where old ridgeline trails met and where camps and springs were named. On the ground, the evidence he expected "was readily found at each of these exact locations."⁵

What it costs

Walking your own land costs nothing but time. Walking anyone else's needs the owner's permission, every time.

On the tree farm The next step on the farm is a walk with the survey notes in hand. Murphy and Hutchinson recorded 23 bearing trees at 13 corners on and near the farm, each with its kind, its diameter, and its



Figure 17.2. A springboard notch in an old stump, Lake Twenty-Two Trail, Washington. Loggers cut the notch, set a plank in it, and stood on the plank to saw above the swell of the trunk. A notch like this marks logging done by hand. *Walter Siegmund, Wikimedia Commons. CC BY-SA 3.0.*

compass bearing and distance from the corner.⁶ Most of those trees are surely long gone. The maps made for the farm's history plot them from the county's digital map, not from a survey, so they show where to look, not where an oak still stands.⁷ Several trees stood far from their corners, and one white oak stood 546 feet away.⁷ At that distance an error of 1 degree in the bearing moves the spot about 10 feet sideways, and an error of 5 degrees about 48 feet. So begin at an old corner that a modern survey has found and marked. The 1993 survey began at the county's brass cap at the northwest corner of the Tedrow claim.⁸ Look for a big stump, the hollow where one rotted away, or an old, wide-crowned oak among the firs, and photograph whatever you find where it lies. Two

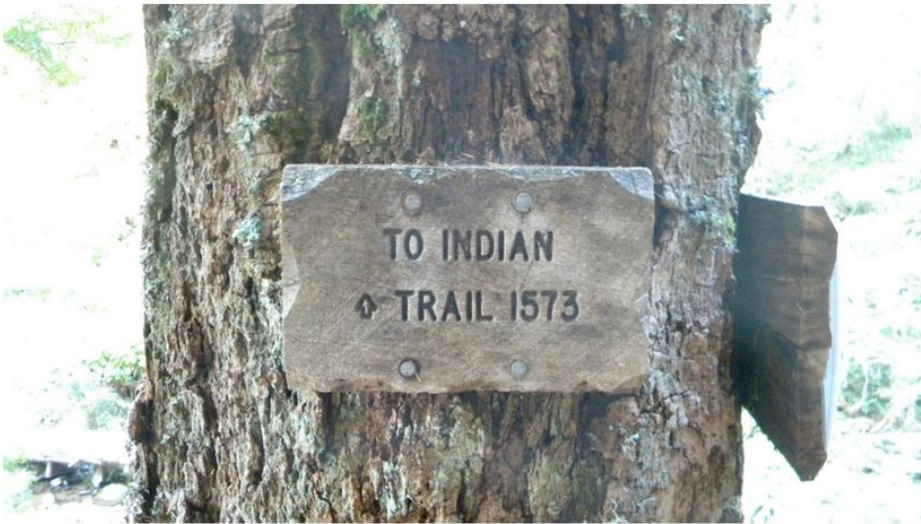


Figure 17.3. An old Forest Service trail marker on a tree near Fish Lake, in the South Umpqua headwaters, July 30, 2010. A mark on a tree can outlast the trail, the fence or the line it marked. *Bob Zybach, Tiller Pre-Contact Reference Condition Study (2011), Figure 3.02.*

1855 house sites also lie inside today's farm.⁹ Like any old house site, they are for looking and photographing, never for digging (Chapter 16).

Living memory

Living memory reaches back to about the 1940s, and it holds what no office files: who did the work, why a road moved, what the place was called. The last chapter of Part II covers interviews, and the papers and photographs families keep.



Detail of Figure 18.1.

CHAPTER 18

What people remember, and what families keep

In 1938 a great-niece recalled who chose James Taylor's land.

In a 1938 interview, a great-niece of the Peedee settler John Johnson recalled the family's crossing of the plains: "Father's uncle, John Johnson who had crossed the plains four times, was captain of the train. He had a place already located near Peedee for grandfather, James Taylor."¹ A John Johnson, very probably the same man, held the land claim that takes in the east side of today's tree farm, and Taylor took the claim next door.² Survey notes and patents could never tell you that Johnson chose a place for Taylor before the wagons arrived. A family remembered it, an interviewer wrote it down, and a volunteer cemetery record kept it. It is still a lead rather than a proof, but without the interview no one would know to look.

People who have known a place for a long time carry information that is written nowhere. They know where the old house stood, who planted the orchard, what burned in which year and what the creek did in the big flood. Records can wait in an archive for another 50 years. People cannot.³

“Father’s uncle, John Johnson who had crossed the plains four times, was captain of the train.”

A great-niece of John Johnson, interviewed in 1938

Oral history

What it tells you. An oral history is a recorded interview with someone who remembers a place or a time, kept so that others can hear it later. It tells you what happened and who was there, in the words of someone who saw it, along with the things no one thought to write down.

Who to talk to. Earlier owners and their children. Neighbors of long standing. People who worked on the land or near it: loggers, farmers, foresters, road crews, mail carriers. Members of the tribes whose homeland it is, if they choose to share. Start with the oldest, and end every visit by asking who else you should see. Do not overlook yourself. If you have owned a place for 20 or 30 years, you are a source: write down what you remember, with dates as best you can give them.³

Before you record. Explain what you are doing and why. Say that you would like to record, what will happen to the recording, and who may hear or read it. Tell the person they can skip any question and stop at any time, and put the agreement in writing. The Oral History Association publishes the accepted standards, and the Smithsonian’s *Folklife and Oral History Interviewing Guide* is a free how-to with sample forms. Permission to talk is not permission to publish.⁴

During the interview.

- Record the conversation; a phone is good enough. Begin by saying the date, the place and who is present.
- Bring things to look at: a map, an aerial photograph, old pictures. If the person is able, walk the ground together.

- Ask open questions. “What was here?” is better than “Was this the old mill?”
- Ask how the person knows. Did they see it, or were they told?
- For dates, ask about order. “Was that before or after the 1962 wind-storm?” is easier to answer than “What year was that?”
- Let the person finish. Silence is fine.³

After the interview. Keep the original recording unchanged, and make a copy to work from. Type out what was said, or let a transcription program make a first draft and correct it against the recording. Give the person the **transcript**, the typed record of the interview, and ask them to check names, spellings and anything they want to correct. Note every correction as a correction. The recording remains the record of what was said.³

Check memory against the documents. Memory is strong on what happened and who was there. It is weaker on exact dates, and it tends to gather around a few large events. Take what you were told to the other records: a newspaper for the date, an aerial photograph for the place, a deed for the name. Bob Zybach’s oral histories of Soap Creek Valley, north of Corvallis, show how. He chose people with first-hand knowledge, interviewed the oldest first whenever he could, and often met them at the places where events had happened. Tested against documents, their memories showed, in most instances, “striking degrees of consistency in detail.”⁵ Where two people remember the same thing differently, record both accounts, and do not pick a winner without evidence.³

Give it a permanent home. A recording in a drawer will be lost. Ask your county historical society, the state historical society or a university archive to take a copy, with the person’s written agreement. The Soap Creek Valley interviews are kept at Oregon State University, with some at the Oregon Historical Society, where anyone can ask to hear them (Chapter 25).³

What it costs. A phone or a recorder, the time to listen and type, and the cost of a copy for an archive. The standards and the sample forms are free.

A caution. A memory is a source, not a verdict. For years the tree farm’s own management plan said the land “was homesteaded around the turn of the century.” The patents show that homesteading accounts for about 7 of its 211 acres (Chapter 19).⁶ Check every story, including your own.

Family papers and photographs

What it tells you. The people who remember a place often hold its best paper records too: albums, letters, diaries, account books, old deeds, timber sale contracts and farm records.⁷ A family photograph can carry its own date and place. A **cabinet card**, a studio portrait mounted on stiff card and common in the late 1800s, usually has the studio's name and town printed on the mount (Figure 18.1).⁸ A working map can be a family record too. An aerial photograph with an owner's lines drawn on it shows how the land was seen and managed in one year (Figure 18.2).

How to go about it. Ask to see the papers, and ask before you copy them. Photograph or scan each item, record who owns it, and leave the originals with the family. The National Archives has a free guide, *How to Preserve Family Archives*.⁷

A caution. A family's papers belong to the family. A copy made for your research is not permission to publish.

On the tree farm The first interview to record on the farm is the owner's. Dave Sullivan bought the farm in December 1989 and has more than 35 years of first-hand knowledge of its land and its weather.⁹ His 2012 management plan already holds part of that memory, and other records bear much of it out. Before his time the whole property was fenced and grazed by cattle, and the 1955 aerial photograph shows open grassland. About 1976 Publishers Paper planted the open areas with Douglas-fir seedlings, each in a tube to keep the deer off. In the spring of 1989 WTD Industries logged nearly all the merchantable timber. In 1990 Dave Sullivan planted about 25,000 seedlings himself, and students from Oregon State University's floor-hockey club planted about 25,000 more.¹⁰ The farm's history also records a dirt-floored dwelling of about the 1930s, collapsed by 1990 and now lost under blackberry.¹¹ That is the kind of detail an owner knows and a deed never mentions. The hand-marked photograph of about 1997 in Figure 18.2 is a family record of the same kind. Earlier owners, their families and long-time neighbors around Pedee come next.



Figure 18.1. A cabinet card, a common kind of studio photograph in the late 1800s. Look at the bottom of the mount, where the studio printed its name and town: "R. H. Mann, Virginia, Ills." (Illinois). A line like that helps date and place a family photograph. *Wikimedia Commons. Public domain.*

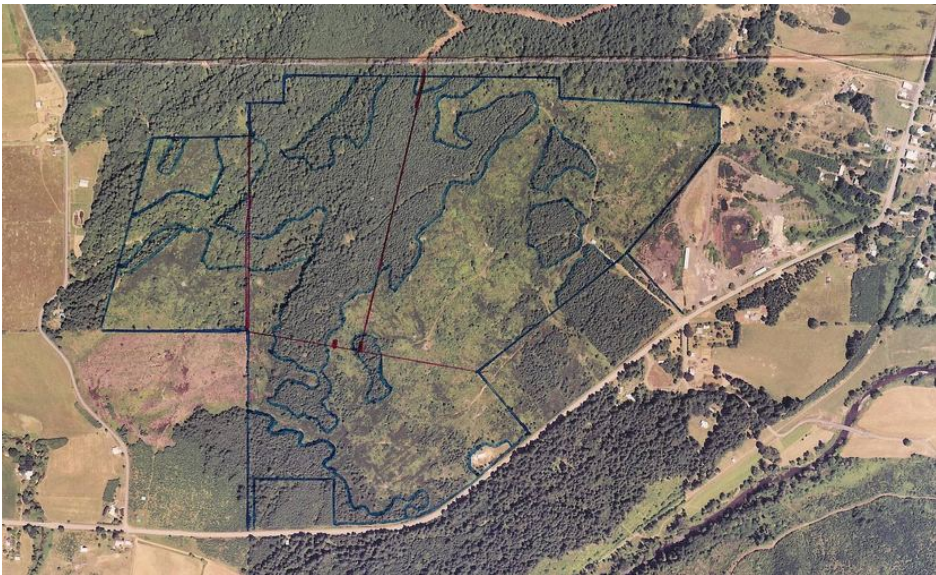


Figure 18.2. The Sullivan tree farm about 1997, with lines drawn by hand on an aerial photograph. Property lines and the edges of stands of trees are drawn by hand. The paler ground between the dark stands is probably land logged in 1989 and replanted in 1990. *From the owner's files.*

PART III

Putting it together

Putting the pieces together

Two records disagreed. The dates of the land laws settled it.

For years the management plan for the Sullivan tree farm said the land “was homesteaded around the turn of the century.”¹ The federal **patents**, the government’s first deeds to the land, said otherwise, and the dates of the land laws showed why. **Donation land claims**, the free grants Congress offered Oregon’s early settlers, could not be started after 1855, and the Homestead Act was not passed until 1862. Claims surveyed in the summer of 1855 could not have been homesteads. The family story held for about 7 of the farm’s 211 acres.²

No single record settled the question. Two records disagreed, and a fact about the law explained which one to believe. That is the work of this chapter: fitting the pieces together, and saying plainly how much they prove.

Every record is a key to another

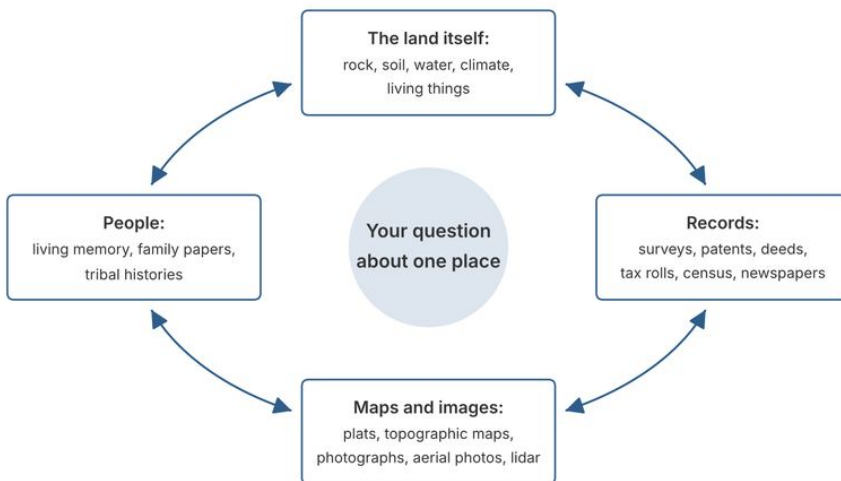
Almost every record you find gives you the key to another one. These are the links used most.

What you find	What it leads to	Why
The rock under the land	The soil	Soil forms from the rock beneath it and what washes onto it.
The soil and the rainfall	What grew there, wild or planted	Soil and water set the limits for plants, crops and trees.
Township, range and section	Survey notes, plats and patents	Federal land records are filed by that description.
The surveyor’s notes	Forest and fire history, old trails, early fields	The notes describe the ground before most of the change.
The first patent	The chain of deeds	The patent names the first owner, where the chain begins.
An owner’s name and dates	Census pages, farm schedules, newspapers, gravestones, family papers	All of those are filed by name.

What you find	What it leads to	Why
A date from a deed or a newspaper	The aerial photograph or map nearest that date	A picture shows what the words describe.
The date a railroad or road arrived	Changes in crops, logging and land prices	Transportation changed what the land could earn.
A stream gage or weather record	Newspaper accounts and people's memories	The record gives the date. The accounts say what happened here.
A feature in an aerial photograph or lidar image	A walk on the ground	The image says where to look.
A story from an interview	Every other record	A memory gives names, places and events to look up.

The work runs in a circle: the records, the pictures, the land, the people, and back to the records (Figure 19.1). You can enter the circle anywhere. Most people enter with a name or a **legal description**, the wording in a deed that says exactly which land is meant, because those two open the most doors.

How the kinds of information connect



Some examples of links between them
 Section and township number → survey notes and patents
 Owner's name → census, newspapers, gravestones
 Date in a deed → the aerial photo nearest that date

Figure 19.1. How the kinds of evidence lead to one another. Your question sits in the middle. Every arrow runs both ways: a deed can send you to an aerial photograph, and a mark on the photograph can send you back to the deeds. The 3 links listed at the bottom are the ones most people use first. *Drawn for this guide.*

Build a timeline

Put every dated piece of evidence in one list, in date order. For each entry give the date, what the source says, and where the source is. Keep three dates apart: the date something happened, the date it was written down, and the date of any later copy or index. They are often different, and the difference matters, as the box at the end of this chapter shows.

Do not fill the empty years with a smooth story. A gap in the timeline is a finding, because it tells you where to look next. On the tree farm, the patents of 1877 to 1900 name the first owners. Then the list of owners goes silent until a paper company planted the land about 1976, and who bought out the Tedrows and the Johnsons is not yet known.³ That gap points straight at the county deed books (Chapter 8).

When sources disagree

Disagreement is information. Before you decide which source is right, ask four questions.

- Are they describing the same place? Names move, and two creeks can share one name.
- Are they describing the same time?
- Who made each record, and for what purpose?
- Did one copy the other? Two newspaper stories that repeat one account are one source, not two.

The last question catches more mistakes than the other three. The 1855 plat, or survey map, of the farm's township letters "Level prairie and soil 1st rate" across Section 33. It looks like a second witness to the surveyor's notes. But the mapmaker drew it from those same notes, so it repeats them rather than confirming them.⁴

If you cannot settle a disagreement, record both versions and name the record that would settle it. Two family accounts of John W. and Rachel Tedrow disagree on whether the couple married in Ohio or in Illinois. Their donation land claim file, which should hold their own sworn statements, is the record that can decide.⁵

Keep more than one explanation open

A straight line of trees might be an old fence, an old road or a property edge. An opening in the forest might have been a field, a burn or a recent harvest. Write down each explanation, and beside each one the record that could confirm it or rule it out.

In 1934 the Historic American Buildings Survey drew the John Johnson house at Pedee. It may be the house the surveyor sighted on what is now the tree farm in 1855. It may instead have stood somewhere else on Johnson's claim, which reached into two other sections. The drawings themselves, kept at the Oregon Historical Society, are the record that could tell the two apart.⁶

Say how sure you are

Write each conclusion in three parts.

1. **What the sources show.** "The 1948 aerial photograph shows an open field here."
2. **What you infer.** "The field was probably cleared before 1948 and has grown back to trees since."
3. **What is still unknown.** "I have not found when it was cleared, or by whom."

Use four plain words for how sure you are: certain, likely, possible and unknown. The tree farm has an example of each. It is certain that the Tedrows' patent was issued on June 14, 1877, because the patent says so. It is likely, but not proven, that the Charles W. Pagett buried at Montgomery Cemetery is the man who homesteaded the farm's north strip. It is possible that the house drawn in 1934 is the one the surveyor sighted in 1855. Who bought the Tedrows' land, and when, is unknown.⁷

A narrow statement that is true is worth more than a broad one that might be.

