California’s Small Forest Landowners

Goals and barriers of landowners motivated to manage their forests

A report to the California Fire and Forest Resilience Task Force
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Introduction

This report is a compilation of information gathered about California forest landowners served by the Forest Stewardship Education Initiative, a landowner educational effort launched in 2019 by the University of California Agriculture and Natural Resources and funded by CALFIRE. The Initiative implements a recommendation by the Small Landowner Assistance Working Group of the California Governor’s Fire and Forest Resilience Task Force (https://wildfirertaskforce.org/).

Goals of the Forest Stewardship Education Initiative are to educate forest landowners to better understand, manage and protect their forests by developing a forest management plan, implementing vegetation management projects, engaging with natural resource professionals, and taking advantage of cost-share opportunities that can help them meet their management goals.

Over 450 people have registered for one of 17 workshop series offered around the state (through July 2022). Of these, 91% said they manage forestland in California. Participants take an assessment before the workshop (N = 315), in which 65% said they were private forestland owners while the other 35% worked for local and state government, non-profits, school districts, land trusts, tribes and others. Workshops are offered through a hybrid learning style involving online learning assignments, nine weeks of evening zoom meetings, and one in-person field day to view various silvicultural methods and build hands on forestry skills including inventory, mapping, and plant identification.

The goal of this report is to give an overview of the goals held, management actions taken, and barriers faced by the motivated forest landowners that enroll in the workshop series.

Data Collection

Information presented here comes from both surveys and interviews. Data is collected on a registration survey (N=458) and a follow up assessment (N=319) based on the USDA Forest Service National Woodland Owner Survey 2018, to identify workshop participants’ concerns and practices. Survey data has been collected and analyzed in Qualtrics. To better understand landowner concerns, we contacted landowners who had completed the workshop by email asking for volunteers to be interviewed.
Fourteen landowners were interviewed over Zoom. The interviews were recorded, transcribed using Zoom software, then uploaded to Dedoose qualitative analysis software. These transcripts were then coded to identify themes from landowners’ experiences. The data collection and handling process was reviewed by the Institutional Review Board for human subjects at UC Davis, and all protocols for ensuring participant anonymity were followed.

**Forest landowner characteristics**

Of the landowners who registered for a workshop series and responded to demographic questions, about half self-identified as female and half self-identified as male and they ranged in age from 20 to 84. Landowners interviewed included 9 women and 5 men and all were white. The oldest was 71 and the youngest was 43 (average age 63). Half were retired and half were employed. Income ranged from $35,000 a year to $250,000 per year.

Workshop participants owned or managed a range of property sizes and vegetation types found in California. Half of all those who registered managed less than 50 acres. About a quarter of those registering had mixed conifer forest type, a quarter had oak woodland, and a third had either coastal redwood forests including redwood or Douglas fir-mixed evergreen forests. About 9% had pinyon-juniper forests.

Most of those interviewed had owned their property for a long time with half having owned it over 35 years. Only two had owned their property less than five years. Three quarters purchased the land themselves. Only two had less than 20 acres. A few did not live on their property, while the rest were evenly divided between being part-time and full-time residents on their property.
Insights about landowners from surveys and interviews

Landowners’ feelings about forests:

Landowners in the workshop series frequently tell us about their love of their forestland.

Attachment to forest:
Landowners participating in the workshop expressed a strong attachment to their forest land. Sixty percent have a residence on or within a mile of their forest land (N=312) and 57% purchased the land themselves (N = 322). Fifteen percent inherited their forestland (N=322).

They agreed or strongly agreed with these statements (N=300):

- I want to know more about my wooded land – 96%
- I want my wooded land to stay wooded – 93%
- I have a strong emotional attachment to my wooded land - 87%
- I would sell my land if I was offered a reasonable price – 8%

Landowners we interviewed told us how much they enjoy the plants and animals they encounter and that they don’t mind putting in the hours of work required to meet their management goals.

“We all have a strong emotional attachment to the land and so that's the thing that drives us to work hard to maintain it and keep it healthy.”

