
Start of Block: Introduction

Q1.1

Study Title: Factors Influencing LTER use by NR Managers

Principal Investigator: Dr. Michael Nelson

Study team: Dr. Michael Nelson, Dr. Claire Rapp, Dr. Jeremy Bruskotter

Sponsor: National Science Foundation Long-Term Ecological Research Program, LTER8
DEB-2025755

Version: 1.0

We are inviting you to take part in a research study.

Purpose: This study is about how natural resource managers utilize information to inform their decision-making. In this study, we focus on what makes ecological information more or less useful for managers' jobs.

We are asking you if you want to be in this study because you work for a public land agency in the Pacific Northwest and we believe you may be a manager or a significant portion of your job may involve acting as a manager. For this study, natural resource managers are people who engage in planning and implementing management actions on a landscape. Managers can typically be distinguished from other positions at public land agencies such as administrative staff (HR, IT, front office staff, etc.), field technicians, and research scientists. You should not be in this study if you do not consider yourself a manager or management is not a significant portion of your position.

Voluntary: You do not have to be in the study if you do not want to. You can also decide to be in the study now and change your mind later. You may skip any questions you do not want to answer and stop the survey at any time.

Activities: The study activities include several survey sections. First you will be asked about your opinions about several current land management issues in the Pacific Northwest. Then we will ask you about hypothetical research results and how useful they would be to your job. Then we will ask you about your office culture and your experiences working with the public. Finally we will ask you a series of demographic questions.

Time: Your participation in this study will last about 10 minutes.

Confidentiality: Your participation in this study is anonymous. While we plan to make the results of this study public, we will not include your name or other information that identifies you. Research records will be stored securely. Some of the study data will be uploaded to the HJ Andrews Long-Term Ecological Research data repository and the Environmental Data Initiative Data Repository. Indirect identifiers including gender, ethnicity, and level of education will not be shared with anyone outside the research team or uploaded to a data repository.

Study contacts: We would like you to ask us questions if there is anything about the study that you do not understand. You can call us at (541) 737-9221 or email us at mpnelson@oregonstate.edu (please CC claire.rapp@oregonstate.edu).

You can also contact the Human Research Protection Program with any concerns that you have about your rights or welfare as a study participant. This office can be reached at (541) 737-8008 or by email at IRB@oregonstate.edu

Continuing the survey indicates that you agree to take part in this study. If you do not consent to participate, please exit out of the browser now.

End of Block: Introduction

Start of Block: Filter for managers

Q2.1

We are interested in hearing the perspectives of managers on a host of land management issues. "Manager" is not necessarily a specific job title but rather typically refers to people who are engaged in planning and implementing management actions on a landscape. Managers can typically be distinguished from other positions at public land agencies, such as administrative staff (HR, IT, front office staff, etc.), field technicians, and research scientists.

Based on this description, do you act as a manager for a significant portion of your position?

- I consider myself a manager or a significant portion of my position is management (1)
- I DO NOT consider myself a manager or management is NOT a significant portion of my position (2)

End of Block: Filter for managers

Start of Block: Belief Preamble and Unit Question

Q3.1

Some of the questions you encounter in this survey may seem abstract or over-simplifications of the decision process you encounter in your actual job. We acknowledge managers must balance many competing objectives when making decisions, and utilize information from a variety of sources, including official policy, scientific information, public comment, personal

expertise, and more.

In this survey, we focus in on one particular piece of information that managers draw on when making decisions, findings from scientific studies. By focusing on this particular source of information, we are not trying to imply or suggest that scientific studies are the only, or most important, factor in manager decision-making.

Page Break

Q3.2

In this survey we focus on three management issues: 1) salvage logging, 2) variable density thinning of mature growth stands, and 3) translocation of plant species. We acknowledge these terms are broad and can have different meanings in different places and contexts.

For the purpose of this survey, **salvage logging** refers to the process of harvesting trees killed or severely damaged specifically by wildfire, **mature growth** is generally 80 – 150 year old stands of predominately Douglas Fir in the Pacific Northwest, USA, and **translocation** involves planting drought-tolerant plant species from warmer climates in response to projected climate change.

Page Break

Q3.3

Throughout the survey, we are going to ask you questions about your unit. Depending on your agency and position, "unit" may mean different things to you, such as national forest, ranger district, national or state park, field office, etc. In this case we are interested in the administrative unit most relevant to your day-today operations.