Keep a research log

The **research log** is where all of this happens. Make one entry for each source, and fill in the same items every time: your question; the place; what the source is and who made it; where you found it; the date of the event; the date the record was made; the page, frame or image number; the exact words, or what the image shows; what you think it means; what else it could mean; any limits on sharing it; and the next

step, with the date you looked. Figure 2.2 shows one entry filled in, and Figure 24.1 is a blank form to copy.

Two habits make the log worth keeping. Copy the record's words exactly, misspellings and all, and put your reading of them on a separate line. And write down where you found each thing on the day you find it. Six months later, "a government website" will not lead you back to a page. "BLM Oregon land records, volume R0029, page 331" will.

Before you share

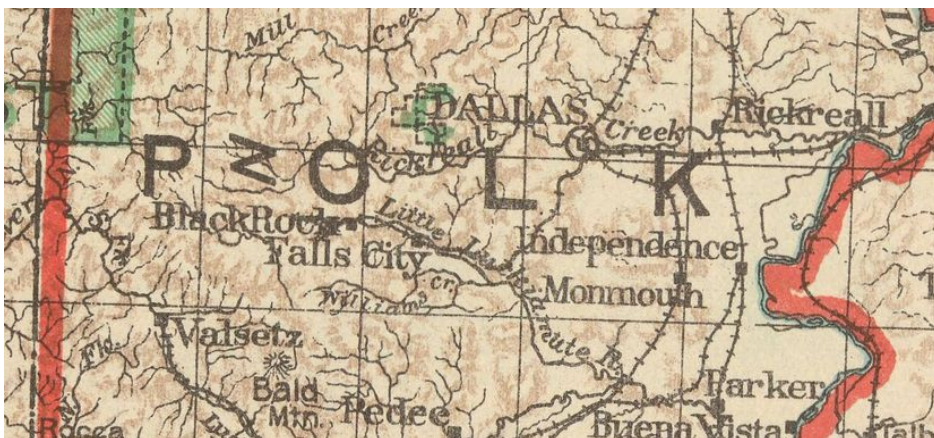
Keep a private copy of everything, and make a separate copy for sharing. Then check what is in the sharing copy. Leave out the locations of archaeological sites and burials (Chapter 16). Follow whatever each person you interviewed agreed to (Chapter 18). Check the rights to any photograph you did not take. This guide follows its own rule. It describes the two 1855 house sites on the tree farm by the surveyor's bearings and distances, as the notes give them, and never draws them on a map.

“10th Aug 1855.”

Thomas H. Hutchinson, the date at the end of his field notes for the Tedrow claim

On the tree farm One survey on the farm carries two dates, and its history had to choose between them. Thomas H. Hutchinson’s field notes for the Tedrow claim end with the date “10th Aug 1855.” The Bureau of Land Management’s index of surveys for the township lists the same work under 1856, and a label printed above the scanned page repeats 1856.⁸ The notes were written in the field, on the days the surveyor did the work. The index and the label came later. When a record made at the time and a later copy disagree, follow the record made at the time, as the farm’s history does.⁹

The 1955 aerial photograph is a chance to practice the three-part statement. *What it shows*: open grassland with scattered trees, crossed by tracks, with denser timber in the northeast and on the west side. *What can be inferred*: the owner’s management plan says the land was fenced and grazed by cattle before he bought it, and the photograph fits that account. *What is still unknown*: to the eye the farm looks more open in 1955 than in 1936, but no record of logging or clearing has turned up, so the change stays a question, not a finding.¹⁰



Detail of Figure 20.1.

CHAPTER 20

Following change through time: roads, railroads and land use

A logging railroad ran past Pedee for more than sixty years.

In 1912 the Cobbs and Mitchell lumber company incorporated the Valley and Siletz Railroad to carry logs and lumber between Valsetz, a timber town in the Coast Range, and Independence, on the Willamette River. Its track followed the Luckiamute River down past Pedee (Figure 20.1).¹ For more than sixty years it carried the forests of the upper Luckiamute to market. Most of the line was abandoned in 1978, and its last owner, Boise Cascade, took up the section through Hoskins early in 1979.²

Many of the biggest changes on a piece of land were caused by something that happened miles away. A railroad arrived, a highway moved, a mill closed, a power line came through. The ground stayed the same, but what it could earn did not.

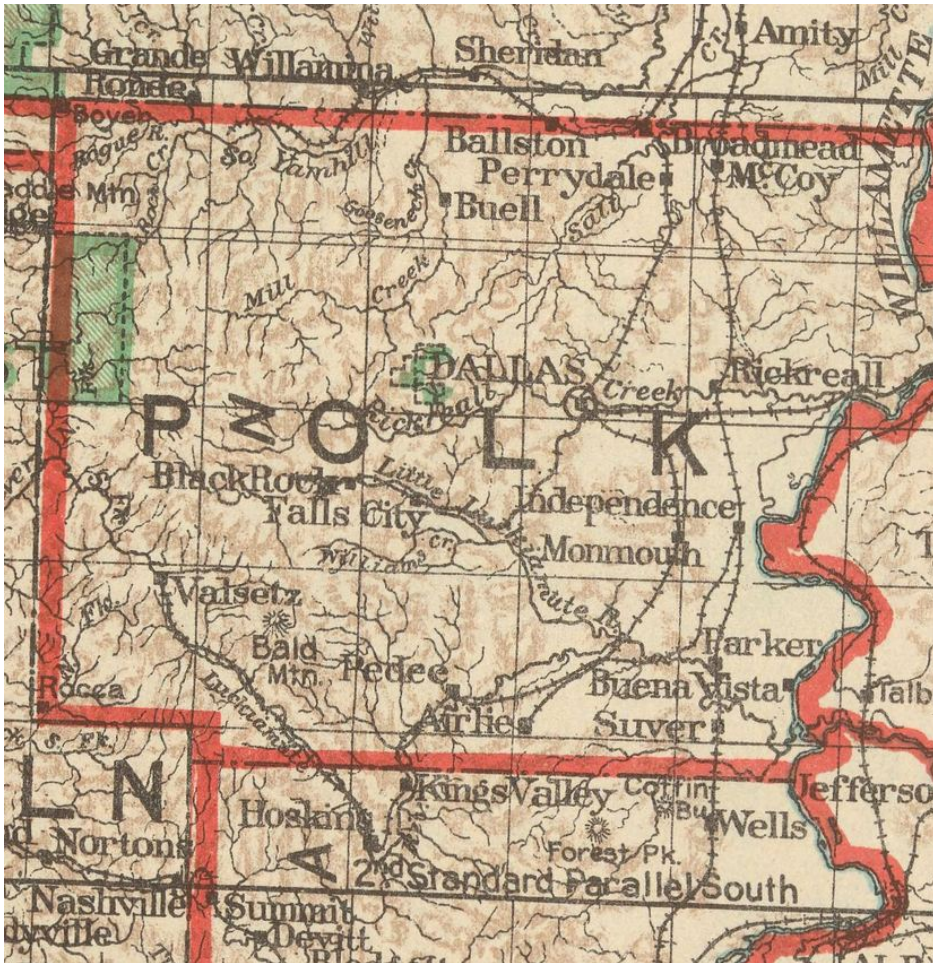


Figure 20.1. Polk County on the General Land Office map of Oregon, 1922. Find Pedee, then follow the railroad, drawn as a line crossed by short ticks, up the Luckiamute to Valsetz, and the branch that ends at Airlie. A state map like this one can date a route even when the histories disagree. *U.S. General Land Office, State of Oregon, 1922 (detail). Scan: David Rumsey Map Collection, CC BY-NC-SA 3.0.*



Figure 20.2. The Valley and Siletz Railroad on a trestle beside a log pond. Logs float in the pond along the track. A line like this one carried the forest out of the upper Luckiamute for more than sixty years. *Undated postcard. Gerald W. Williams Collection, Special Collections and Archives Research Center, Oregon State University Libraries. No known copyright restrictions.*

Roads, rails and wires arrive in order

In the West the usual order was trail, wagon road, railroad, then automobile highway. Mail delivery, the telephone and electric power followed, each on its own date. Each one changed what could leave a farm or a forest at a profit, and so what the land was used for. A logging railroad could turn standing timber miles up a valley into lumber that could be sold (Figure 20.2). To date a change on your land, find the dates of the roads and rails that served it.

Where the dates are kept

- The first survey plats show the trails and wagon roads of the 1850s (Chapter 11).
- Each edition of the U.S. Geological Survey's **topographic maps**, maps that show the shape of the land with contour lines, shows the roads and railroads of its year (Chapter 11).
- The Library of Congress has a free online collection of railroad maps from 1828 to 1900.³
- State highway departments published maps and reports year by year.
- County road records are kept by the county surveyor or road department, and the Oregon State Archives' county inventories list the older ones (Chapter 25).
- Newspapers give the dates of openings, closings and wrecks (Chapter 9).
- Old bridges and road grades are dated records of a route themselves (Figure 20.3).

A map can also fix a date when the histories disagree. Oregon State University's history of Hoskins says the Valley and Siletz was finished in 1914, while state railroad reports of 1915 and 1917 describe it still growing. The General Land Office's map of 1922 settles the part that matters for most questions: by 1922 the line ran all the way to Valsetz.⁴

Land use and industry

The second kind of change is in how the land was used: farming, grazing, logging, milling, mining or housing, and when one use gave way to another. The Annual National Land Cover Database maps the land cover of the lower 48 states for every year from 1985 to 2025, so you can watch a field become a forest, or a forest become a subdivision (Figure 20.4).⁵ County planning offices keep zoning maps and their history. The Forest History Society collects the records and photographs of logging and lumber companies. For past industrial uses that may have left something in the ground, the Environmental Protection Agency's "Cleanups in My Community" and Oregon's Department of Environmental Quality list known sites, and the Oregon Department of Geology and Mineral Industries maps old mines and quarries.



Figure 20.3. The Ritner Creek covered bridge, 2010. Built in 1927 to carry the Kings Valley Highway over Ritner Creek, the bridge was moved just downstream in 1976. Old roads and bridges date the routes that tied farms to their markets. *Gary Halvorson, Oregon State Archives, 2010. CC BY 4.0.*

On the tree farm A narrow-gauge railroad reached the farm's neighborhood only 26 years after the land claims were surveyed. William Reid's Oregonian Railway reached Airlie, just southeast of Pedee, in September 1881, and its line from Airlie north to Monmouth was abandoned in 1927.⁶ The Valley and Siletz followed the river past the farm, and the earliest aerial photograph of the farm, taken in 1936, shows its track running toward Pedee.⁷ On the Kings Valley Highway near Pedee, the Ritner Creek covered bridge was built in 1927. In 1976 it was lifted from its foundation and moved just downstream (Figure 20.3).⁸ Since 1985 the change has been in the land cover. In the 6-mile square around Pedee, cultivated crops covered about 5 percent of the ground in 1985 and less than 1 percent in 2025. Pasture and hay grew from about 17 to 20 percent, and evergreen forest covered about half in both years (Figure 20.4).⁹

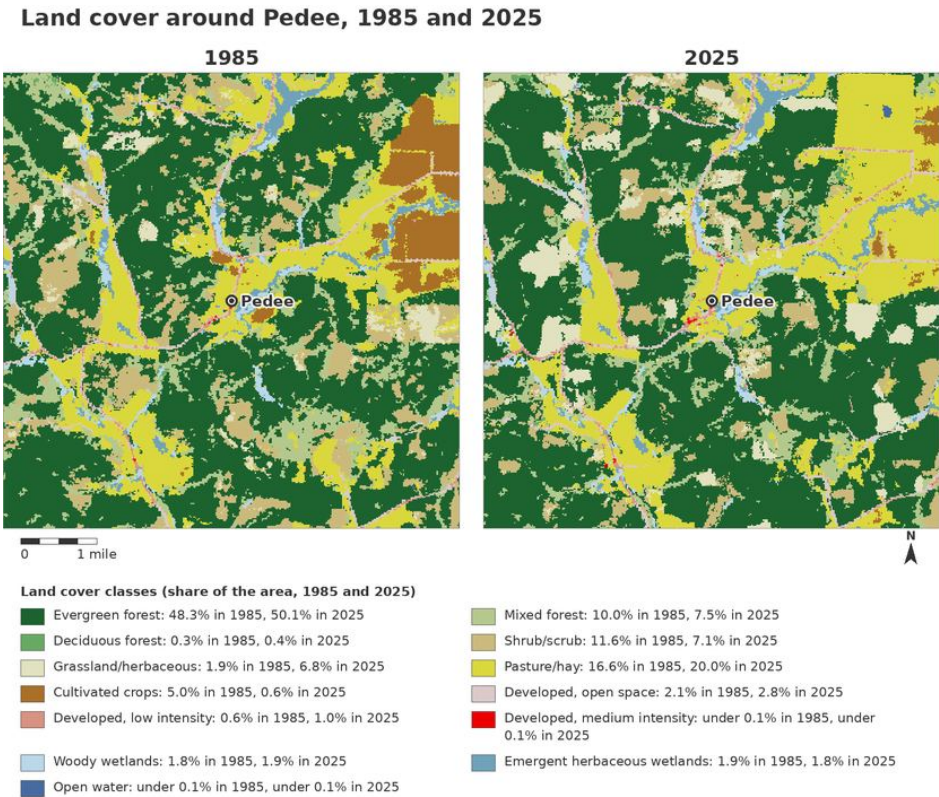


Figure 20.4. Land cover around Pedee, 1985 and 2025. The same 6-mile square in both years, with Pedee at the center. Watch the brown cropland east of Pedee all but disappear, and the patches of forest and shrub shift as stands are cut and grow back. *U.S. Geological Survey and the Multi-Resolution Land Characteristics Consortium, Annual National Land Cover Database, 1985 and 2025, retrieved October 7, 2026. Drawn for this guide.*

All four kinds of evidence at once: the Oregon Coast Range

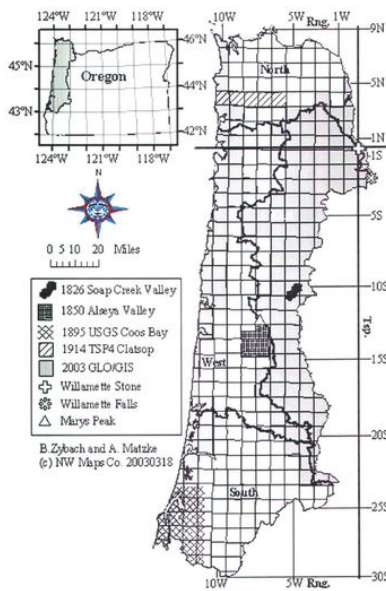
A rule written for a whole mountain range works for 211 acres.

The rule fits in one line: “research questions are answered based on the ‘weight of evidence’ from multiple sources.”¹ Bob Zybach wrote it in 2003 about a whole mountain range. It works just as well for 211 acres.

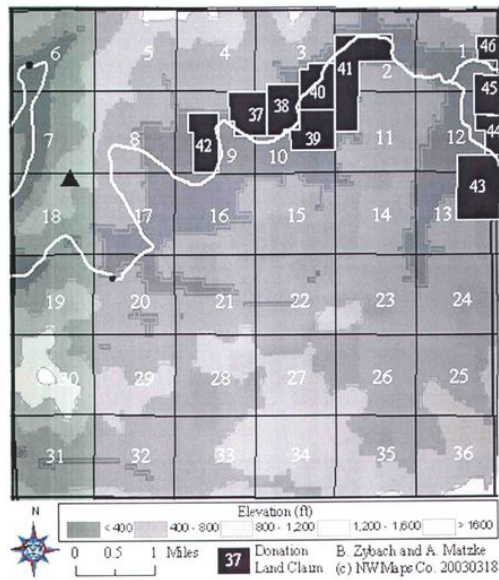
The study it comes from, *The Great Fires: Indian Burning and Catastrophic Forest Fire Patterns of the Oregon Coast Range, 1491-1951*, asked how the burning done by Native people was related to the great forest fires of the Coast Range over 460 years. No single kind of record could answer that, so the study used all four kinds of evidence in this guide.

- **Written documents.** The journals of early travelers, and the notes of the land surveyors who followed them. The study warns that “all of the journalists were white males, so a certain amount of demographic bias needs to be taken into account for these narratives.”²
- **Images.** Survey maps, early forest maps and aerial photographs. The government survey maps and notes locate trails, homesites, berry patches and fields of root and grain crops, mapping that, in the study’s words, “cannot be duplicated by any other source of information.”³
- **The land itself.** The patterns of forest, prairie and old burns.
- **Living memory.** Oral histories and interviews, including the interviews anthropologists made between 1910 and 1936 with members of the Siletz and Grand Ronde reservations.⁴

Every record in the study was tied to the same survey grid (Figure 21.1). Answers were chosen on the balance of the evidence, and the study expected them “to change or be modified as more information is made available.”⁵



Map 2.01 Oregon Coast Range study index.



Map 2.02 Tsp. 14 S., Rng. 8 W. GLO subdivision and DLC survey index.

Figure 21.1. One grid for every record. On the left, the survey grid laid over the whole Oregon Coast Range, with the study's sample areas marked. On the right, one township, Township 14 South, Range 8 West, with its 36 sections and its numbered donation land claims. Journals, maps, photographs and memories were all placed on this grid before they were compared. *Bob Zybach, The Great Fires (2003), Maps 2.01 and 2.02, maps by B. Zybach and A. Matzke, NW Maps Co.*

Habit one: learn how each record was made

In the Alsea Valley, a line drawn around the valley's prairies on a General Land Office map of the early 1850s (the study's "1850 GLO Map") seemed to match a line drawn around the same prairies on a map of 1936. "However, the two were drawn in entirely different fashions." The 1936 line followed the innermost edge of the forest and the burns. The 1850 line followed the outermost edge of the grassland.⁶ Two lines in the same place meant two different things. Before you compare two records, find out how each one was made.