Legacy: The vast majority of landowners who took the workshop assessment survey ranked keeping the land intact for future generations as a concern or great concern (85%). They expressed a strong desire to have their forest be a legacy that they pass on to others. They thought the following reasons to own land were very important or important:

- To pass my land on to my children or other heirs – 62%
• To raise my family - 49%

These ideas of keeping forestland in the family or succession planning and legacy were also mentioned often by interview participants as a management goal.

“We want to be able to pass on to the next generation. They will keep it in the family and keep it open to family members for recreation and just to be there. It's family history.”

Other interviewees sometimes mentioned succession planning as something they needed to prioritize.

“For me it was a whole new area. I wasn't involved, or didn't need to be, in long term planning, but it's in my interest to be involved.”

**Forest management goals:**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Very Important</th>
<th>Important</th>
<th>Moderately Important</th>
<th>Of Little Importance</th>
<th>Not at All Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>To enjoy beauty or scenery</td>
<td>11%</td>
<td>32%</td>
<td>31%</td>
<td>18%</td>
<td>10%</td>
</tr>
<tr>
<td>To protect nature or biological diversity</td>
<td>81%</td>
<td>22%</td>
<td>23%</td>
<td>13%</td>
<td>3%</td>
</tr>
<tr>
<td>To protect or improve wildlife habitat</td>
<td>81%</td>
<td>22%</td>
<td>23%</td>
<td>13%</td>
<td>3%</td>
</tr>
<tr>
<td>To protect water resources</td>
<td>81%</td>
<td>22%</td>
<td>23%</td>
<td>13%</td>
<td>3%</td>
</tr>
<tr>
<td>To pass land on to my children / heirs</td>
<td>49%</td>
<td>17%</td>
<td>15%</td>
<td>13%</td>
<td>10%</td>
</tr>
<tr>
<td>For privacy</td>
<td>36%</td>
<td>32%</td>
<td>19%</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>To raise my family</td>
<td>31%</td>
<td>16%</td>
<td>18%</td>
<td>19%</td>
<td>14%</td>
</tr>
<tr>
<td>For recreation, other than hunting</td>
<td>32%</td>
<td>31%</td>
<td>22%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>For land investment</td>
<td>31%</td>
<td>31%</td>
<td>22%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>For wildfire</td>
<td>11%</td>
<td>39%</td>
<td>25%</td>
<td>23%</td>
<td>8%</td>
</tr>
<tr>
<td>For other forest products (berries / mushrooms)</td>
<td>9%</td>
<td>19%</td>
<td>21%</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>For timber products (logs or pulpwood)</td>
<td>7%</td>
<td>13%</td>
<td>18%</td>
<td>38%</td>
<td>30%</td>
</tr>
<tr>
<td>For hunting</td>
<td>3%</td>
<td>10%</td>
<td>21%</td>
<td>54%</td>
<td>4%</td>
</tr>
</tbody>
</table>

“*We wish that we could keep it as a barrier or antidote to civilization, a place of respite and calm.*”

Landowners were asked about their forest management goals in the survey and interview.

**Ecological goals:**

Landowners who registered for the workshop series ranked ecological and aesthetic reasons for owning their land very highly. Landowners thought the following reasons to own land were important or very important:

- To enjoy beauty or scenery – 96%
- To protect nature or biological diversity – 92%
- To protect wildlife habitat – 90%
- To protect water resources – 88%
**Utilitarian goals:** Utilitarian reasons for owning forest land were ranked fairly low. Landowners thought the following reasons to own land were of little to no importance:

- For hunting – 76%
- For timber products – 62%
- For other forest products – 50%
- For firewood – 49%

“Both of my daughters will inherit (the property) and they’ll probably have the same goals I do which isn’t commercial logging, it’s just recreational, spiritual, forest restoration.”

**Fire resilience:** When interviewed, landowners expressed a variety of learning and management goals based around their attitudes about their forestland and towards forest management in general. Not surprisingly, because of the ongoing drought conditions and numerous wildfires, management goals centered on forest health and wildfire resilience were frequently mentioned.

“We would like to help the forest become more climate resilient, drought resilient, and also fire resilient. We clearly want to manage the forest to prevent that sort of devastating damage from a firestorm-like event or any sort of fire.”

**Forest Landowner Concerns:**

Alongside the enjoyment of their forests, landowners also have concerns.