What administrative level are you thinking of when you think of your "unit"? (e.g., "ranger district", "national forest", "field office", "refuge", etc. **For your privacy and confidentiality, please do not give us the specific name of your unit.**

End of Block: Belief Preamble and Unit Question

Start of Block: Salvage Logging Beliefs

Q4.1

The following questions have to do with salvage logging. While salvage logging can be done for a variety of reasons, for the purpose of this survey, salvage logging refers to the process of harvesting trees that have been killed or severely damaged by wildfire.

Q4.2 In general, I think salvage logging is a good management action.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q4.3 Salvage logging is an effective tool for reducing future fire severity.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q4.4 Salvage logging is necessary if we hope to reduce future fire risk.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q4.5 On my unit, salvage logging is a politically feasible management action.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q4.6 I think salvage logging aligns with the mission of my agency.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q4.7 The issue of salvage logging is relevant to my unit.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

End of Block: Salvage Logging Beliefs

Start of Block: Mature Growth Beliefs

Q5.1

The following questions have to do with variable density thinning of mature growth stands. While there are many definitions of mature growth, for the purpose of this survey mature growth is generally 80 – 150 year old stands of predominately Douglas-Fir forest in the Pacific Northwest, USA.

Q5.2 In general, I think thinning mature growth stands is a good management action.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q5.3 Thinning mature growth stands is an effective tool for creating forests with the structure and function of old growth.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q5.4 Variable density thinning is necessary if we hope to speed up the rate at which mature growth becomes old growth.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q5.5 On my unit, variable density thinning of mature growth stands is a politically feasible management action.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q5.6 I think thinning mature growth forests aligns with the mission of my agency.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q5.7 The issue of variable density thinning of mature growth forests is relevant to my unit.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

End of Block: Mature Growth Beliefs

Start of Block: Translocation Beliefs

Q6.1 The following questions have to do with translocation as an adaptation to climate change. For the purpose of this survey, translocation involves planting drought-tolerant plant species from warmer climates in response to projected climate change.

Q6.2 In general, I think translocation is a good response to climate change.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q6.3 Translocating plant species now is an effective way to adapt to climate change over the next 100 years.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q6.4 Translocating plant species now is necessary if we hope to maintain the structure and function of our ecosystems over the next 100 years.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q6.5 On my unit, translocating plant species is a politically feasible management action.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q6.6 I think it aligns with my agency's mission to translocate plant species in my unit.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q6.7 The issue of translocation is relevant to my unit.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

End of Block: Translocation Beliefs

Start of Block: Preamble to all argument evaluation blocks

Q7.1

Many factors influence decisions about how to manage landscapes. We are interested in what kind of scientific information is useful to managers.

In the following sections, we will show you results from hypothetical scientific studies and ask you how useful each finding is for your job.

End of Block: Preamble to all argument evaluation blocks

Start of Block: SHORT-term PRO-salvage

Q8.1 A research team recently published the results of a series of studies on the effects of salvage logging on impacts from subsequent fires. The studies had three major findings. For each finding, please rate how useful the information is for your job.

The research team conducted their studies over 2 years, concluding in 2021.

Page Break

Q8.2

One study suggests post-fire salvage logging after a high severity fire reduces future impacts to soil health after another fire. In this study, stands that were salvage logged after a high-severity fire experienced less soil erosion after a second fire than stands that were not salvage logged.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q8.3

One study suggests post-fire salvage logging after a high severity fire improves post-fire recovery in areas that burn over a second time. In this study, stands that were salvage logged after a high severity fire had higher tree recruitment and survival after a second fire than stands that were not salvage logged.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q8.4

One study suggests salvage logging after high-severity fires improves air quality during a subsequent fire. The study found stands that were salvage logged generated less smoke during subsequent fires than stands that were not salvage logged.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Page Break

Q8.5

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 2 years concluding in 2021 suggests post-fire salvage logging after a high severity fire reduces future impacts to soil health after another fire. In this study, stands that were salvage logged after a high-severity fire experienced less soil erosion after a second fire than stands that were not salvage logged. **Therefore**, salvage logging should be used on my landscape.

Q8.6

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 2 years concluding in 2021 suggests post-fire salvage logging after a high severity fire improves post-fire recovery in areas that burn over a second time. In this study, stands that were salvage logged after a high severity fire had higher tree recruitment and survival after a second fire than stands that were not salvage logged. **Therefore**, salvage logging should be used on my landscape.