Habit two: say no more than the evidence supports

After weighing all four kinds of evidence across the range, the study found “a strong correlation between Indian burning practices in the Oregon Coast Range and subsequent Great Fire events; however, it has not demonstrated a cause and effect relationship between the two.”⁷ That sentence is a model. It says what the evidence shows, and in the same breath it says what the evidence does not show.

On the tree farm The farm’s history weighs the same four kinds of evidence on 211 acres. The surveyors’ notes of the 1850s, the aerial photograph of 1955 and the owner’s management plan were made by different people, for different reasons, and none copied another. All three describe open ground where Douglas-fir plantation stands today.⁸ The history also follows habit two. It calls the surveyors’ 23 corner trees, 15 of them oaks, a small sample chosen by surveyors, “not a survey of the vegetation,” and it leaves open what kept the prairie open and when the trees closed in.⁹ Chapter 22 follows the farm through every kind of evidence in order.



Detail of Figure 22.4.

CHAPTER 22

One tree farm from beginning to end

Prairie in 1855, grass in 1955, Douglas-fir plantation today.

Thomas Hutchinson would not know the place. In 1855 he described prairie, oak and fir timber. In 1955 an aerial photograph shows open grass and scattered trees. Today the farm is almost entirely Douglas-fir plantation.¹ This chapter follows the farm through every kind of evidence in order, as a model of a first pass, and ends with what is still unknown. Each step names the chapter where its method is taught.

The place and the questions

The Sullivan tree farm is about 211 acres of forest in Sections 28 and 33 of Township 9 South, Range 6 West, Willamette Meridian, in Polk County. It lies in the Coast Range foothills just west of Pedee. The west side drains to Pedee Creek and the east side straight to the Luckiamute River.² Dave Sullivan bought it in December 1989. Two questions started the research in October 2026. Was the land really “homesteaded around the turn of the century,” as its management plan said? And what was it like before it was a tree farm?³

What the records showed

The first pass took a few evenings, almost all of them spent with free records online. The table lists what each kind of record contributed, and the chapter of this guide that explains it.⁴

Question	Where the answer came from	What it showed	Chapter
The rock	Oregon's geologic map, around Pedee	Mostly Tyee Formation sandstone, laid down on an ancient sea floor, with river deposits along the Luckiamute	13
The soil	The county soil survey, around Pedee	Jory and Peavine soils on the uplands; Waldo and Chehalis soils on the valley floor	13
The rain	NOAA's county records since 1895	Polk County has averaged about 66 inches of precipitation a year	14
The river	U.S. Geological Survey stream gages	The largest flood on record came on December 22, 1964	14
The first people	The 1855 treaty; tribal and published histories	Homeland of the Luckiamute, a Kalapuyan people, ceded by the treaty dated January 22, 1855	16
The first survey	Daniel Murphy's field notes, March 1854	Prairie, timber, and settlers' houses already standing	6
The claim surveys	Thomas H. Hutchinson's field notes, 1855	Two donation land claims, each part rich prairie and part timber	6, 7
The corner trees	Both surveyors' field notes	Of 23 trees marked at corners on and near the farm, 15 were oaks and one was a Douglas-fir	6, 15
The first owners	Federal patents and the BLM historical index	Five patents, probably six: two claims, railroad grant land and one homestead	7
From the air	USDA photographs of 1936, 1955 and 1978	Tree clumps and open ground, then open grass, then young plantation	12
The owner's files	The 2012 management plan and the 1993 survey	Grazing in earlier years, planting about 1976, logging in 1989, replanting in 1990	3, 18

The story in order

The ground

The farm sits on an old sea floor. Most of the upland around Pedee is Tyee Formation sandstone, laid down about 50 million years ago, with

river deposits along the Luckiamute below it. Jory and Peavine soils cover the uplands (Chapter 13).⁵

The first people

The farm lies in the homeland of the Luckiamute, one of the Kalapuyan peoples of the Willamette Valley, who lived along the river and its creeks from about Rickreall south to Corvallis.⁶ Their leaders signed the treaty concluded at Dayton and dated January 22, 1855, by which the valley's bands ceded nearly the whole Willamette Valley. In the winter of 1855 to 1856 the bands were removed to Grand Ronde, and the Luckiamute arrived there in February or March 1856.⁷ Today the Confederated Tribes of Grand Ronde count the Luckiamute among the bands of that treaty. The farm's management plan records that no artifacts have been found on the property, and no record yet ties a named person to the farm itself.⁸ Chapter 16 tells this history at the scale of the river, where it belongs.

The surveyors and the two claims

In March 1854 deputy surveyor Daniel Murphy ran the section lines around what is now the farm (Chapter 6). He was not crossing empty country. From the section corner just east of the farm he wrote, "Mr Tedroe's dwelling bears S 51½° W," meaning: stand at the corner, face south, and turn 51½ degrees toward the west. Elsewhere he sighted the dwellings of Johnson and Taylor. Fifteen **chains** (990 feet; a chain is 66 feet) along the line between Sections 28 and 33, he wrote "Leave prairie & enter Timber."⁹

In the summer of 1855 deputy surveyor Thomas H. Hutchinson surveyed the settlers' **donation land claims**, the free grants made under the act of 1850, one by one: Mary Gilliam's on July 13 and 14, John W. Tedrow's on August 10 and 11, and John Johnson's on September 14 and 15.¹⁰ About 150 of the farm's acres lie in Claim No. 54, the 322 acres of John W. and Rachel Tedrow. About 12 more, on the east side, lie in Claim No. 53, the 323.5 acres of John Johnson. Of the Tedrow claim Hutchinson wrote, "There is but little improvement on the claim," and then, "but it is valuable on account of the timber on Luckiamute river and the rich prairie." Of Johnson's: "Three fourths of this claim is rich level prairie, one fourth is timbered. The claim is highly improved."¹¹

“The claim is highly improved.”

Thomas H. Hutchinson, field notes of John Johnson’s donation land claim, September 1855

The trees the surveyors marked at the corners tell the same story another way. Of the 23 **bearing trees**, the trees marked and measured so that a corner could be found again, that the two men recorded at 13 corners on and near the farm, 15 were oaks and only one was a “red fir,” their name for Douglas-fir (Chapters 6 and 15).¹²

Two houses about 400 feet apart

Hutchinson tied both families’ houses to one corner, the southwest corner of Johnson’s claim, which lies inside today’s farm. “Tedrow’s house” stood S 40° E, 100 **links** (66 feet; a link is a hundredth of a chain) from it. “Johnson’s house” stood N 40° E, about 6 chains (about 396 feet) from it. Work out the geometry and the two families lived only about 400 feet apart. Plotted from the notes, both houses fall inside what is now the tree farm. Murphy’s two compass sightings on the Tedrow dwelling the year before, taken from two different points, agree within about 2 degrees.¹³

Nobody has yet walked the two sites with the notes in hand, and nothing has been found there. This guide gives the surveyor’s bearings and distances, as the record does, and does not draw the sites on any map. Chapter 16 explains why.

The patents, and the story that needed correcting

The patents show that the farm left federal hands in five pieces, by five patents and probably a sixth, under three different laws (Chapter 7 and Figure 22.1).¹⁴

Part of today’s farm	First owner after the United States	Patent	Acres (about)
Most of the farm	John W. and Rachel Tedrow, donation land claim 54	June 14, 1877	150
The east side	John Johnson, donation land claim 53	1877	12
The west side	Oregon and California Railroad, land grant	January 30, 1897, and November 29, 1899	31
A small lot in the northeast	Oregon and California Railroad (probably)	July 12, 1871	7

Part of today's farm	First owner after the United States	Patent	Acres (about)
A strip along the north edge	Charles W. Pagett, homestead	October 12, 1900	7

The acreages are estimates from county map layers. They add up to about 207 acres, against the 211 the county assesses. Homesteading accounts for about 7 of them, and even Pagett was not the first to try: three earlier homestead entries on his tract, made in 1881, 1886 and 1887, were all cancelled, the last in October 1894.¹⁵ The error in the farm's story showed once the dates of the land laws were checked, and the lesson is general. Family stories, and even your own files, are leads to check.

From the air

The aerial photographs carry the story through the twentieth century (Chapter 12). The earliest, taken in 1936, covers about two-thirds of the farm: a patchwork of dark tree clumps and lighter open ground, with fields, orchards and the Valley and Siletz Railroad toward Pedee to the east. A dirt-floored dwelling of about the 1930s stood on the farm's east side; it had collapsed by 1990 and is now lost under blackberry.¹⁶

In 1955 the whole farm is in view (Figure 22.2): open grassland with scattered trees, crossed by tracks, with denser timber in the northeast and on the west side. The management plan says the property was fenced and grazed by cattle before its present owner's time, and the photograph fits. About 1976 Publishers Paper planted the open areas with Douglas-fir seedlings, each in a tube to keep the deer off, and the planting took. The 1978 photograph shows more trees, with pale open patches between them (Figure 22.3).¹⁷

Each outline on these photographs was fitted to the modern map by matching roads, and it fits only to within 100 to 250 feet. That is close enough to show what grew where. It is not close enough to find a corner or a tree.¹⁸

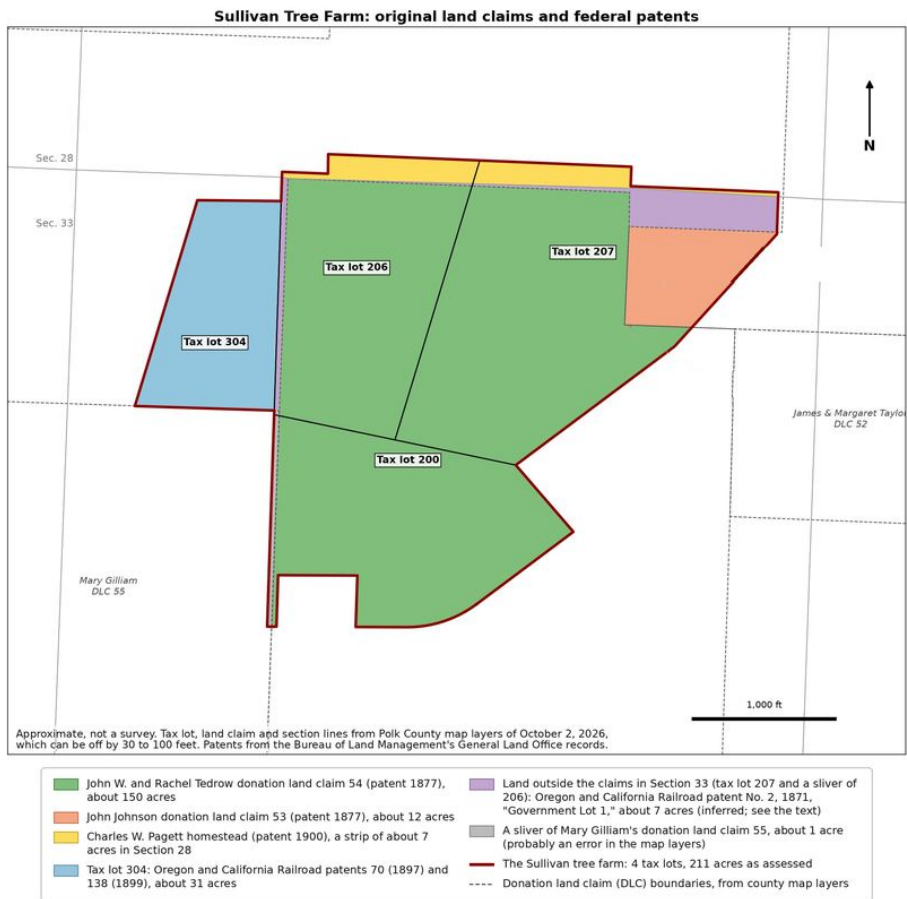


Figure 22.1. One farm, five ways out of federal ownership. Most of the farm was the Tedrow claim. The east side was Johnson's claim, the west side and, probably, the small northeast lot were railroad grant land, and the thin strip along the north edge is the only homestead land. The dashed lines are the old claim boundaries. Approximate, not a survey. *Drawn for this guide from Polk County map layers (retrieved October 2, 2026) and Bureau of Land Management patent records.*



Figure 22.2. The farm in 1955. Look for the pale tracks crossing open grassland, the darker timber in the northeast and on the west side, and the two inked circles marking section corners. U.S. Department of Agriculture aerial photograph, Polk County, 1955. Oregon State University Libraries, through Oregon Digital. Outline approximate, fitted to within about 100 to 250 feet.

Becoming a tree farm

In 1988 Publishers Paper sold the property to WTD Industries. WTD built a network of dirt roads and, in the spring of 1989, logged nearly all the merchantable timber, leaving about two-thirds of the land as bare dirt and brush piles. That December WTD sold the cutover, unplanted land to Dave Sullivan, for what his management plan calls “a bit over \$300/acre.”¹⁹

In 1990 he planted about 25,000 Douglas-fir seedlings himself and supervised students from Oregon State University’s floor-hockey club, who planted about 25,000 more. Helicopters sprayed for grass control in 1990 and 1991, and he thinned the young trees on the 50 acres Publishers Paper had planted. In 1993 he had the main tract surveyed and divided into three parcels, by a survey that still finds its way by the 1855 claim corners (Chapter 3).²⁰ Today conifer forest covers most of the farm (Figure 22.4).

Date	What happened	Source
July 12, 1871	Railroad patent, probably covering the northeast lot	BLM historical index
1877	Patents for both claims, the Tedrows' on June 14	BLM patent records
September 1881	Railroad reaches Airlie	<i>The Oregon Encyclopedia</i>
1881 to 1894	Three homestead entries on Pagett's later tract, all cancelled	BLM historical index
1897 and 1899	Railroad grant patents for the west side	BLM patent records
October 12, 1900	Homestead patent to Charles W. Pagett	BLM patent records
1912	Valley and Siletz Railroad incorporated	OSU history of Hoskins
1934	John Johnson house at Pedee drawn by the Historic American Buildings Survey	Oregon Historical Society catalog
1936	Earliest aerial photograph	USDA
1955	Aerial photograph shows open grassland and scattered trees	USDA
About 1976	Open areas planted with Douglas-fir	Management plan
1978 to 1979	Valley and Siletz Railroad abandoned and taken up	OSU history of Hoskins and others
1988	Publishers Paper sells the land to WTD Industries	Management plan
Spring 1989	Nearly all merchantable timber logged	Management plan
December 1989	Dave Sullivan buys the land	Management plan
1990	About 50,000 seedlings planted	Management plan
June 24, 1993	Main tract surveyed and divided	Partition plat

What is still to do

The first pass ended with a list, and the list is the next chapter of the farm's history.²²

- Trace the deeds from the patents to 1989 (Chapter 8). The 1993 survey cites a 1960 county survey and three easements by book and page to start from.
- Read the claimants' sworn statements in the donation land claim files, certificates 4751 and 4753 on National Archives microfilm M815, free on FamilySearch (Chapter 7). They should settle where the Tedrows married and confirm which John Johnson held Claim 53.

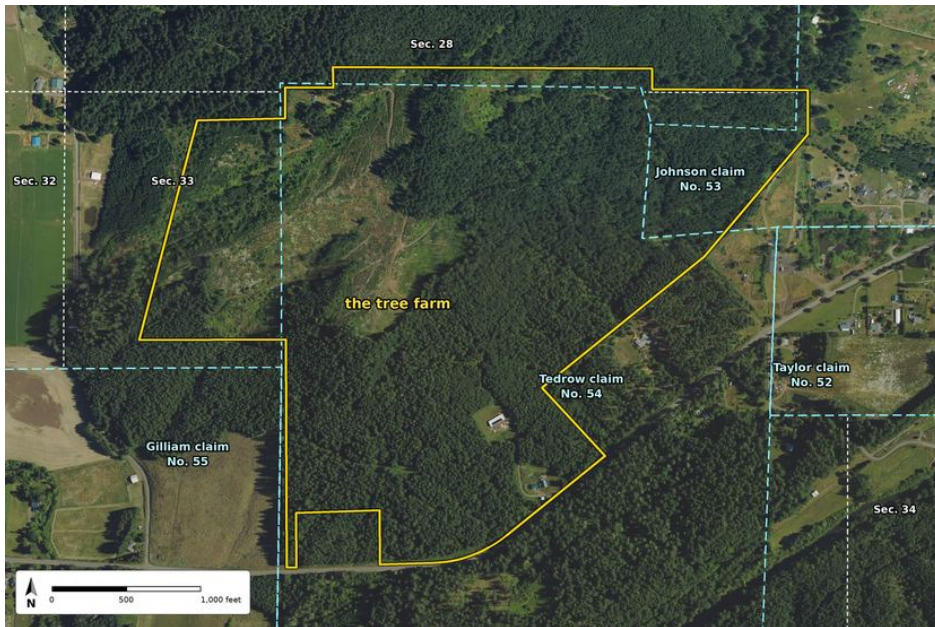


Figure 22.4. The farm today. Conifer forest covers most of the farm. The yellow line is the farm's outline. The blue dashed lines are the donation land claims Hutchinson surveyed in 1855, and the white dotted lines are section lines where they bound land outside the claims; both still shape the county's map. Compare the open ground of Figure 22.2. *U.S. Department of Agriculture, National Agriculture Imagery Program, photographs of June 25 and July 11, 2022, through the U.S. Geological Survey's National Map. Public domain. Claim and section lines from Bureau of Land Management survey data. Outline approximate, not a survey.*

- Order Charles W. Pagett's homestead case file, final certificate 5919, from the National Archives, and copies of the unscanned railroad patents, among them the patent of 1871, from the Bureau of Land Management's public room (Chapters 7 and 25).
- Look for the estate files of John Johnson, who died in 1877, and Charles Pagett, who died in 1905 (Chapter 25).
- See the 1934 drawings of the John Johnson house at the Oregon Historical Society (Chapter 10).
- Find the farm on the forest maps of 1914 and the 1930s (Chapter 15).
- Record the owner's memories first, then those of earlier owners and neighbors (Chapter 18).
- Walk the old corners with the field notes in hand, and visit Taylor and Montgomery cemeteries (Chapter 17).