**Wildfire / climate impacts:**

Those who registered for the workshop series ranked wildfire and climate change impacts high on their lists of concerns about their land. They thought the following issues were a concern or great concern:

- Wildfire – 95%
- Climate change – 82%
- Drought or lack of water – 83%
- Insects and disease - 67%

High fuel loads and concerns around pests and diseases were often mentioned in the interviews, which directly reflect their goals around forest health and wildfire resilience.

![Figure 7. Please indicate your level of concern about each of the following topics for your wooded land in California. N=300](image-url)
“There’s lots of self-doubt and uncertainty. There’s our neighbors down the road you know, who are selling their land because they’re just too concerned about the risks of fire.”

“We’ve got dying junipers which we haven’t had before, and I’m talking in 60 years, we haven’t seen this.”

**What landowners are doing:**

**Forest management activities:**
Landowners who registered for the workshop reported having undertaken a variety of management actions in the last five years, including (n = 315):

- Reducing fire hazards – 72%
- Eliminating or reducing invasive plants – 54%
- Cutting and or removing trees for their own use – 43%
- Trail / road construction or maintenance – 37%

The management activities interviewees described having implemented directly reflected their attitudes about forest management and their desire to improve forest health. Participants frequently mentioned ‘cleaning-up’ the forest, hand thinning, pile-burning and activities focused on water quality or quantity as management activities they have undertaken to work towards their forest health goals.

“My daughter last year turned 40 and so for her, this is how crazy we are, for her 40th birthday, she wanted a chain saw. So, we got her a Husqvarna, it’s an 18-inch gas powered one. Then we took the class with you, and as we would walk the dogs, all she does is 'this has got to go, and that one.' Some of these aren't even our property!”

Additionally, chipping, commercial or non-commercial thinning, defensible space, road building or maintenance and invasive or non-invasive species removal were often mentioned as management activities.

“We had some roadwork that needed to be done. We have a fair amount of water on the property, so there are a couple of bogs and couple of mud pits that were part of the road system. We kind of rerouted some things around and made sure that we weren’t tearing things up anymore.”

**Access to technical information:** Just over half of those who registered (53% of 303) had received information or advice about managing their land in the five years before taking the workshop. Interview participants mentioned various sources of technical information that they consult regarding their management activities and goals. The Forest Stewardship workshop series was the most frequently mentioned source, as well as Registered Professional Foresters (RPFs).
“Those forestry workshops have been huge for me. You know I didn't know what I didn't know, and to be able to get an understanding about the issues I should be thinking about, some of the topics that are current and how to approach managing this forest, it's a big responsibility.”

**Role of a forest management plan:** As previously stated, interviewees mentioned the enjoyment they receive from working on their land. However, uncertainty of what to do leaves many wondering how to proceed.

“When you get a piece of property and it hasn't been maintained at all and they've just done nothing for 50 years, where do you start? How do you start?”

“It feels like there's not a roadmap, that you fall into this huge ocean of possibilities, responsibilities, rules and regulations. If there was an easier way to help us think through all the pieces without getting overwhelmed and just wanting to throw up our hands and say just forget it.”

Those interviewed became aware of the importance of having a forest management plan through their participation in the Forest Stewardship workshop series. About half mentioned they currently, or previously had, a planning document such as the California Cooperative Forest Management Plan (CCFMP), a Non-Industrial Timber Management Plan (NTMP), a conservation easement, or an emergency exemption.

**Barriers to forest management experienced by landowners:**

Interviewees mentioned many barriers to implementing their goals. The most frequently mentioned barrier was the cost of treatments and financial limitations. The lack of an available qualified workforce, having to decide on management activities to undertake with multiple ownership partners, and time were also often mentioned.

**Cost:** Landowners overwhelmingly listed cost as their major barrier to action. Most of the activities they described did not yield any revenue, meaning that funds had to be taken from participants’ discretionary income to pay for them.

“You know it sounds a little easier when you only have five acres, but when you're talking about 100 acres, it starts to become very costly. And so, the things that you could do when it’s just five acres are not as cost effective when you start dealing with 100 acres.”
**Time:** Landowners very frequently mentioned having enough time to carry out actions as a major barrier, especially those who did not live on their land.