Q8.7

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 2 years concluding in 2021 suggests salvage logging after high-

severity fires improves air quality during a subsequent fire. The study found stands that were salvage logged generated less smoke during subsequent fires than stands that were not salvage logged. **Therefore**, salvage logging should be used on my landscape.

Q8.8 Please indicate the soundness of this argument.

- Not at all sound (1)
 - Slightly sound (2)
 - Moderately sound (3)
 - Very sound (4)
 - Extremely sound (5)
-

Q8.9 Please explain your answer.

End of Block: SHORT-term PRO-salvage

Start of Block: SHORT-term ANTI-salvage

Q9.1 A research team recently published the results of a series of studies on the effects of salvage logging on impacts from subsequent fires. The studies had three major findings. For each finding, please rate how useful the information is for your job.

The research team conducted their studies over 2 years, concluding in 2021.

Page Break

Q9.2

One study suggests post-fire salvage logging after a high severity fire worsens future impacts to soil health after another fire. In this study, stands that were salvage logged after a high-severity fire experienced more soil erosion after a second fire than stands that were not salvage logged.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q9.3

One study suggests post-fire salvage logging after a high severity fire hinders post-fire recovery in areas that burn over a second time. In this study, stands that were salvage logged after a high severity fire had lower tree recruitment and survival after a second fire than stands that were not salvage logged.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q9.4

One study suggests salvage logging after high-severity fires does not improve air quality during a subsequent fire. The study found stands that were salvage logged generated about the same amount of smoke during subsequent fires than stands that were not salvage logged.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Page Break

Q9.5

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 2 years concluding in 2021 suggests salvage logging after high-severity fires does not improve air quality during a subsequent fire. The study found stands that were salvage logged generated about the same amount of smoke during subsequent fires than stands that were not salvage logged. **Therefore**, salvage logging should not be used on my landscape.

Q9.6

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 2 years concluding in 2021 suggests post-fire salvage logging after a high severity fire hinders post-fire recovery in areas that burn over a second time. In this study, stands that were salvage logged after a high severity fire had lower tree recruitment and survival after a second fire than stands that were not salvage logged. **Therefore**, salvage logging should not be used on my landscape.

Q9.7

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 2 years concluding in 2021 suggests post-fire salvage logging after a high severity fire worsens future impacts to soil health after another fire. In this study, stands

that were salvage logged after a high-severity fire experienced more soil erosion after a second fire than stands that were not salvage logged. **Therefore**, salvage logging should not be used on my landscape.

Q9.8 Please indicate the soundness of this argument.

- Not at all sound (1)
 - Slightly sound (2)
 - Moderately sound (3)
 - Very sound (4)
 - Extremely sound (5)
-

Q9.9 Please explain your answer.

End of Block: SHORT-term ANTI-salvage

Start of Block: SHORT-term ANTI-thinning

Q10.1 A research team recently published the results of a series of studies on the effects of variable density thinning of mature growth stands. The studies had three major findings. For each finding, please rate how useful the information is for your job.

The research team conducted their studies over 2 years, concluding in 2021.

Page Break

Q10.2

One study used a 5-year data set to model the effects of variable density thinning. The study suggests variable density thinning doesn't accelerate the transition of mature growth forests to old growth forests. Compared to mature stands that aren't thinned, models suggest thinned mature growth stands approach the structure and function of old growth at approximately the same rate.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q10.3

One study suggests variable density thinning decreases fire resistance of mature growth stands. Compared to control mature growth stands under similar weather conditions, variable thinned stands experience more extreme fire behavior.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q10.4

One study suggests variable density thinning of mature growth stands increases drought stress. Compared to control stands, variable thinned stands have lower soil moisture content and are more likely to experience drought stress.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Page Break

Q10.5

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study used a 5-year data concluding in 2021 set to model the effects of variable density thinning. The study suggests variable density thinning doesn't accelerate the transition of mature growth forests to old growth forests. Compared to mature stands that aren't thinned, models suggest thinned mature growth stands approach the structure and function of old growth at approximately the same rate. **Therefore**, mature growth stands should not be thinned on my landscape.

Q10.6

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 2 years concluding in 2021 suggests variable density thinning decreases fire resistance of mature growth stands. Compared to control mature growth stands under similar weather conditions, variable thinned stands experience more extreme fire behavior. **Therefore**, mature growth stands should not be thinned on my landscape.