What the example shows

The first pass did not finish the history. It replaced a wrong story with a documented one, and it showed where the rest of the evidence is kept. That is what a first pass is for. A history that says plainly where its evidence stops is one that can be improved.

On the tree farm Here is one record from the farm, read with care. In March 1854, 15 chains (990 feet) along the line between Sections 28 and 33, Daniel Murphy wrote “Leave prairie & enter Timber.”²³ Read it in four steps. *What the record says:* at a measured point on one section line, the surveyor passed from open prairie into timber, with settlers already living nearby. *What it suggests:* part of the farm that is forest today was open ground in 1854. *What it does not say:* how far the prairie reached on either side of the line, what kept it open, or when the trees filled in. *What was checked next:* the plat, the 1855 claim surveys, the trees marked at the corners and the aerial photographs, which is the order this chapter has followed.



Detail of Figure 23.1.

CHAPTER 23

The same method in town and on the wheat plains

An Albany house built about 1880 has a different set of records.

The George Earle Chamberlain House, in the Hackleman Historic District of Albany, was built about 1880, according to its National Register nomination.¹ A house like that has a different set of records than a tree farm, and a dryland wheat field has a third. The method stays the same. What changes is which sources lead.

A house built about 1880 in Albany

Albany began as a land claim. Thomas and Walter Monteith bought Hiram Smead's claim in 1848 and laid out the town, and the Oregon and California Railroad arrived in 1871.² A house built about 1880 went up in a river town that had been a railroad town for less than ten years.

In town, buildings, maps, owners, the census, newspapers and photographs lead. Start here (Figure 23.1):

1. **The National Register.** Two of Albany's residential neighborhoods and its downtown were listed on the National Register of Historic Places in the early 1980s.³ A nomination is a short researched history with its sources.

2. **Fire insurance maps.** Oregon State University's Special Collections and Archives Research Center holds Sanborn maps of Albany for 1884, 1888, 1890, 1895, 1908 and 1925, and the Library of Congress has the 1890 map free online (Chapter 10).⁴ Compare the outline of the house from map to map to date its additions.
3. **City directories,** to see who lived at the address year by year.
4. The deeds, at the Linn County Clerk's office (Chapter 8).
5. The census pages of 1880 and 1900, for the household and its neighbors (Chapter 9).
6. Albany's newspapers, in Historic Oregon Newspapers, searched by the owners' names (Chapter 25).
7. The Albany Regional Museum, 136 Lyon Street SW, which takes research requests and has an online catalog of its collections.⁵

Two older layers still matter in town. Albany sits on the Willamette River, so its flood history is part of every house's story (Chapter 14). And the ground under it is Kalapuyan homeland, ceded by the same treaty of 1855 as the tree farm (Chapter 16).⁶

A dryland wheat field near Moro

On the Columbia Plateau the soil, the rain, the first title, the crops, the railroad and the view from the air lead. At Moro, in Sherman County, precipitation averages 11.4 inches a year, and the soil at the state's research station there is Walla Walla silt loam.⁷ Sherman County became the state's largest producer of wheat beginning in the 1880s. The Columbia Southern Railroad built its depot at Moro in 1898, which made the town a shipping point, and in 1909 the Oregon Agricultural College set up a research station there for crops of low-rainfall country, now the Columbia Basin Agricultural Research Center.⁸

From the air the fields form a patchwork of two colors (Figure 23.2). Planted fields alternate with **fallow**, cropland left unplanted for a year so the soil can store water for the next crop. A map of the crops grown in 2025, in a 6-mile square around Moro, counts 32 percent winter wheat, 38 percent fallow or idle cropland and 21 percent grassland or pasture (Figure 23.3).⁹

For a field like these, start with Web Soil Survey for the soil (Chapter 13); PRISM for rainfall, since in 11-inch country a run of dry years matters (Chapter 14); General Land Office Records, to learn whether the land was a homestead or railroad grant land (Chapter 7); the Census of Agriculture, for the county's wheat acreage decade by decade

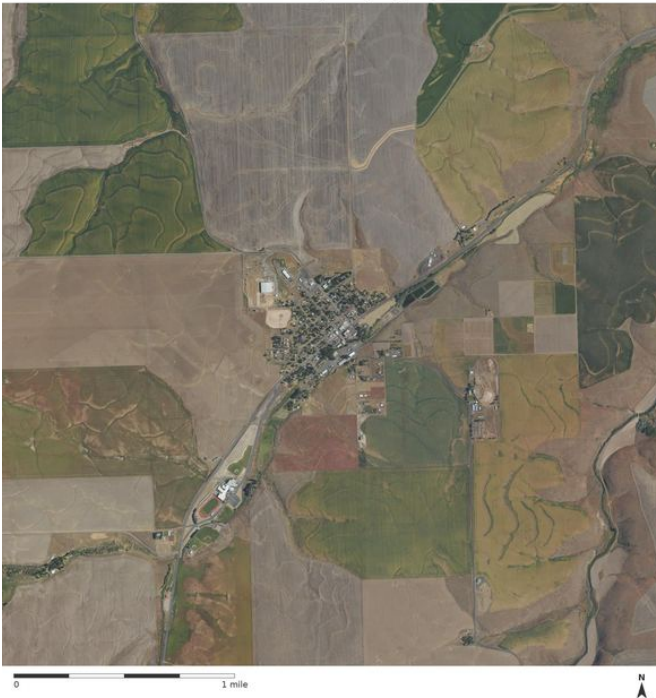


Figure 23.1. The George Earle Chamberlain House in Albany’s Hackleman Historic District. Built about 1880, according to its National Register nomination. The bay windows, the decorated gables and the porch are the kind of details a house history dates, and the Sanborn maps can show when each part of the outline first appears. *Photograph, 2009, Wikimedia Commons. Released to the public domain by the photographer.*

(Chapter 15); aerial photographs from the 1930s on, for field shapes and farmsteads that have vanished (Chapter 12); and the neighbors, for how the work changed from horses to tractors (Chapter 18).

On the tree farm On the farm near Pedee the survey notes, the patents and the aerial photographs led, because settlers were living there before the surveyors came and the forest grew back within sight of the camera. In Albany the buildings and the town maps lead, and near Moro the soil, the rain and the crop records do, but the circle of Chapter 19 runs the same way in all three places.

Wheat and fallow fields around Moro, Oregon, July 2022



Source: USDA Farm Service Agency, National Agriculture Imagery Program (NAIP), photographed July 1, 2022 (quarter-quads m_4512026_se, m_4512027_sw, m_4512034_ne, m_4512035_nw), via the USGS National Map service USGSNAIPImagery, retrieved October 7, 2026.
Area shown: 3 miles by 3 miles centered on the town of Moro, Sherman County, Oregon (center of picture). North is up. Green and golden fields are planted, mostly in winter wheat; pale gray-brown fields are summer fallow, left unplanted for a year to store soil moisture.

Figure 23.2. Wheat and fallow around Moro, July 1, 2022. The town is at the center of a square 3 miles on a side. Green and golden fields are planted, mostly in winter wheat; the pale gray-brown fields are fallow, left unplanted for a year. *USDA National Agriculture Imagery Program, July 1, 2022. Public domain.*

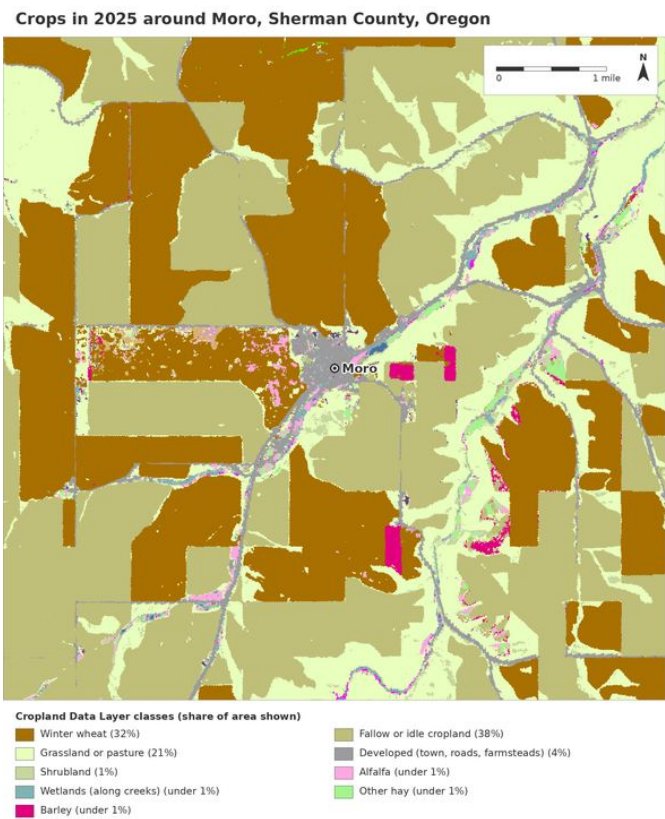


Figure 23.3. What was grown around Moro in 2025. Brown is winter wheat and olive is fallow or idle cropland; pale green is grass or pasture, most of it along the draws. The square is 6 miles on a side, with the town at its center. *USDA National Agricultural Statistics Service, Cropland Data Layer, 2025, retrieved October 7, 2026. Drawn for this guide.*

If you're hooked: what to do next

A few evenings with free records replaced a wrong story.

A few evenings with free records replaced a wrong story about the tree farm near Pedee with a documented one. They turned up a prairie, an oak woodland and two pioneer claims under a Douglas-fir plantation.¹ Your land has a file like that one waiting. Here is how to open it.

A plan for your first week

1. Write down one question about your land (Chapter 2).
2. Find your township, range and section, and your tax lot (Chapter 3).
3. Look up your geology and your soils, and save both maps (Chapter 13).
4. Download the first survey plat and the field notes for your section (Chapters 6 and 11).
5. Find the earliest aerial photograph of your land (Chapter 12).
6. Make a list of the people who know the place, and call the oldest one first (Chapter 18).
7. Start your research log, and enter everything you have found (Chapter 19 and Figure 24.1).

That is enough to know whether you want to go further.

Let the site do the first hour

The website Your Land History, at YourLandHistory.org, gathers the survey plats, field notes, patents, soils, geology, rainfall and modern aerial photographs for a piece of Oregon land and writes them up in plain English (Chapter 5). Start there. Then spend your own evenings on what a computer cannot fetch.

Where the rest is kept

- The county clerk's deed index, for the owners between the patent and today (Chapter 8).
- The Bureau of Land Management, for survey records and patents not yet online, and the National Archives, for the files behind the patents (Chapter 7).
- The Oregon State Archives, for old tax rolls, road records and estate files (Chapter 25).
- Your county historical society and museum, for photographs, family files and the people who still know the old names.
- The cultural offices of the tribes, who are the authorities on their own history (Chapter 16).
- The offices and websites this guide uses most, with addresses and telephone numbers, are in Chapter 25.

Share what you learn, with care

Before you share anything, take out the locations of archaeological sites and burials, honor what each person you interviewed agreed to, and check the rights to every photograph (Chapter 19). Then share it. A copy of your timeline and your sources, given to the county historical society, saves the next researcher the evenings it cost you.

One request

If you try any part of this guide on your own land, send word of where it was unclear, where a link failed, or where your county's records work differently. One paragraph is plenty. Send corrections and additions through the Your Land History site: the About page, or the "That's wrong" link beside any record.

Research log

One sheet for each source.

Source no. _____ Sheet ____ of ____

My question	
The place (address, section, or tax lot)	
What the source is, and who made it	
Where I found it (office, website, or person)	
Date of the event or observation	
Date the record was made	
Page, frame, or image number	
Exact words, or what the image shows	
What I think it means	
What else it could mean	
Permission or limits on sharing	
Next step, and the date I looked	

Keep the record's exact words in their own row. Put your reading of them in the rows below.

Copy this page as often as you need.

Figure 24.1. A research log form to copy. Use one copy for each source. Keep the record's exact words in their own row, and your reading of them in the rows below. *Drawn for this guide.*

On the tree farm The farm's history ends the way this guide does, with a list of next steps: the claim files on FamilySearch, the deed books from 1877 on, the estate files of John Johnson and Charles Pagett, Pagett's homestead file, the 1934 drawings of the Johnson house, a walk to the old corners with the notes in hand, and a published account of the first people of the Luckiamute country. Its last lines make the same invitation this chapter makes. If you know these families, this land or these records, or have an old photograph of Pedee, the owner would like to hear from you.² Send corrections and additions through the Your Land History site: the About page, or the "That's wrong" link beside any record.



Detail of Figure 25.1.

CHAPTER 25

An Oregon directory of offices and websites

Most of what this guide describes is kept in about thirty places.

Most of what this guide describes is kept in about thirty places, and you can search most of them from home without paying anything. This chapter lists them, grouped the way the work usually goes: the federal land records first, then the state's archives and libraries, the maps and data about the land itself, the counties, the records of people, and the tribal nations and the state's archaeology office. Each entry says what the office or website holds, how to search it, what it costs, where it is, and how it served the tree farm near Pedee.

Federal land records

Bureau of Land Management, General Land Office Records

WHAT IT HOLDS. "Federal land conveyance records for the Public Land States": land patents issued from 1788 to the present, with images of millions of them, and images of survey plats and field notes. **HOW TO SEARCH.** Choose the state, then search by a person's name or by the land's township and range. **COST.** Free. **WEBSITE.** glorerecords.blm.gov. **ON THE TREE FARM.** The patents for the two donation land claims (1877), the railroad grant land (1897 and 1899) and the Pagett homestead (1900) all came from here.¹

Bureau of Land Management, Oregon/Washington State Office

WHAT IT HOLDS. For every township in Oregon and Washington: the Master Title Plat, which maps today's federal land; the Historical Index, which lists every entry, sale and patent, including the ones that failed; and the survey plats and field notes, with scans online. **HOW TO SEARCH.** Choose the township and range. The survey index lists each survey and plat with its dates, and the field-note volumes open as page scans. **COST.** Free online. The public room makes copies of plats, field notes, title records and case files, and helps with research. **WHERE.** Public room, Edith Green-Wendell Wyatt Federal Building, 11th floor, 1220 SW 3rd Avenue, Portland, OR 97204; 503-808-6008; blm-orwa-public-room@blm.gov; walk-in Monday to Friday, 9 a.m. to 4 p.m. **WEBSITE.** blm.gov/or/landrecords. **ON THE TREE FARM.** Murphy's notes of 1854 (volume R0029) and Hutchinson's of 1855 (volume D0022) are read here, and the Historical Index lists the three failed homestead entries on the farm's north strip.²

National Archives: land entry files and the census

WHAT IT HOLDS. The case files behind federal land entries (homestead, cash, credit and mineral), and the federal census from 1790 to 1950. Census pages are opened to the public 72 years after the count, so the 1950 census was released on April 1, 2022; its own website searches more than 6.5 million population schedules by name or by place. **HOW TO ORDER.** Land entry case files are ordered with form NATF 84 or through the Archives' online ordering system. Oregon's donation land claim files are on National Archives microfilm M815, free to view through FamilySearch (below). **COST.** The 1950 census website is free. **WEBSITE.** archives.gov/research/land; 1950census.archives.gov. **ON THE TREE FARM.** Charles W. Pagett's homestead case file, final certificate 5919, is the farm's next order.³

State archives, libraries and historical societies

Oregon State Archives

WHAT IT HOLDS. "Oregon's permanently valuable government records," including old assessment rolls for some counties and years. Its Oregon Historical County Records Guide inventories the surviving records of each of Oregon's 36 counties and says where each series is kept: at the Archives, at the courthouse or at a local museum. **HOW TO SEARCH.** Open the County Records Guide, choose your county, and read the inventory for deeds, assessment and tax rolls, road records and estate files. Then ask the reference staff about copies or an appointment. **WHERE.** Cecil L. Edwards Archives Building, 800 Summer Street NE, Salem, OR 97310; 503-373-0701; Monday to Friday, 8 a.m. to 5 p.m., by appointment. **WEBSITE.** sos.oregon.gov/archives. **ON THE TREE FARM.** Polk County's inventory shows assessment rolls for scattered years from 1892 to 1940 at the Archives, and the county's earliest listed roll, for 1866, at the Polk County Historical Society.⁴

Oregon Historical Society Research Library

WHAT IT HOLDS. “Thousands of books, maps, manuscripts, serials, vertical files, newspaper microfilm” about Oregon. **COST.** “There is no charge for admission to the Research Library.” **WHERE.** 1200 SW Park Avenue, Portland, OR 97205; research library voicemail 503-306-5240. On October 10, 2026, the library’s web page still described the reading room as closed for renovation, so call before you plan a visit. **WEBSITE.** ohs.org/research-and-library. **ON THE TREE FARM.** Manuscript collection Mss 3100 holds the 16 drawings of the John Johnson house at Pedee that the Historic American Buildings Survey made in 1934.⁵

Oregon State University, Special Collections and Archives Research Center

WHAT IT HOLDS. Manuscripts, archives, photographs and books, collecting especially in natural resources and the university’s own history, with an oral history program. Its collections include Sanborn fire insurance maps of Oregon towns from 1879 to 1956 and the Gerald W. Williams forest history photographs (Figure 20.2). **HOW TO SEARCH.** Collection guides, called **FINDING AIDS**, on its website and in Archives West; digitized items through Oregon Digital. **WHERE.** 121 The Valley Library, fifth floor, Oregon State University, Corvallis, OR 97331; 541-737-2075; open by appointment only. **WEBSITE.** scarc.library.oregonstate.edu. **ON THE TREE FARM.** The aerial photographs of the farm from 1936, 1955 and 1978 are this library’s, seen through Oregon Digital.⁶

Oregon Digital

WHAT IT HOLDS. The shared digital collections of Oregon State University and the University of Oregon. Its “Aerial Photos, Mid-Willamette” collection holds U.S. Department of Agriculture aerial photographs from the 1930s to the 1970s: 1,241 items for Polk County, 1,831 for Benton and 2,403 for Linn, among other counties. **HOW TO SEARCH.** Open the collection and narrow it by county and decade, or search a place name; frames are tagged by place. **COST.** Free to view. Before you publish a picture, ask the library that holds it. **WEBSITE.** oregondigital.org. **ON THE TREE FARM.** The farm’s three earliest aerial photographs (Chapters 12 and 22).