“I’m up there for a weekend and what can I get done in a weekend? Then while I’m also up there, I’m trying to help with chopping wood or clearing blackberry bushes and things out for my parents. So, time became part of that obstacle for me also.”

**Lack of qualified workforce:** Landowners also frequently said they had a lot of difficulty finding quality contractors to do work on their property. Those whose property were the most remote reported the most difficulty finding qualified workers.

“We are slowly cleaning things up a little at a time and the biggest challenge is finding people to do the work, who are qualified, certified, insured. You know you find people and they say, Oh, I can come cut down a tree, yeah NO! We want people who do this for a business and it’s hard getting on their list. It takes time.”

**Needing to get agreement from multiple owners:** Participants registering for the workshop owned property in different ways (N = 315). Only 15% owned property as an individual, meaning they did not need to seek agreement on actions from others:

- Owned property as an individual – 15%
- Owned property with partner or other family members or friends – 25%
- Owned property as family partnership or in a trust or estate – 21%

Those who owned property with others often described some of the owners as having different goals which needed to be resolved before action could be taken. They said this could take a long time, or in cases, might not be possible at all.

“My goals are a little different than my parents, which was probably the biggest hurdle and roadblock to doing anything. I am a believer in controlled burns. I feel that there’s a place for them, and when they’re managed and properly prepared for, the potential for issues or problems can be minimized. My mom is vehemently against that idea. I just think for her the whole concept of fire brings up bad memories and so, for her it's a no go.”

**Permitting:** Surprisingly, only 29% of those registering listed government regulations as a concern or great concern. Permitting was not brought up as a barrier by any of the landowners interviewed.
However, most had not attempted to get a permit for their management activities since most were non-commercial projects done by contractors or do-it-yourself activities.

**How landowners are paying for their management activities:**

Overwhelmingly, landowners participating in the workshop series have paid for work done on their property themselves. Only 14% of those who registered for the workshop had used a cost-share program in the last five years (N=298). Landowners we interviewed also said they mostly did the work themselves or paid contractors for work on their properties.

“We haven’t really hired any labor in the forest itself, but we have invested in equipment so we could do some things.”

A few mentioned working with the Natural Resources Conservation Service (NRCS) to receive funding through the Environmental Quality Incentives Program (EQIP).

“I’ve done 60 acres of thinning, limbing, piling and burning by hand under an EQIP grant since 2016 or 2017. I think my plan is that when I get done with the 40 acres that I have left to do on the EQIP project I’ll put in for another grant on the other 40 across the street and do the same.”

Though many mentioned that they were interested in applying for cost-share programs in the future, some mentioned uncertainty over available funding and application processes.

“I never know when the schedules are for submitting applications and when they review them and all of that, because it just seems to be, well now we have money, but now we don’t.”

**Landowner recommendations for Natural Resource Agencies:**

We asked workshop participants what they would recommend California natural resources agencies do to help landowners like them manage their forests.

**Increase awareness and outreach:** They strongly recommended increasing awareness, education and outreach as a way for natural resource agencies to focus their efforts and financial resources around forest management.
“From my perspective, the infrastructure is there with these agencies, like what you guys (UC ANR) are doing, what Cal Fire is doing, or even the fire safety council people. Maybe folks who live in the area know this stuff, but I sure didn't. I didn't even know it existed. I mean I knew Cal Fire, but I didn't think of them having outreach or being accessible to me unless there's a fire, I didn't think of them in those ways.”

Participants also expressed the need for an overall increase in forest and forest management awareness in communities and across the state.

“Ag extension and the forester community, you have such great services and such great knowledge. And the stewardship workshop was a huge way of you know, getting that knowledge out into the community. But you know, it just needs to be so much more of a push out into the community.”

“It's almost like there's no presence in our everyday culture of the idea of what a forester does, and that there is even a forester around the corner.”

Some also had creative suggestions about how to increase awareness.

“Now I realize, it would have been great when we bought the property, if our real estate agent had said, here's a list of foresters that you should consult with because now you have a forest you should manage. That would have been a great intersection.”

**Summary**

Approximately 22 percent of California’s timberlands are owned by non-industrial private landowners. Most forest landowners who have taken a Forest Stewardship workshop own their property for recreation, conservation, and spiritual values. Many have ecological conservation, restoration, and resilience goals which are driven by concern about wildfire, climate change, drought, and tree mortality. Commercial or utilitarian objectives for these ownerships were lower in landowner priority or were considered solely as a means to meet ecological goals.

The threat of wildfire was the largest and most prevalent concern for non-industrial forest landowners. As a result, the most common forest management activities undertaken by participants is fuel management: thinning, burning, and/or chipping of largely non-commercial material to improve
defensible space. The vast majority are doing or paying for the work themselves and only half had received any technical advice on managing their land in the last five years.

Unsurprisingly, landowners identified costs, time and lack of contractors as major barriers in accomplishing forest management on their properties, and only a quarter of participants identified permitting as a barrier. This is likely because most landowners are performing primarily non-commercial work that generates little product value, any paying primarily for service labor work which requires relatively little permitting.

Workshop participants communicated a greater awareness of the need for forest stewardship and planning after the workshop, which may broaden their knowledge, skills, and abilities to manage their land. They also were more interested in engaging with natural resource professionals, agencies and organizations for technical and funding assistance, and developing a forest management plan. The Forest Stewardship curriculum not only broadened landowner’s perspectives on their forest property but also motivated them to do succession planning as a way to maintain forest stewardship of their land for the long term.

Though forest health and wildfire have been topics of great discussion in the media over the past several years, and many workshop participants have been directly impacted by wildfire themselves, interview participants support the need for more education and outreach around these topics. Additionally, they expressed the need for greater understanding and recognition of natural resource professional experience and expertise within their local communities.

**Recommendations**

Based on the data gathered here about motivated private forest landowners, we recommend the following actions to help landowners reach their management goals and to increase the pace and scale of management on private lands. These recommendations could be taken up by natural resources agencies, non-governmental organizations, landowner assistance groups, local government or landowners themselves.

**Attachment:**
- Feature landowner’s attachment to their landscapes in marketing assistance programs and other outreach.
- Amplify landowners’ voices to help other Californians understand their attachment to their forested landscape.

**Legacy:**
- Help landowners to plan for the succession of their property to the next generation.
- Help families work together to identify succession planning needed.
- Feature legacy planning as an outreach means to work with landowners on stewardship more broadly.

**Goals/ Concerns:**
• Help landowners with concerns about wildfire to broaden their understanding of forest stewardship practices and plan for fire resilience actions.
• Help landowners who have merchantable timber on their property to understand that this value can be used to reach other goals.

Plans:
• Help landowners to develop forest management plans to enable them to plan out their stewardship activities and potentially apply for cost-share funds.
• Help landowners understand the importance of management plans for legacy planning.

Forest management activities:
• Help landowners learn skills to conduct forest management activities themselves.
• Create opportunities for landowners to learn about implementing stewardship activities from each other.

Barriers:
• **Cost**
  ○ Work with landowners to realize income from their properties to further their stewardship goals.
  ○ Continue to fund and advertise cost share programs. Stabilize funding levels so it is easier to understand when funds are available and when they are not.
  ○ Help landowners network with each other to implement larger scale projects that can reach an economy of scale.
• **Time**
  ○ Continue to offer assistance programs that minimize the effort and time needed by individual landowners to accomplish projects (through organizations working on larger scale projects such as fire safe councils and resource conservation districts).
• **Agreements**
  ○ Work with families and others owning land jointly to develop management plans and to help them agree on management goals.
• **Workforce**
  ○ Increase the size of the forestry and fire safety workforce.
  ○ Develop a means to connect landowners with contractors that can carry out management activities on their land.
• **Permitting**
  ○ Reduce the cost, effort, and expertise needed to carry out permitted forest management activities on private land.
  ○ Help landowners understand the permitting requirements and help landowners find professionals to help with the permitting process.

Increase awareness and outreach:
• Increase outreach to forest landowners about issues, strategies, and resources for forest stewardship.
• Support landowners in networking with each other about forest stewardship.
• Help raise awareness about forest stewardship in forested communities and across the state.