Archives West

WHAT IT HOLDS. Collection guides for “primary sources in the western United States,” from Oregon State University, the University of Oregon, the Oregon Historical Society and many other libraries and archives. **HOW TO SEARCH.** Keyword search, limited to one repository if you like, or browse by subject. **COST.** Free. **WEBSITE.** archiveswest.orbiscascade.org. **ON THE TREE FARM.** Not yet searched. Pedee and the names Johnson, Taylor and Pagett are the first to try.

University of Oregon Libraries, Aerial Photography Collection

WHAT IT HOLDS. About 1,000,000 aerial photographs, mostly paper prints, the earliest from 1929 and most from the 1930s through the 2000s; the library calls it “one of the most extensive covering Oregon.” **HOW TO USE IT.** Arrange a visit to Knight Library in advance through the online request form, or order scans by sending a map of your land’s boundary; turnaround is “typically 3 to 4 business days.” **COST** (OCTOBER 2026). \$35 to set up an order for one site, then \$12 an image for standard coverage of less than a square mile, or \$14 at high resolution. Publishing an image needs permission and a use fee. **WHERE.** Knight Library, 1501 Kincaid Street, Eugene, OR 97403; 541-346-3051; map@uoregon.edu. **WEBSITE.** library.uoregon.edu/aerial-photography-collection. **ON THE TREE FARM.** The next place to look for frames of the farm between 1936 and 1978.

County and regional historical societies

WHAT THEY HOLD. Photographs, family files, local research libraries, and people who know the old names. **POLK COUNTY HISTORICAL SOCIETY:** museum and research library at the fairgrounds, 560 S Pacific Hwy W, Rickreall, OR 97371; 503-623-6251; Tuesday to Saturday, noon to 4 p.m.; “Library research can also be accommodated.” Admission: members free, adults \$5, seniors \$4, students \$2. polkcountyhistoricalsociety.org. **BENTON COUNTY HISTORICAL SOCIETY:** bentoncountymuseum.org. **SOUTHERN OREGON HISTORICAL SOCIETY:** library and archives at 106 N. Central Avenue, Medford, OR 97501, with an online catalog and indexes to photographs, addresses, biographies and post offices; 541-622-2025; sohs.org. For other counties, the State Archives’ County Records Guide names the local museums that keep county records. **ON THE TREE FARM.** The Polk County society keeps the county’s 1866 assessment roll, and it is the next place to ask about the Johnson, Taylor and Pagett families.⁷

The Oregon Encyclopedia

WHAT IT HOLDS. Short signed articles on Oregon’s places, people and events, meant to give “definitive, authoritative information written in accessible and literate language about the State of Oregon”; a project of the Oregon Historical Society. **HOW TO SEARCH.** A search box, an advanced search and an A to Z list. **COST.** Free. **WEBSITE.** oregonencyclopedia.org. **ON THE TREE FARM.** Its articles on the Kalapuyan peoples, the Kalapuya Treaty of 1855, the Confederated Tribes of Grand Ronde and the community of Airlie all bear on the farm (Chapters 16 and 20).

Genealogical Forum of Oregon

WHAT IT HOLDS. A research library of more than 60,000 items, access to subscription genealogy websites, and an index to Oregon's donation land claims, with more open to members. COST. Some files are for members only; the website explains membership. WHERE. 2505 SE 11th Avenue, Suite B018, Portland, OR 97202; 503-963-1932. WEBSITE. gfo.org. ON THE TREE FARM. Its donation land claim index is a second way into the Tedrow and Johnson claim files.

Maps, geology, soils, climate and water

ORMAP, Oregon's statewide tax lot map

WHAT IT HOLDS. Oregon's "publicly accessible, continually maintained" digital map of the tax lots in every county, built to support the property tax system. The counties keep the official maps. HOW TO SEARCH. Open the viewer, search or zoom to your land, and read its map number and TAX LOT (Chapter 3). COST. Free. WEBSITE. ormap.net. ON THE TREE FARM. The 1993 survey writes the farm's county map number as 9-6-33: Township 9 South, Range 6 West, Section 33.⁸

Oregon Explorer

WHAT IT HOLDS. "Natural resource data, maps, and tools" for Oregon, with "information about land, water, climate, and communities across the state." COST. Free. WEBSITE. oregonexplorer.info. ON THE TREE FARM. A second way into the land, water and climate around Pedee.

Oregon Department of Geology and Mineral Industries (DOGAMI)

WHAT IT HOLDS. The statewide geologic map (click a spot for the rock unit and the map it came from), bare-ground lidar for most of the state, the statewide landslide inventory, a hazard viewer called HazVu that works by address, and the department's publications. HOW TO SEARCH. Search an address or pan to your land in the geologic map viewer or the lidar viewer, click for details, and save a screen image with the map's title and date. COST. The viewers are free. CONTACT. dogami-info@dogami.oregon.gov. WEBSITE. oregon.gov/dogami; viewers at gis.dogami.oregon.gov/maps. ON THE TREE FARM. The geologic map puts the uplands around Pedee on Tyee Formation sandstone, and the lidar shows a grade under the trees along the Luckiamute that older maps label a railroad (Chapter 13).⁹

Natural Resources Conservation Service: Web Soil Survey and soil series descriptions

WHAT IT HOLDS. "Soil data and information produced by the National Cooperative Soil Survey," for "more than 95 percent of the nation's counties." The Official Soil Series Descriptions explain each named soil, such as Jory. HOW TO SEARCH. Four steps: draw your Area of Interest, open the Soil Map tab, use the Soil Data Explorer for ratings, and use the Shopping Cart for

a “custom printable report.” COST. Free. WEBSITE. websoilsurvey.nrcs.usda.gov; soilseries.sc.egov.usda.gov. ON THE TREE FARM. Jory and Peavine soils on the uplands, Waldo and Chehalis on the valley floor (Chapter 13).¹⁰

U.S. Geological Survey: topoView and EarthExplorer

WHAT THEY HOLD. topoView holds the Historical Topographic Map Collection, “more than 178,000 maps” printed “between 1884 and 2006,” free to download. EarthExplorer holds satellite images and aerial photographs, including older federal programs; “You must be logged in to download and order scenes,” with a free account. WEBSITE. ngmdb.usgs.gov/topoview; earthexplorer.usgs.gov. ON THE TREE FARM. The topographic maps of 1942 and of 1974 and 1984 that show the country around Pedee (Chapter 11).¹¹

PRISM climate data, Oregon State University

WHAT IT HOLDS. Precipitation and temperature mapped for the lower 48 states from “1895 to the present,” a Data Explorer that gives the record for one point, and the 30-year averages for 1991 to 2020. PRISM offers its data to the public free of charge. WEBSITE. prism.oregonstate.edu. ON THE TREE FARM. NOAA’s county records put Polk County at about 66 inches of precipitation a year since 1895; PRISM’s Data Explorer gives the same kind of record for one point on the farm (Chapter 14).¹²

Oregon Water Resources Department: well reports and water rights

WHAT IT HOLDS. Scanned well reports, searchable by township, range and section, by county, by owner’s last name, by company or well label, or on a map; and the state’s water rights, including cancelled ones. COST. Free to search. WEBSITE. apps.wrd.state.or.us/apps/gw/well_log (wells) and apps.wrd.state.or.us/apps/wr/wrinfo (water rights). ON THE TREE FARM. The 1993 survey lists water rights certificates 17385 and 40289 with the land.¹³

U.S. Geological Survey, Water Data for the Nation

WHAT IT HOLDS. The records of stream gages, stations that measure a stream’s height and flow: daily flows, the highest flow of each year, and the history of each station. COST. Free. WEBSITE. waterdata.usgs.gov. ON THE TREE FARM. Two gages on the Luckiamute serve the farm: at Pedee (station 14190000) and near Suver (station 14190500) (Chapter 14).

Forestry

Oregon Department of Forestry

WHAT IT OFFERS. A “Find a forester” directory, a “Helping landowners” section, the Small Forestland Owner Office, fire information and statistics, and maps and data. WHERE. 2600 State Street, Salem, OR 97310; 503-945-7200. WEBSITE. oregon.gov/odf. ON THE TREE FARM. Any records the department kept of the farm’s 1989 logging and 1990 replanting have not yet been looked for.

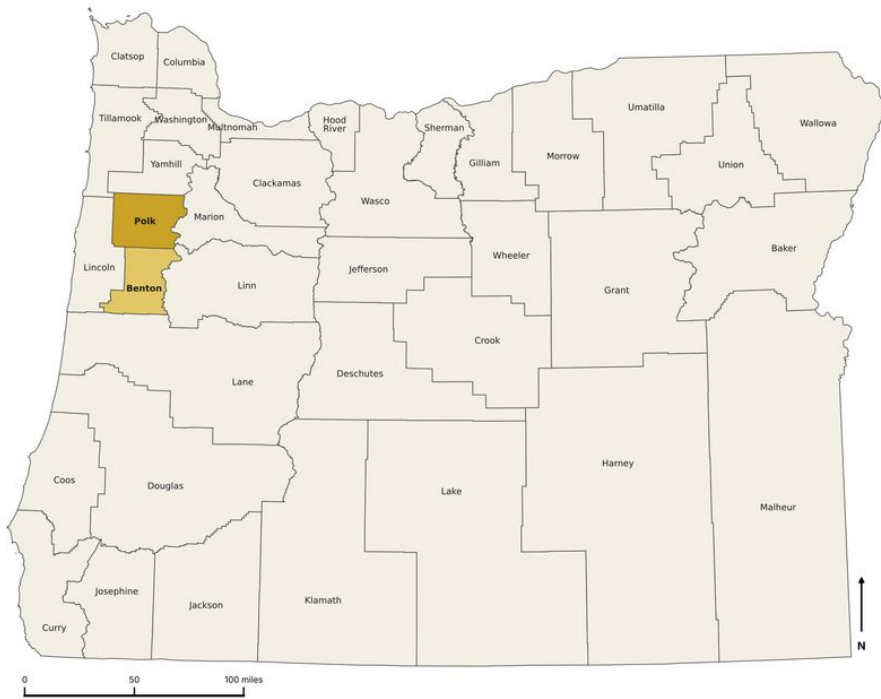


Figure 25.1. Oregon's 36 counties. Find your land, then your county: its clerk, assessor and surveyor keep the records for everything inside its lines. The tree farm near Pedee is in Polk County (dark), just north of Benton County (light), on the west side of the Willamette Valley. Drawn for this guide from U.S. Census Bureau county boundary files, 2023. Public domain.

Counties: clerk, assessor and surveyor

Finding any Oregon county's offices

Every Oregon county has three offices that matter for land history (Figure 25.1). The **COUNTY CLERK**, called Records in some counties, records deeds, mortgages, liens and plats and keeps the **GRANTOR** and **GRANTEE** indexes, lists of sellers and of buyers. The **ASSESSOR** keeps the tax lot maps, account records, acreages and sales. The **COUNTY SURVEYOR** keeps filed surveys, partition and subdivision plats, and corner records. The Oregon Blue Book lists all 36 counties, each with a link to its county page, at sos.oregon.gov/blue-book/government/Pages/local-county.aspx. For counties in other states, publicrecords.netronline.com lists assessor and recorder websites.

Polk County, the tree farm's county

WEBSITE. polkcountyor.gov; the county's older address, co.polk.or.us, now forwards there. CLERK. Records land documents; Monday to Friday, 8 a.m. to noon and 1 to 5 p.m., with a 4:30 p.m. cutoff for recording and certified copies. The Digital Research Room searches recorded documents online (apps2.co.polk.or.us/DigitalResearchRoom; accept the disclaimer to enter). The State Archives' inventory lists the county's deed books from 1851 on microfilm at the clerk's office, indexes to deeds from 1856, a Historical Index of Land Deeds for 1854 to 1985 on the county website, and scans of deed volumes 75 to 110 (1920 to 1942) on FamilySearch. ASSESSOR. Property Search Online (apps2.co.polk.or.us/PSO) covers more than 36,000 tax accounts; the county warns that its online applications "are not guaranteed to be accurate." SURVEYOR. Filed surveys, partition plats and corner records; reach the office through the county's main website. ON THE TREE FARM. The 1993 partition plat is county survey CS 12769, and the deeds from 1877 to 1989 are the farm's largest gap.¹⁴

Benton County, a second example

ASSESSOR. Property Account Search and maps; 4500 SW Research Way, Corvallis, OR 97333; 541-766-6855; assessment.bentoncountyor.gov. RECORDS. An online index to recorded deeds, mortgages and liens from 1966 to the present. "Online information is currently limited to index data," and document images come by request or in person. The deed index for 1848 to 1966 can be used only in person. Same address; 541-766-6756; Monday to Friday, 8 a.m. to 5 p.m.; re.bentoncountyor.gov. ON THE TREE FARM. None; the farm is in Polk County. Benton is here because it shows how differently two neighboring counties put their records online.

People, newspapers and burials

Historic Oregon Newspapers, University of Oregon

WHAT IT HOLDS. More than 3.5 million pages of Oregon newspapers from 1846 to 2026, searchable by any word in them, with a list of titles and a map of places. COST. Free. WEBSITE. oregonnews.uoregon.edu. ON THE TREE FARM. The *Polk County Observer* of May 26, 1905, reports a logger at Pedee "getting out 4,000,000 feet of logs on the Big Luckiamute."¹⁵

Chronicling America, Library of Congress

WHAT IT HOLDS. The Library of Congress's national collection of digitized historic American newspapers. COST. Free. WEBSITE. loc.gov/collections/chronicling-america. ON THE TREE FARM. Not yet searched for Pedee or the farm's families.

FamilySearch

WHAT IT HOLDS. “Billions of ancestor profiles, photographs, and historical documents,” with full-text search and a catalog. Filmed county deed books and Oregon’s donation land claim files (National Archives microfilm M815) are reachable through it. **COST.** Free, but you must “Create a free account” to see most images. It is run by The Church of Jesus Christ of Latter-day Saints. **WEBSITE.** familysearch.org. **ON THE TREE FARM.** Claim certificates 4751 and 4753 should hold the Tedrows’ and John Johnson’s sworn statements, and Polk County deed volumes 75 to 110, for 1920 to 1942, are scanned here.¹⁶

Find a Grave and Oregon’s historic cemeteries

WHAT THEY HOLD. Find a Grave lists “over 265 million memorials created by the community since 1995,” searchable by name, dates and place; treat its volunteer records as leads, not proof. The Oregon Historic Cemeteries Program, in the Oregon Parks and Recreation Department, keeps a county-by-county list of historic cemeteries and guidance for their care. Polk County’s volunteer-compiled pioneer cemetery records are at polkcountycemetery.org. **COST.** Free. **WEBSITES.** findagrave.com; oregon.gov/oprd/OH/pages/historic-cemeteries-program.aspx. **ON THE TREE FARM.** John and Phebe Johnson share a monument in Taylor Cemetery, about half a mile southwest of the Pedee store, and a Charles W. Pagett (1841 to 1905) is buried at Montgomery Cemetery.¹⁷

Tribal nations and archaeology

Confederated Tribes of Grand Ronde, Cultural Resources Department

WHAT IT DOES. Its Historic Preservation Office handles archaeology, research and cultural protection and reviews projects in the Tribe’s ceded and ancestral homelands. Its Cultural Collections Program “provides access to archival materials and artifact collections,” and the Chachalu Museum and Cultural Center “shares the Tribes’ story.” **WHERE.** Tribal headquarters, 9615 Grand Ronde Road, Grand Ronde, OR 97347; 800-422-0232 or 503-879-5211; info@grandronde.org. Chachalu is at 8720 Grand Ronde Road. **WEBSITES.** grandronde.org; chachalu.org. **ON THE TREE FARM.** Grand Ronde lists the Luckiamute and Mary’s River bands among the bands of the 1855 treaty that ceded the farm’s township.¹⁸

Confederated Tribes of Siletz Indians, cultural program

WHAT IT DOES. Carries on the Tribe’s history and language programs, with artifacts and historical documents kept at the Siletz Tribal Cultural Center. Agencies and others seeking “consultation; protected sites; site disturbances” write to CulturalResources@ctsi.nsn.us. **WHERE.** Siletz Tribal Community Center, 402 Government Hill Road, Siletz, OR 97380; main line 541-444-2532. **WEBSITE.** ctsi.nsn.us. **ON THE TREE FARM.** The Forest Service’s record of the 1855 cession that includes the farm names the Siletz among the nations of today.¹⁹

Oregon State Historic Preservation Office

WHAT IT DOES. Oversees archaeology on land that is not federal: “An Oregon Archaeological Permit is needed to excavate or collect from an archaeological site” on public or private land. If you find an artifact: “Do not move or collect the artifact.” Photograph it with a scale, and email the picture and its location to arch.permits@opr.d.oregon.gov; 503-986-0690. For human remains, see Chapter 16. The office also keeps the Oregon Historic Sites Database, which lists surveyed buildings by address, at heritagedata.prd.state.or.us/historic.oregon.gov/opr.d/OH. ON THE TREE FARM. The farm’s 2012 management plan records that no artifacts have been found on the property. If one ever is, this office is the first call.²⁰

The author’s own sources

Oregon Websites and Watersheds Project (ORWW)

WHAT IT IS. “An educational, nonprofit 501 c(3) corporation founded in Philomath, Oregon in December 1996,” offering “Online Tools for the Study and Stewardship of Oregon’s Watershed Resources.” It hosts Bob Zybach’s *Coquille Trails* and Tiller reports and the Kalapuya-Amin papers of 2006. COST. Free. WEBSITE. orww.org. ON THE TREE FARM. The habits the farm’s history follows come from the studies posted here (Chapter 4).

NW Maps Co.

WHAT IT IS. The publisher of this guide, in Cottage Grove, Oregon. Its website carries Bob Zybach’s books, his curriculum vitae, a page of free material and his 1999 Soap Creek Valley thesis. WEBSITE. nwmapsco.com. ON THE TREE FARM. The thesis lists 18 people of the “Luckymute Nation” by name from the Grand Ronde census rolls of 1860 and 1888 (Chapter 4).²¹

Before you go

Addresses, telephone numbers, hours and costs in this chapter were checked on October 10, 2026. Offices move, hours change and websites are rebuilt. If a web address fails, search for the name of the office or the collection, which lasts longer than the address, and call ahead before you drive to any office.

Words used in this guide

These are the words printed in **bold** in the chapters, with a few more that turn up in records and offices.

Acreage. How big a piece of land is, in acres. The assessor, a surveyor and an old patent may each give a different figure for the same land.

Aerial photograph. A photograph taken from an airplane, usually looking straight down. In Oregon they begin in the 1930s.

Archaeological site. A place where people of the past left traces, such as tools, hearths or graves. Digging at one in Oregon needs a state permit.

Assessment roll. The county's yearly list of taxable property, with owners and values.

Assessor. The county officer who maps and values land for property taxes.

Base line. The east-west line from which townships are counted north and south. Oregon's starts at the Willamette Stone in Portland's West Hills.

Bearing. A direction given as an angle east or west of north or south. "S 51½° W" means: face south, then turn 51½ degrees toward the west.

Bearing tree. A tree a surveyor marked near a corner and described by its kind, size, bearing and distance, so the corner could be found again. Also called a witness tree.

Cabinet card. A studio portrait mounted on stiff card, common in the late 1800s.

Census. The federal count of the people, taken every ten years since 1790; its pages open to the public after 72 years.

Cession. Land a tribe gave up to the United States by treaty.

Chain. A surveyor's measure of 66 feet, divided into 100 links. Eighty chains make a mile.

Chain of title. The list of a property's owners, in order, from the first patent to today.

City directory. A yearly list of a town's residents and businesses.

Claim file. The papers behind a land claim or entry, such as the settler's sworn statements and proof of living on the land.

Corner. A point a surveyor marked where lines meet, with a post, stone or mound and, where possible, bearing trees.

Correction deed. A deed recorded to fix a mistake in an earlier deed. It is not a new sale.

County clerk. The county officer who records deeds, mortgages and plats and keeps their indexes. Some counties call the office Records.

County surveyor. The county officer who keeps filed surveys, plats and corner records.

Deed. A document that passes land from one owner to the next.

Deputy surveyor. A surveyor working under contract for the government to run township lines, section lines or claim boundaries.

Donation land claim. Land granted free to early settlers of Oregon under an act of Congress of 1850. Claims could not be started after 1855.

Easement. A right that lets someone else use a piece of land for a purpose, such as a road, a spring or a power line.

Enumeration district. The area one census taker was assigned to cover.

Fallow. Cropland left unplanted for a season or a year; in dry country, so the soil can store water for the next crop.

Farm schedule. A census page, used from 1850 to 1880, that lists each farm's acres, livestock and crops.

Field notes. The written record a surveyor kept while measuring land: distances, corners, bearing trees, and remarks on soil, timber and houses.

Finding aid. A guide to an archive's collection that describes what is in it, often box by box.

Fire insurance map. A detailed town map made for insurance companies, showing each building's outline, height and material. The best known are the Sanborn maps.

Formation. A named body of rock of one kind and age, such as the Tyee Formation.

General Land Office. The federal agency that surveyed and disposed of the public lands from 1812 until 1946, when it became part of the Bureau of Land Management.

Government lot. A numbered piece of a section that is not a regular quarter, often a scrap left between a section line and a claim line or a river.

Grantee. The person who receives land in a deed; the buyer.

Grantor. The person who passes land to another in a deed; the seller.

Herbarium. A library of pressed, labeled plants. Each sheet records what was collected, where, when and by whom.

Historical index. The Bureau of Land Management's list of every entry, sale and patent in a township, including the entries that were cancelled.

Homestead. Federal land granted to a settler under the Homestead Act of 1862, after five years of living on and farming it.

Land grant. A grant of public land by Congress to a railroad, a wagon road company or a state, to pay for building or for schools.

Landslide inventory. A map of the landslides geologists have found. Oregon's is SLIDO, the Statewide Landslide Information Database for Oregon.

Legal description. The wording in a deed or survey that says exactly which land is meant.

Legend. A map's key, which explains its symbols and lines.

Lidar. A laser survey made from an aircraft. With the trees and buildings

taken out, it shows the shape of the bare ground.

Link. One hundredth of a surveyor's chain: 7.92 inches.

Map unit. An outlined area on a soil map, labeled with a symbol and usually named for its main soil series.

Master title plat. The Bureau of Land Management's map of a township showing the present status of the federal land in it.

Metes and bounds. A description of land that starts at a point and follows a series of bearings and distances around its edge, back to the start.

Oral history. A recorded interview with someone who remembers a place or a time, kept so that others can hear it later.

Partition plat. A survey map, filed with the county, that divides one piece of land into a few parcels.

Patent. The government's first deed to a piece of land, passing it to a private owner.

Peak flow. The highest flow of a stream in a year.

Plat. A map drawn from a survey.

Principal meridian. The north-south line from which ranges are counted east and west. Oregon's is the Willamette Meridian.

Quarter corner. The surveyor's mark halfway along a section line.

Quarter section. One fourth of a section, 160 acres, named by its direction, such as the NE $\frac{1}{4}$.

Range. A column of townships, counted east or west of the principal meridian.

Repeat photography. Taking an old photograph's view again from the same spot, to show what has changed.

Research log. A running record of every source you look at: what it is, where you found it, its exact words, what you think they mean, and what to do next.

Reservation (in a deed). A right that a seller keeps back when selling land, such as the minerals, water rights or a right-of-way. It is written into the deed and usually carries on through later sales.

Reservation (tribal). Land set aside by treaty, law or executive order as a home for a tribe.

Revested land. Granted land that the United States took back into federal ownership. In 1916 Congress revested about 2.9 million acres of the Oregon and California Railroad's grant (Chapter 7).

Savanna. Grassland with scattered trees, such as the oak savanna of the Willamette Valley in the 1850s.

Scale. How much ground a map covers for each inch of paper. At 1:24,000, an inch on the map is 2,000 feet on the ground.

School lands. Sections 16 and 36 of each township, granted to Oregon at statehood in 1859 to support public schools.

Section. One square of the survey grid, about a mile on a side and about 640 acres. A township has 36.

Soil series. A named kind of soil, such as Jory, described once and mapped wherever it is found.

Soil survey. A study that maps the soils of a county and describes each

one: its depth, texture, drainage and uses.

Splash dam. A temporary dam that held back a creek until loggers released the water to carry their logs downstream.

Springboard. The plank early loggers stood on to saw above the swell of a tree's trunk.

Stream gage. A station that measures the height and flow of a stream, often for decades.

Tax lot. A piece of land as the county assessor maps and numbers it for property taxes.

Topographic map. A map that shows the shape of the land with contour lines, along with streams, roads and buildings.

Township. A square of the survey grid 6 miles on a side, holding 36 sections.

Transcript. The typed record of a recorded interview.

Treaty. A formal agreement between nations, such as the treaty of 1855 by which the bands of the Willamette Valley ceded most of the valley to the United States.

Water right. The state's permission to use water from a stream, spring or well for a stated purpose.

Weight of evidence. The rule of choosing the answer that the most independent sources support, and changing it when better evidence appears.

Witness tree. Another name for a bearing tree.

Notes

Chapter 1. Every piece of land has a story

- 1 Sullivan Tree Farm Management Plan (2012), as quoted in *A History of the Land: The Story of the Sullivan Tree Farm near Pedee, Polk County, Oregon* (October 2026), opening section.
- 2 *A History of the Land* (2026), “1871 to 1900: Railroad land and a seven-acre homestead,” patent table, from Bureau of Land Management, General Land Office Records, and the BLM historical index for T9S R6W.
- 3 Daniel Murphy, field notes of the section lines, T9S R6W, Willamette Meridian, March 1854, BLM Oregon land records, vol. R0029, p. 331. Murphy wrote “prarie.”
- 4 Murphy (1854); Thomas H. Hutchinson, field notes of the donation land claim surveys, T9S R6W, 1855, BLM Oregon land records, vol. D0022; tally of 23 bearing trees at 13 corners in *A History of the Land* (2026), “The witness trees.”
- 5 University of Oregon Libraries, Aerial Photography Research Service, fee schedule, checked October 10, 2026.
- 6 Hutchinson (1855), vol. D0022, p. 351, on the Tedrow claim; Murphy (1854); tally in *A History of the Land* (2026), “The witness trees.”
- 7 General Land Office plat of T9S R6W, Willamette Meridian, approved May 1, 1855, BLM Oregon State Office; drawn from Murphy’s notes, as *A History of the Land* (2026) explains in “1852 to 1854: The surveyors arrive and find neighbors.”
- 8 USDA aerial photograph of 1955, Oregon Digital; Sullivan Tree Farm Management Plan (2012); both as

described in *A History of the Land* (2026), “The twentieth century, seen from the air.”

- 9 *A History of the Land* (2026), “The twentieth century, seen from the air” and “December 1989 to today.”
- 10 *A History of the Land* (2026), “The land today.”
- 11 Same.
- 12 Dave Sullivan, October 10, 2026. The preface tells how the research began.

Chapter 2. Start with your place and your question

- 1 Daniel Murphy, field notes of the section lines, T9S R6W, March 1854, BLM Oregon land records, vol. R0029, p. 331. Murphy wrote “prarie.”
- 2 Sullivan Tree Farm Management Plan (2012); Partition Plat No. 1993-0029, Polk County survey CS 12769; both listed in *A History of the Land* (2026), annotated bibliography.
- 3 *A History of the Land* (2026), opening section.
- 4 Murphy (1854), vol. R0029, p. 331.

Chapter 3. Find your legal description, tax lot and acreage

- 1 Partition Plat No. 1993-0029, June 24, 1993: title, narrative and surveyor's certificate. Polk County survey CS 12769.
- 2 Kay Atwood, "Oregon Land Survey, 1851-1855," *The Oregon Encyclopedia*, Oregon Historical Society, last updated May 25, 2022 (the Land Ordinance of May 20, 1785, and the Donation Land Act of September 1850).
- 3 "ORMAP: The Oregon Property Tax Map," State of Oregon, catalog entry at catalog.data.gov, checked October 10, 2026; viewer at ormap.net.
- 4 Oregon-California Trails Association, Mapping and Marking Committee, "Public Land Survey System," Appendix 3 of its mapping manual; U.S. Geological Survey, "Public Land Survey System of the United States," National Atlas of the United States (2010), which covers the 30 states formed from the public domain.
- 5 Champ Clark Vaughan, "Willamette Stone and Willamette Meridian," *The Oregon Encyclopedia*, last updated February 27, 2024.
- 6 Same; Oregon-California Trails Association, "Public Land Survey System."
- 7 43 U.S.C. 751.
- 8 General Land Office plat of T9S R6W (1855), as read in *A History of the Land* (2026), "How the old surveys worked."
- 9 Donation land claim plat of T9S R6W, BLM Oregon State Office; *A History of the Land* (2026), "How the old surveys worked."
- 10 U.S. Geological Survey, Scientific Investigations Report 2007-5050, well and section location system, pubs.usgs.gov/sir/2007/5050/sectionlocation.html, checked October 10, 2026.
- 11 City of Scappoose, "Tax lot info is required on all permits" (revised September 2021), checked October 10, 2026.
- 12 *A History of the Land* (2026), "1871 to 1900," note to the patent table; county map layers retrieved October 2, 2026.
- 13 *A History of the Land* (2026), "1871 to 1900"; Partition Plat No. 1993-0029.

Chapter 4. The four studies behind the approach

- 1 Bob Zybach, *The Great Fires: Indian Burning and Catastrophic Forest Fire Patterns of the Oregon Coast Range, 1491-1951* (PhD dissertation, Oregon State University, 2003), Figure 2.03. Online at ir.library.oregonstate.edu/downloads/5x21tj35x.
- 2 Bob Zybach, *Using Oral Histories to Document Changing Forest Cover Patterns: Soap Creek Valley, Oregon, 1500-1999* (MAIS thesis, Oregon State University, 1999), p. 59. Online at nwmapsco.com/ZybachB/Thesis/Zybach_MAIS_1999.pdf.
- 3 Bob Zybach and Don Ivy, *Coquille Trails: Early Historical Roads and Trails of Ancestral Coquille Indian Lands, 1826-1875* (Coquille Indian Tribe Cultural Geography Project, North Bend, Oregon, 2013), p. 1. Online at orwww.org/Coquille_Trails/.
- 4 Same, Volume I, Part 1.
- 5 Bob Zybach, *Tiller Pre-Contact Reference Condition Study*, final report, February 14, 2011 (Oregon Websites and Watersheds Project, for Resource Management Services, Roseburg, Oregon), p. 8. Online at orwww.org/Reports/Tiller_Precontact_Conditions/.
- 6 Same, p. 26.
- 7 Zybach (2003), p. 53.
- 8 Zybach (1999), Appendix D, Table D.1, pp. 250-251, compiled from Leonard Whitlow II, *Grande Ronde Indian Reservation, Yamhill County, Oregon: 1860 Census, 1888 Census, 1901 Family Register* (1988).

Chapter 5. How the site Your Land History fits with this guide

- 1 *A History of the Land* (2026), “Researching your own land’s history” (step 9) and “Next steps for this property.”

Chapter 6. The first survey: what the surveyor wrote

- 1 Daniel Murphy, field notes of the subdivision of T9S R6W, Willamette Meridian, March 1854, BLM Oregon land records, vol. R0029, as read in *A History of the Land* (2026), “1852 to 1854: The surveyors arrive and find neighbors.” Murphy wrote “Gillam”; the later land patents read “Gilliam.”
- 2 Bureau of Land Management, Oregon State Office, survey index for T9S R6W (field notes of the outer lines, 1852 and 1853, vols. R0017, R0020 and R0029), checked October 10, 2026; *A History of the Land* (2026), “1852 to 1854.”
- 3 *A History of the Land* (2026), “1852 to 1854.”
- 4 Same, “How the old surveys worked.”
- 5 Thomas H. Hutchinson, field notes of the donation land claim surveys, T9S R6W, 1855, BLM Oregon land records, vol. D0022; dates in *A History of the Land* (2026), “1855: Two claims and two houses.”
- 6 Oregon-California Trails Association, Mapping and Marking Committee, “Public Land Survey System,” Appendix 3 of its mapping manual; U.S. Geological Survey, “Public Land Survey System of the United States,” National Atlas of the United States (2010), which covers the 30 states formed from the public domain.
- 7 Zybach, B., *How to Research Your Land’s History*, review draft, October 7, 2026, “The first survey: the surveyor’s field notes.”
- 8 General Land Office, *Instructions to the Surveyors General of Public Lands of the United States ... Containing Also a Manual of Instructions to Regulate the Field Operations of Deputy Surveyors* (1855), pp. 15, 17 and 19; copy at the Bureau of Land Management, checked October 10, 2026. Murphy surveyed in 1854, the year before this edition was printed.
- 9 Murphy (1854), vol. R0029, p. 331.
- 10 Hutchinson (1855), vol. D0022, p. 351. The page opens in the middle of a sentence. Hutchinson wrote “goode.”
- 11 Bureau of Land Management, Oregon State Office, land records site and survey index, checked October 10, 2026.
- 12 BLM Oregon State Office, survey index for T9S R6W, field note records 1852 to 2020, checked October 10, 2026.
- 13 Bureau of Land Management, General Land Office Records website, site text, checked October 10, 2026.
- 14 Murphy (1854), p. 331; Zybach, review draft, “The first survey.”
- 15 Hutchinson (1855); *A History of the Land* (2026), “How the old surveys worked.”
- 16 Zybach, review draft, “The first survey.”
- 17 Zybach, review draft, “One record, read with care”; *A History of the Land* (2026), “The witness trees.”
- 18 Murphy (1854) and Hutchinson (1855); tally in *A History of the Land* (2026), “The witness trees.”
- 19 Murphy (1854), p. 331. Murphy wrote “prarie.”
- 20 *A History of the Land* (2026), “1855: Two claims and two houses.”

Chapter 7. How the land left the government

- 1 *A History of the Land* (2026), “1871 to 1900: Railroad land and a seven-acre homestead.”
- 2 Same; Bureau of Land Management, General Land Office Records, homestead patent to Charles W. Pagett, October 12, 1900; BLM historical index for T9S R6W.
- 3 Zybach, B., *How to Research Your Land’s History*, review draft, October 7, 2026, “First title: patents, claims, homesteads, and grants.”
- 4 U.S. patent 865382 to Andrew J. Welch and Martha Welch, donation claim No. 41, T9S R6W, May 31, 1922, under the act of September 27, 1850. BLM General Land Office Records.
- 5 *A History of the Land* (2026), “1871 to 1900”; Zybach, review draft, “The story that needed correcting.”
- 6 Zybach, review draft, “First title”; *A History of the Land* (2026), “1871 to 1900.”
- 7 Bureau of Land Management, “History of the O&C Act” (flyer), checked October 10, 2026.
- 8 Act of February 14, 1859, 11 Stat. 383, section 4, first proposition, and Oregon’s act accepting the propositions, approved June 3, 1859, both as printed in Oregon State Legislature, “Oregon Admission Acts,” checked October 10, 2026.
- 9 Zybach, review draft, “First title.”
- 10 *A History of the Land* (2026), “Next steps for this property”; FamilySearch, checked October 10, 2026.
- 11 National Archives, “Land Records” research page, checked October 10, 2026; Zybach, review draft, “First title.”
- 12 *A History of the Land* (2026), annotated bibliography, entries for the BLM survey index and the General Land Office Records database; Bureau of Land Management, Oregon State Office, land records site, checked October 10, 2026.
- 13 Genealogical Forum of Oregon, website, checked October 10, 2026; Zybach, review draft, “First title.”
- 14 BLM historical index for T9S R6W, as read in *A History of the Land* (2026), “1871 to 1900.”
- 15 *A History of the Land* (2026), “Next steps for this property”; Zybach, review draft, “First title.”
- 16 Zybach, review draft, “First title.”
- 17 *A History of the Land* (2026), “1855: Two claims and two houses” and “1871 to 1900,” patent table, from BLM General Land Office Records and the BLM historical index for T9S R6W. Acreages are estimates from county map layers.
- 18 *A History of the Land* (2026), “1871 to 1900.”
- 19 Sullivan Tree Farm Management Plan (2012), as quoted in *A History of the Land* (2026), opening section; Zybach, review draft, “The story that needed correcting.”

Chapter 8. Deeds, tax rolls and the chain of owners

- 1 Partition Plat No. 1993-0029, June 24, 1993, “Existing easements,” narrative and surveyor’s certificate. Polk County survey CS 12769. The plat says the reservation “effects only portion in Section 28” and that the easements are “not plotted,” with “no specific location in deed record.”
- 2 Zybach, B., *How to Research Your Land’s History*, review draft, October 7, 2026, “Deeds and the chain of owners.”
- 3 Zybach, review draft, “Tax lots and assessor records”; Oregon State Archives, County Records Guide, checked October 10, 2026.
- 4 Zybach, review draft, “Deeds and the chain of owners”; Polk County, Digital Research Room, checked October 10, 2026.
- 5 Benton County Records, “Real Property Records” and “Records Requests and Fees,” checked October 10, 2026.

- 6 Zybach, review draft, "Deeds and the chain of owners."
- 7 *A History of the Land* (2026), "Researching your own land's history," step 6.
- 8 Zybach, review draft, "Deeds and the chain of owners."
- 9 *A History of the Land* (2026), "Researching your own land's history," step 7; Benton County Records, "Real Property Records" (an index of "recorded deed, mortgage and lien records"), checked October 10, 2026.
- 10 *A History of the Land* (2026), "1871 to 1900: Railroad land and a seven-acre homestead," patent table, from BLM General Land Office Records, the BLM historical index for T9S R6W and Polk County map layers retrieved October 2, 2026.
- 11 Zybach, review draft, "Deeds and the chain of owners."
- 12 *A History of the Land* (2026), "1871 to 1900" and "December 1989 to today: becoming a tree farm"; Partition Plat No. 1993-0029, narrative.
- 13 Sullivan Tree Farm Management Plan (2012), as summarized in *A History of the Land* (2026), "December 1989 to today."
- 14 *A History of the Land* (2026), "Researching your own land's history," step 7.
- 15 Same, "The Tedrows" and "Next steps for this property."

Chapter 9. Census pages, newspapers, journals and county histories

- 1 Polk County Pioneer Cemeteries, Taylor Cemetery records (volunteer-compiled), quoting the 1854 marriage record, as read in *A History of the Land* (2026), "The Johnsons."
- 2 Zybach, B., *How to Research Your Land's History*, review draft, October 7, 2026, "Census records."
- 3 U.S. Census of 1880, Polk County, Oregon, Luckiamute and Buena Vista precincts, enumeration district 107, p. 24, National Archives microfilm T9, roll 1083.
- 4 National Archives, census research page and 1950 census website, checked October 10, 2026.
- 5 Zybach, review draft, "Census records"; National Archives, 1950 census website, checked October 10, 2026.
- 6 Zybach, review draft, "Census records"; *A History of the Land* (2026), "The Johnsons."
- 7 Zybach, review draft, "Newspapers."
- 8 "Among the Sawmills," *Polk County Observer* (Dallas, Oregon), May 26, 1905, Historic Oregon Newspapers.
- 9 Historic Oregon Newspapers, University of Oregon Libraries, site text, checked October 10, 2026; Zybach, review draft, "Newspapers."
- 10 Interview of 1938, as quoted in Polk County Pioneer Cemeteries, Taylor Cemetery records; *A History of the Land* (2026), "The Johnsons."
- 11 Zybach, review draft, "Journals, diaries, and letters."
- 12 Zybach, review draft, "Local histories."
- 13 Polk County Pioneer Cemeteries, Taylor Cemetery records; *A History of the Land* (2026), "The Johnsons."
- 14 Interview of 1938, as quoted in Polk County Pioneer Cemeteries, Taylor Cemetery records.
- 15 McFall, Tedrow family note, as quoted at michaelkluckner.com; WikiTree, "John Wilson Tedrow"; both as read in

A History of the Land (2026), “The Tedrows,” which treats them as unverified.

- 16 *A History of the Land* (2026), “Next steps for this property” (National Archives microfilm M815, Oregon City certificates 4751 and 4753).

Chapter 10. Buildings, cemeteries and place names

- 1 Oregon Historical Society Research Library, Mss 3100, *John Johnson residence plans* (1934), catalog entry; *A History of the Land* (2026), “The twentieth century, seen from the air” and annotated bibliography. The catalog entry has been read, not the drawings.
- 2 Hutchinson (1855), vol. D0022; *A History of the Land* (2026), “1855: Two claims and two houses” and “The twentieth century, seen from the air.”
- 3 Zybach, B., *How to Research Your Land’s History*, review draft, October 7, 2026, “Buildings and house history.”
- 4 Oregon Parks and Recreation Department, State Historic Preservation Office, Oregon Historic Sites Database, checked October 10, 2026; Zybach, review draft, “Buildings and house history.”
- 5 Sanborn Map Company, Albany, Oregon, 1890, sheet 8, Library of Congress; Zybach, review draft, Figure 10.
- 6 Oregon Historical Society, Research Library web page, checked October 10, 2026.
- 7 Zybach, review draft, “Tax lots and assessor records.”
- 8 Zybach, review draft, “Cemeteries and burial places.”
- 9 Find a Grave, site text, checked October 10, 2026; Oregon Parks and Recreation Department, Oregon Historic Cemeteries Program, checked October 10, 2026; Zybach, review draft, “Cemeteries and burial places.”

- 10 *A History of the Land* (2026), “Researching your own land’s history,” step 8, and annotated bibliography, entry for Polk County Pioneer Cemeteries.
- 11 Zybach, review draft, “Place names and community places.”
- 12 Lewis A. McArthur, *Oregon Geographic Names* (1952 edition), “Pedee,” as given in Zybach, review draft, “Place names and community places.”
- 13 Murphy (1854), vol. R0029, as read in *A History of the Land* (2026), “1852 to 1854”; Hutchinson (1855), vol. D0022, survey of the Mary Gilliam claim, July 13 to 14, 1855, as listed in *A History of the Land* (2026), “1855: Two claims and two houses.”
- 14 Polk County Pioneer Cemeteries, Taylor and Montgomery cemetery records, as read in *A History of the Land* (2026), “The Johnsons” and “1871 to 1900.”
- 15 *A History of the Land* (2026), “The twentieth century, seen from the air.”

Chapter 11. Maps and survey plats

- 1 General Land Office plat of T9S R6W, Willamette Meridian, approved May 1, 1855, BLM Oregon State Office; *A History of the Land* (2026), “1852 to 1854: The surveyors arrive and find neighbors.”
- 2 *A History of the Land* (2026), “1852 to 1854.”
- 3 Zybach, B., *How to Research Your Land’s History*, review draft, October 7, 2026, “How to compare maps.”
- 4 Zybach, review draft, “Maps and survey plats” and “Kinds of maps.”
- 5 U.S. Geological Survey, topoView, site text, checked October 10, 2026.
- 6 Zybach, review draft, “Where to look” (maps).
- 7 Zybach, review draft, “How to collect them” (maps).
- 8 Zybach, review draft, “How to read a map.”

- 9 Plat of T9S R6W (1855); *A History of the Land* (2026), “1852 to 1854.”
- 10 Bob Zybach and Don Ivy, *Coquille Trails: Early Historical Roads and Trails of Ancestral Coquille Indian Lands, 1826-1875* (Coquille Indian Tribe, 2013), Volume I, Part 1.
- 11 Zybach, review draft, “A caution” (maps).
- 12 Plat of T9S R6W (1855), as read in *A History of the Land* (2026), “How the old surveys worked”; Murphy (1854), vol. R0029, p. 331.
- 13 U.S. Geological Survey, Dallas and Corvallis quadrangles (1942), Falls City and Airlie North (1974), and Kings Valley and Airlie South (1984), topoView; Zybach, review draft, Figure 14.
- 14 USDA aerial photograph of 1936, Oregon Digital, as described in *A History of the Land* (2026), “The twentieth century, seen from the air.”
- 15 *A History of the Land* (2026), “December 1989 to today,” Figure 12 and its caption (Polk County map layers).
- Zybach, review draft, “Aerial photographs.”
- 8 Oregon Digital, “Aerial Photos, Mid-Willamette,” collection page (1,241 items for Polk County), checked October 10, 2026.
- 9 University of Oregon Libraries, Aerial Photography Collection and Aerial Photography Research Service, checked October 10, 2026.
- 10 Zybach, review draft, “Aerial photographs”; news reports “Google Earth Pro desktop app won’t be available for new downloads starting June 25, 2027” (AlternativeTo, July 2026) and “Google Earth Pro desktop downloads will end in 2027, but existing installs will keep working” (Digital Citizen), checked October 10, 2026.
- 11 Zybach, review draft, “Aerial photographs.”
- 12 Zybach, review draft, “What old lines can tell you”; Zybach, *The Great Fires* (2003), Figure 2.03.
- 13 Zybach, review draft, “Satellite images.”
- 14 Zybach, review draft, “Lidar.”
- 15 Oregon Digital, “Aerial Photos, Mid-Willamette,” rights statements, checked October 8, 2026.
- 16 USDA aerial photograph of 1936, Oregon Digital; *A History of the Land* (2026), “The twentieth century, seen from the air.”
- 17 *A History of the Land* (2026), “The twentieth century, seen from the air.”
- 18 Same; Sullivan Tree Farm Management Plan (2012), as quoted there.

Chapter 12. Photographs from the ground, the air and space

- 1 Zybach, B., *How to Research Your Land’s History*, review draft, October 7, 2026, “Photographs taken on the ground”; U.S. Forest Service photograph, July 24, 1933, as printed in Bob Zybach, *Tiller Pre-Contact Reference Condition Study* (2011), Figure 2.05.
- 2 Zybach, Tiller study (2011), p. 32, Table 2.03; Zybach, review draft, Figure 18.
- 3 Zybach, review draft, “Photographs, aerial photos, and satellite images.”
- 4 Zybach, review draft, “Photographs taken on the ground.”
- 5 Zybach, review draft, “Repeat photography.”
- 6 Zybach, review draft, “Aerial photographs.”
- 7 U.S. Geological Survey, EarthExplorer, site text, checked October 10, 2026;

Chapter 13. Rock, soil and the shape of the land

- 1 Oregon Department of Geology and Mineral Industries (DOGAMI), Oregon Geologic Data Compilation, read in the Oregon Geologic Map viewer for about 4 miles around Pedee, October 2026; S. Taylor, B. Dutton and P. Poston, *Field Guide to the Luckiamute River Watershed* (Western Oregon University, 2002).
- 2 *A History of the Land* (2026), “The land today” and “December 1989 to today.”
- 3 H. E. Vokes, D. A. Myers and L. Hoover, *Geology of the West-Central Border Area of the Willamette Valley, Oregon*, U.S. Geological Survey Oil and Gas Investigations Map OM-150 (1954).
- 4 DOGAMI and Oregon Lidar Consortium lidar (2011) and USDA National Agriculture Imagery Program photograph of July 11, 2022, compared for this guide; the railroad-grade label on older maps as reported in Zybach, B., *How to Research Your Land’s History*, review draft, October 7, 2026, “Geology and landforms,” Figure 22.
- 5 Zybach, review draft, “Geology and landforms.”
- 6 Zybach, review draft, “Soils.”
- 7 USDA Natural Resources Conservation Service, Web Soil Survey, home page and “getting started” steps, checked October 10, 2026.
- 8 DOGAMI, Statewide Landslide Information Database for Oregon (SLIDO), release 4.5, mapped for about 6 miles around Pedee for this guide.
- 9 Zybach, review draft, “Natural hazards”; DOGAMI HazVu viewer, checked October 10, 2026.
- 10 DOGAMI, Oregon Geologic Data Compilation (as in note 13-1); Taylor, Dutton and Poston (2002).
- 11 Clarence A. Knezevich, *Soil Survey of Polk County, Oregon* (USDA Soil Conservation Service, 1982), as kept current in Web Soil Survey (version of September 8, 2026), mapped for about 2 miles around Pedee for this guide.
- 12 Zybach, review draft, “Soils.”

Chapter 14. Rain, rivers and the weather people remember

- 1 U.S. Geological Survey, annual peak streamflow, station 14190500, Luckiamute River near Suver, retrieved October 7, 2026; station 14190000, Luckiamute River at Pedee; both as summarized in Zybach, B., *How to Research Your Land’s History*, review draft, October 7, 2026, “Water: streams, springs, wells, and floods.”
- 2 Zybach, review draft, “Climate and weather history” and “Water: streams, springs, wells, and floods.”
- 3 PRISM Climate Group, Oregon State University, home page, checked October 10, 2026.
- 4 NOAA National Centers for Environmental Information, Climate at a Glance, county time series.
- 5 Ralph J. Garono, Becci Dale Anderson, Kirsten Harma and Christine Buhl, *Luckiamute / Ash Creek / American Bottom Watershed Assessment* (Earth Design Consultants, for the Luckiamute Watershed Council, June 2004), Table 2, p. 28.
- 6 Same, Map 3, “Precipitation,” drawn from the 103-Year High-Resolution Precipitation Climate Data Set for the Conterminous United States (Spatial Climate Analysis Service and Oregon Climate Service, Oregon State University, 2002); the rise into the Coast Range from the Zybach, review draft, “Climate and weather history.”
- 7 Zybach, review draft, “Climate and weather history,” Figure 26.
- 8 Zybach, review draft, “Water: streams, springs, wells, and floods.”
- 9 Oregon Water Resources Department, well report query and water rights information pages, checked October 10, 2026; Zybach, review draft, “Water: streams, springs, wells, and floods.”

- 10 Zybach, review draft, "Water: streams, springs, wells, and floods," and Figure 28.
- 11 Garono and others (2004), p. 10, citing Licata and others (1998) and Theurer (2003).
- 12 NOAA, Climate at a Glance, county time series, Polk County, Oregon, 1895 to 2025 (Figure 14.1).
- 13 *A History of the Land* (2026), "The land today."
- 14 Zybach, review draft, "Climate and weather history."
- 15 Partition Plat No. 1993-0029, June 24, 1993, declaration and "Existing easements." Polk County survey CS 12769.

Chapter 15. What grew there: plants, forests, fire and crops

- 1 Daniel Murphy, field notes of the section lines, T9S R6W, March 1854, BLM Oregon land records, vol. R0029; Thomas H. Hutchinson, field notes of the donation land claim surveys, T9S R6W, 1855, BLM Oregon land records, vol. D0022; tally in *A History of the Land* (2026), "The witness trees."
- 2 *A History of the Land* (2026), "December 1889 to today."
- 3 W. J. Spillman, camas specimen, Monmouth, Oregon, April 22, 1894, University of Minnesota, Bell Museum herbarium, MIN 89465.
- 4 Zybach, B., *How to Research Your Land's History*, review draft, October 7, 2026, "Plants and herbarium records."
- 5 John A. Christy and Edward R. Alverson, "Historical Vegetation of the Willamette Valley, Oregon, circa 1850," *Northwest Science* 85, no. 2 (2011): 93 to 107, abstract.
- 6 Zybach, review draft, "Forest and fire history."
- 7 Zybach, review draft, "Wildlife."
- 8 Zybach, review draft, "Crops and farming."
- 9 Underwood and Underwood stereograph, near Walla Walla,

Washington, 1902; Russell Lee, Farm Security Administration photograph, Whitman County, Washington, July 1941; both Library of Congress.

- 10 Hutchinson (1855), vol. D0022, p. 351 (Tedrow claim, August 10, 1855) and his closing notes on the Johnson claim, as read in *A History of the Land* (2026), "1855: Two claims and two houses" and "The witness trees." The Tedrow page opens in mid-sentence; spelling regularized there.
- 11 *A History of the Land* (2026), "The witness trees."
- 12 Spillman specimen (as in note 15-3); Clarence A. Knezevich, *Soil Survey of Polk County, Oregon* (USDA Soil Conservation Service, 1982), as reported in the Zybach, review draft, "Crops and farming"; distance to Monmouth from *A History of the Land* (2026), "The land today."

Chapter 16. The first people on the land

- 1 Bob Zybach, *Using Oral Histories to Document Changing Forest Cover Patterns: Soap Creek Valley, Oregon, 1500-1999* (MAIS thesis, Oregon State University, 1999), pp. 137-138, quoting the council record as printed in Harold Mackey, *The Kalapuyans: A Sourcebook on the Indians of the Willamette Valley* (1974). The thesis names "the Chapanafas and Luckymutes (or, Luckiamutes)" nations at the council and reads the 44 as "the combined survivors of two nations." The newspaper count of that week gives the 44 as Luckiamute alone: the *Oregon Spectator* of May 8, 1851, "the Luckiamutes number forty-four," as quoted by David G. Lewis, "Luckiamuke Band of Calapooia Indians Reservation 1855," *The Quartux Journal*, May 15, 2016.
- 2 Zybach (1999), p. 137, and Map 13, p. 138; Melinda Jette, "Kalapuya Treaty of 1855," *The Oregon Encyclopedia*, Oregon Historical Society, updated March 17, 2022. The council record spells the third name Yuh-kow; the *Spectator* calls him Kone (Lewis 2016).

- 3 Zybach, B., *How to Research Your Land's History*, review draft, October 7, 2026, "People before the written records" and "Archaeology and the long human past."
- 4 Same; C. Melvin Aikens, Thomas J. Connolly and Dennis L. Jenkins, *Oregon Archaeology* (Oregon State University Press, 2011); Oregon State Historic Preservation Office, *Archaeological Sites on Private Lands*, Bulletin 1 (2019).
- 5 Zybach, review draft, "Archaeology and the long human past"; Oregon State Historic Preservation Office, archaeology page, checked October 10, 2026.
- 6 Oregon State Historic Preservation Office, archaeology page, checked October 10, 2026.
- 7 Zybach, review draft, "Archaeology and the long human past"; Oregon Revised Statutes 97.745(4).
- 8 Lewis (2016).
- 9 Zybach (1999), pp. 30, 72 and 191, citing Robert Boyd (1990) on the epidemic and Charles Wilkes (1845) on the numbers.
- 10 "Treaty with the Kalapuya, etc., 1855," January 22, 1855, 10 Stat. 1143, in Charles J. Kappler, ed., *Indian Affairs: Laws and Treaties*, vol. 2, as transcribed in the Tribal Treaties Database, Oklahoma State University Libraries.
- 11 Same, articles 1 and 2; Jette (2022).
- 12 Jette (2022); David Lewis, "Confederated Tribes of Grand Ronde," *The Oregon Encyclopedia*, updated November 13, 2023.
- 13 Lewis, "Confederated Tribes of Grand Ronde" (2023).
- 14 Confederated Tribes of Grand Ronde, "Treaties," grandronde.org, read October 8, 2026.
- 15 USDA Forest Service, Tribal Cession Lands, cession 352 (after Royce 1899), retrieved October 8, 2026.
- 16 Jette (2022); Lewis, "Confederated Tribes of Grand Ronde" (2023).
- 17 Confederated Tribes of Grand Ronde, Cultural Resources page, and Confederated Tribes of Siletz Indians, Heritage page, both checked October 10, 2026; Oregon State Historic Preservation Office, archaeology page, checked October 10, 2026; Zybach, review draft, "Native peoples and their history on the land."
- 18 Kappler, vol. 2; National Archives, Ratified Indian Treaty 282, National Archives Identifier 169820763.
- 19 Charles C. Royce, *Indian Land Cessions in the United States*, in the Eighteenth Annual Report of the Bureau of American Ethnology, part 2 (1899).
- 20 Zybach, review draft, "Native peoples and their history on the land."
- 21 Zybach (1999), p. 30; Yvonne P. Hajda, *Mary's River Kalapuyan: A Descriptive Phonology* (MA thesis, Portland State University, 1976), p. 7; Henry Zenk, "The Kalapuyan Presence in Oregon's Geographic Names" (2006), note 6; Melville Jacobs, *Kalapuya Texts* (University of Washington Publications in Anthropology, vol. 11, 1945).
- 22 Treaty of 1855 (Kappler, vol. 2); Zybach (1999), p. 137.
- 23 Sullivan Tree Farm Management Plan (2012), as quoted in *A History of the Land* (2026), "Before the surveyors."
- 24 Treaty of 1855 (Kappler, vol. 2), signatures of January 4, 1855; Lewis (2016).
- 25 Lewis (2016), quoting the agreement of March 14, 1855, and the 1856 Grand Ronde census.
- 26 Zybach (1999), Appendix D, Table D.1, pp. 250-251, compiled from Leonard Whitlow II, *Grande Ronde Indian Reservation, Yamhill County, Oregon: 1860 Census, 1888 Census, 1901 Family Register* (1988).
- 27 Confederated Tribes of Grand Ronde, "Treaties," grandronde.org, read October 10, 2026: it lists the Luckiamute and Mary's River bands among the tribes and bands of the Willamette Valley Treaty of 1855.

Chapter 17. What you can see on the ground

- 1 Thomas H. Hutchinson, field notes of the donation land claim surveys, T9S R6W, July 1855, BLM Oregon land records, vol. D0022, as read in *A History of the Land* (2026), “The witness trees”; the corner’s place on the main tract’s west line from Partition Plat No. 1993-0029, drawing (point 4).
- 2 Partition Plat No. 1993-0029, June 24, 1993, narrative. Polk County survey CS 12769.
- 3 Zybach, B., *How to Research Your Land’s History*, review draft, October 7, 2026, “What you can see on the ground.”
- 4 Bob Zybach, *Tiller Pre-Contact Reference Condition Study*, final report, February 14, 2011 (Oregon Websites and Watersheds Project, for Resource Management Services, Roseburg, Oregon), p. 8.
- 5 Same, p. 26.
- 6 Daniel Murphy, field notes of the section lines, T9S R6W, March 1854, BLM Oregon land records, vol. R0029; Hutchinson (1855), vol. D0022; tally in *A History of the Land* (2026), “The witness trees.”
- 7 *A History of the Land* (2026), “The witness trees.”
- 8 Partition Plat No. 1993-0029, surveyor’s certificate and drawing.
- 9 Hutchinson (1855), vol. D0022, as read in *A History of the Land* (2026), “Two houses.”

Chapter 18. What people remember, and what families keep

- 1 Polk County Pioneer Cemeteries, Taylor Cemetery records (polkcountycemetery.org), quoting a 1938 interview; as given in *A History of the Land* (2026), “The Johnsons.”
- 2 *A History of the Land* (2026), “1855: Two claims and two houses” and “The Johnsons.” That the cemetery’s John Johnson held land claim 53 is the report’s inference, though a strong one.
- 3 Zybach, B., *How to Research Your Land’s History*, review draft, October 7, 2026, “Oral history and interviews.”
- 4 Same; Oral History Association, *Principles and Best Practices*; Smithsonian Institution, *The Smithsonian Folklife and Oral History Interviewing Guide*.
- 5 Bob Zybach, *Using Oral Histories to Document Changing Forest Cover Patterns: Soap Creek Valley, Oregon, 1500-1999* (MAIS thesis, Oregon State University, 1999), pp. 18 to 62; the quotation is on p. 59.
- 6 Sullivan Tree Farm Management Plan (2012), as quoted in *A History of the Land* (2026), opening section and “1871 to 1900: Railroad land and a seven-acre homestead.”
- 7 Zybach, review draft, “Family papers and photographs”; National Archives, *How to Preserve Family Archives*.
- 8 Zybach, review draft, “Family papers and photographs,” Figure 45.
- 9 *A History of the Land* (2026), opening section.
- 10 Sullivan Tree Farm Management Plan (2012) and USDA aerial photograph of 1955, as described in *A History of the Land* (2026), “The twentieth century, seen from the air” and “December 1989 to today.”
- 11 *A History of the Land* (2026), “The twentieth century, seen from the air.”

Chapter 19. Putting the pieces together

- 1 Sullivan Tree Farm Management Plan (2012), as quoted in *A History of the Land* (2026), opening section.
- 2 *A History of the Land* (2026), “1871 to 1900: Railroad land and a seven-acre homestead,” patent table and the paragraphs after it, which record Bob Zybach’s correction; Homestead Act of May 20, 1862, 12 Stat. 392.
- 3 *A History of the Land* (2026), “1855: Two claims and two houses,” “1871 to 1900” and “The twentieth century, seen from the air.”
- 4 General Land Office plat of T9S R6W, Willamette Meridian, approved May 1, 1855, BLM Oregon State Office; drawn from Daniel Murphy’s field notes of 1854, as *A History of the Land* (2026) explains in “1852 to 1854: The surveyors arrive and find neighbors.”
- 5 *A History of the Land* (2026), “1855: Two claims and two houses” and “Next steps for this property”; the two family accounts are listed in its annotated bibliography.
- 6 *A History of the Land* (2026), “The twentieth century, seen from the air” and “Next steps for this property”; Oregon Historical Society Research Library, Mss 3100, *John Johnson residence plans* (1934), catalog entry.
- 7 The patent: Bureau of Land Management, General Land Office Records, as listed in *A History of the Land* (2026), “1855: Two claims and two houses.” Pagett: Polk County Pioneer Cemeteries, Montgomery Cemetery records, as cited in the same report, “1871 to 1900.” The house of 1934 and the Tedrow sale: the same report, “The twentieth century, seen from the air” and “1855: Two claims and two houses.”
- 8 Thomas H. Hutchinson, field notes of the donation land claim surveys, T9S R6W, 1855, BLM Oregon land records, vol. D0022, p. 351; BLM Oregon State Office, land records survey index for T9S R6W.
- 9 *A History of the Land* (2026), “1855: Two claims and two houses.”
- 10 USDA aerial photographs of Polk County, 1936 and 1955, Oregon Digital; Sullivan Tree Farm Management Plan (2012); both as read in *A History of the Land* (2026), “The twentieth century, seen from the air.”

Chapter 20. Following change through time: roads, railroads and land use

- 1 Oregon State University Libraries, Special Collections and Archives Research Center, “Local History in the Special Collections and Archives Research Center: Hoskins,” historical sketch, checked October 10, 2026; *A History of the Land* (2026), “The twentieth century, seen from the air.”
- 2 “Valley and Siletz Railroad,” Wikipedia, checked October 10, 2026, citing Benton County’s Fort Hoskins Historic Park brochure for the 1978 abandonment; OSU, “Local History: Hoskins,” for Boise Cascade and the removal of the Hoskins section in early 1979.
- 3 Library of Congress, “Railroad Maps, 1828 to 1900,” online collection, loc.gov.
- 4 OSU, “Local History: Hoskins” (finished 1914); the *Eighth Annual Report of the Railroad Commission of Oregon* (1915) and the *Tenth Annual Report of the Public Service Commission of Oregon* (1917), as summarized in “Valley and Siletz Railroad,” Wikipedia, checked October 10, 2026; U.S. General Land Office, *State of Oregon* (1922), David Rumsey Map Collection.
- 5 U.S. Geological Survey and Multi-Resolution Land Characteristics Consortium, Annual National Land Cover Database, mrlc.gov, years 1985 to 2025.
- 6 Richard Engeman, “Community of Airlie (Benton County),” *The Oregon Encyclopedia*, last updated February 24, 2022; Airlie’s place on the 1922 General Land Office map of Oregon (Figure 20.1).

- 7 *A History of the Land* (2026), “The twentieth century, seen from the air.”
- 8 “Ritner Creek Bridge,” Wikipedia, checked October 10, 2026, citing Polk County’s page on the bridge; National Register of Historic Places, Ritner Creek Bridge, listed November 29, 1979.
- 9 Annual National Land Cover Database, 1985 and 2025, shares of the 6-mile square around Pedee as counted for Figure 20.4.

Chapter 21. All four kinds of evidence at once: the Oregon Coast Range

- 1 Bob Zybach, *The Great Fires: Indian Burning and Catastrophic Forest Fire Patterns of the Oregon Coast Range, 1491-1951* (PhD dissertation, Oregon State University, 2003), p. 53.
- 2 Zybach (2003), p. 77.
- 3 Same, p. 96.
- 4 Same, p. 83.
- 5 Same, p. 53.
- 6 Same, p. 122, and Map 2.14.
- 7 Same, p. 296.
- 8 Murphy (1854) and Hutchinson (1855); USDA aerial photograph of 1955, Oregon Digital; Sullivan Tree Farm Management Plan (2012); all as read in *A History of the Land* (2026), “The witness trees” and “The twentieth century, seen from the air.”
- 9 *A History of the Land* (2026), “The witness trees.”

Chapter 22. One tree farm from beginning to end

- 1 Hutchinson (1855), vol. D0022; USDA aerial photograph of Polk County, 1955, Oregon Digital; *A History of the Land* (2026), “December 1989 to today: becoming a tree farm.”
- 2 *A History of the Land* (2026), “The land today.”
- 3 Same, opening section; Sullivan Tree Farm Management Plan (2012).
- 4 The rock: Oregon Department of Geology and Mineral Industries, Oregon Geologic Data Compilation; S. Taylor, B. Dutton and P. Poston, *Field Guide to the Luckiamute River Watershed* (2002). The soil: Clarence A. Knezevich, *Soil Survey of Polk County, Oregon* (1982), and the NRCS Web Soil Survey. The rain: NOAA, Climate at a Glance, Polk County series. The river: U.S. Geological Survey peak-flow records, stations 14190000 and 14190500. The first people: “Treaty with the Kalapuya, etc., 1855,” 10 Stat. 1143. The rest: the records named in the notes that follow.
- 5 Oregon Department of Geology and Mineral Industries, Oregon Geologic Data Compilation, unit descriptions for the country around Pedee; Taylor, Dutton and Poston (2002); Knezevich (1982).
- 6 David G. Lewis, “Luckimaucke Band of Calapooia Indians Reservation 1855,” *The Quartux Journal*, May 15, 2016.
- 7 “Treaty with the Kalapuya, etc., 1855,” January 22, 1855, 10 Stat. 1143, in Charles J. Kappler, ed., *Indian Affairs: Laws and Treaties*, vol. 2; Melinda Jette, “Kalapuya Treaty of 1855,” *The Oregon Encyclopedia*, updated March 17, 2022; Lewis (2016).
- 8 Confederated Tribes of Grand Ronde, “Treaties,” grandronde.org; Sullivan Tree Farm Management Plan (2012), as quoted in *A History of the Land* (2026), “Before the surveyors.”
- 9 Daniel Murphy, field notes of the section lines, T9S R6W, March 1854, BLM Oregon land records, vol. R0029,

- p. 331; *A History of the Land* (2026), “1852 to 1854: The surveyors arrive and find neighbors.” Murphy wrote “prarie.”
- 10 Thomas H. Hutchinson, field notes of the donation land claim surveys, T9S R6W, 1855, BLM Oregon land records, vol. D0022; *A History of the Land* (2026), “1855: Two claims and two houses.” The BLM index lists these surveys under 1856; the field notes are dated 1855 (Chapter 19).
 - 11 Hutchinson (1855), vol. D0022, p. 351 (Tedrow) and the closing page of the Johnson survey; *A History of the Land* (2026), “1855: Two claims and two houses.”
 - 12 *A History of the Land* (2026), “The witness trees,” a tally from Murphy (1854) and Hutchinson (1855).
 - 13 Hutchinson (1855), vol. D0022, pp. 347 and 363; Murphy (1854); *A History of the Land* (2026), “1855: Two claims and two houses.”
 - 14 Bureau of Land Management, General Land Office Records, and the BLM historical index for T9S R6W, as tabulated in *A History of the Land* (2026), “1871 to 1900: Railroad land and a seven-acre homestead.”
 - 15 Same.
 - 16 USDA aerial photograph of Polk County, 1936, Oregon Digital; *A History of the Land* (2026), “The twentieth century, seen from the air.”
 - 17 USDA aerial photographs of Polk County, 1955 and 1978, Oregon Digital; Sullivan Tree Farm Management Plan (2012); *A History of the Land* (2026), “The twentieth century, seen from the air.”
 - 18 *A History of the Land* (2026), “The twentieth century, seen from the air.”
 - 19 Sullivan Tree Farm Management Plan (2012), as quoted in *A History of the Land* (2026), “December 1989 to today: becoming a tree farm.”
 - 20 Same; Partition Plat No. 1993-0029, June 24, 1993, Polk County survey CS 12769.
 - 21 The records named in the table and in the notes above, with Richard Engeman, “Community of Airlie (Benton County),” *The Oregon Encyclopedia* (2022), for Airlie; Oregon State University Libraries, “Local History: Hoskins,” and “Valley and Siletz Railroad,” Wikipedia (both checked October 10, 2026), for the railroad; and Oregon Historical Society Research Library, Mss 3100, for the drawings of 1934.
 - 22 *A History of the Land* (2026), “Next steps for this property.”
 - 23 Murphy (1854), vol. R0029, p. 331. Murphy wrote “prarie.”

Chapter 23. The same method in town and on the wheat plains

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Chapter 25 is itself a list of sources. Every office and website in it was checked on October 10, 2026.

Picture sources

One line for each figure: its number, a short title, who made it or holds it, and the terms on which it is used.

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1.1	The Sullivan tree farm from the air, about 2002	From the owner's files	Used with the owner's consent
1.2	The first map of the place, 1855	General Land Office; Bureau of Land Management, Oregon State Office	Public domain
1.3	Where the running example is	Drawn for this guide from U.S. Geological Survey, Census Bureau and Bureau of Land Management data	Public-domain data
2.1	How far back each kind of record reaches	Compiled for this guide	Made for this guide
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About the author

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About this guide

Knowing Your Land: A Reference Guide to Researching Your Land's History, by Bob Zybach, PhD. First edition, version 1.1, October 2026. Published by NW Maps Co., Cottage Grove, Oregon.

The guide goes with the website Your Land History, at YourLandHistory.org. Your Land History is a project of Dr. Bob Zybach and Dr. Dave Sullivan. The research method comes from Oregon Websites and Watersheds; the idea began in the library of Oregon Advocates for School Trust Lands.

Many of the records were gathered, and the first drafts of the text were written, with the help of the computer tools named in the preface, working from Bob Zybach's outline and draft, his four studies and the public records named in the notes. Every fact in the book rests on a record named in the notes.

Web addresses, telephone numbers, hours and costs were checked on October 10, 2026.

This guide is historical research, not title research. It can tell you who owned a piece of land and what happened on it. It cannot tell you who owns the land now or where its lines run; for those questions, see a title company, a licensed surveyor or an attorney.

A Young Readers' Edition and a Research Edition are planned, with the same method and the same running example.

Corrections are welcome. If you find a mistake, a broken link or an office that has moved, say which chapter and which version you were reading. Send corrections and additions through the Your Land History site: the About page, or the "That's wrong" link beside any record.

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