Q10.7

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 2 years concluding in 2021 suggests variable density thinning of mature growth stands increases drought stress. Compared to control stands, variable thinned

stands have lower soil moisture content and are more likely to experience drought stress. **Therefore**, mature growth stands should not be thinned on my landscape.

Q10.8 Please indicate the soundness of this argument.

- Not at all sound (1)
 - Slightly sound (2)
 - Moderately sound (3)
 - Very sound (4)
 - Extremely sound (5)
-

Q10.9 Please explain your answer.

End of Block: SHORT-term ANTI-thinning

Start of Block: SHORT-term PRO-thinning

Q11.1 A research team recently published the results of a series of studies on the effects of variable density thinning of mature growth stands. The studies had three major findings. For each finding, please rate how useful the information is for your job.

The research team conducted their studies over 2 years, concluding in 2021.

Page Break

Q11.2

One study used a 5-year data set to model the effects of variable density thinning. The study suggests variable density thinning accelerates the transition of mature growth forests to old growth forests. Compared to mature stands that aren't thinned, models suggest thinned mature growth stands approach the structure and function of old growth 50 - 100 years sooner.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q11.3

One study suggests variable density thinning increases fire resistance of mature growth stands. Compared to control mature growth stands under similar weather conditions, variable thinned stands experience less extreme fire behavior.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q11.4

One study suggests variable density thinning of mature growth stands decreases drought stress. Compared to control stands, variable thinned stands have higher soil moisture content and are less likely to experience drought stress.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Page Break

Q11.5

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study used a 5-year data concluding in 2021 set to model the effects of variable density thinning. The study suggests variable density thinning accelerates the transition of mature growth forests to old growth forests. Compared to mature stands that aren't thinned, models suggest thinned mature growth stands approach the structure and function of old growth 50 - 100 years sooner. **Therefore**, mature growth stands should be thinned on my landscape.

Q11.6

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 2 years concluding in 2021 suggests variable density thinning increases fire resistance of mature growth stands. Compared to control mature growth stands under similar weather conditions, variable thinned stands experience less extreme fire behavior. **Therefore**, mature growth stands should be thinned on my landscape.

Q11.7

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 2 years concluding in 2021 suggests variable density thinning of mature growth stands decreases drought stress. Compared to control stands, variable thinned stands have higher soil moisture content and are less likely to experience drought stress.

Therefore, mature growth stands should be thinned on my landscape.

Q11.8 Please indicate the soundness of this argument.

- Not at all sound (1)
 - Slightly sound (2)
 - Moderately sound (3)
 - Very sound (4)
 - Extremely sound (5)
-

Q11.9 Please explain your answer.

End of Block: SHORT-term PRO-thinning

Start of Block: SHORT-term PRO-translocation

Q12.1 A research team recently published the results of a series of studies on translocation as an adaptation to climate change in the Pacific Northwest. The studies had three major findings. For each finding, please rate how useful the information is for your job.

The research team used 5-year datasets (2016 - 2021) in their models.

Page Break

Q12.2

One study suggests there is an 80% chance of collapse of meadow pollinators over the next 100 years due to trophic asynchronies between meadow plants and pollinators. The model predicts immediately incorporating translocation of later-blooming meadow plants into management actions will reduce the probability of collapse over the next 100 years to 10%.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q12.3

One study suggests soil moisture will be below values associated with physiological moisture stress for twice as many days in the next 100 years due to increased temperature from climate change. Models suggest to maintain current levels of canopy cover over the next century, translocation of native trees from hotter and drier seed zones needs to be incorporated into ongoing management actions.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q12.4

One study suggests timber biomass growth rates will decline by on average 30% over the next 100 years due to increased temperature and moisture stress, despite lengthening of the growing season, CO2 enrichment, and increased water use efficiency. Models suggest to ensure current levels of timber production, translocation of native trees from hotter and drier seed zones needs to be incorporated into ongoing management actions.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Page Break

Q12.5

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study using a 5-year data set (2016 - 2021) suggests there is an 80% chance of collapse of meadow pollinators over the next 100 years due to trophic asynchronies between meadow plants and pollinators. The model predicts immediately incorporating translocation of later-blooming meadow plants into management actions will reduce the probability of collapse over the next 100 years to 10%. **Therefore**, we should immediately begin translocating later-blooming meadow plants onto my landscape.

Q12.6

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study using a 5-year data set (2016 - 2021) suggests soil moisture will be below values associated with physiological moisture stress for twice as many days in the next 100 years due to increased temperature from climate change. Models suggest to maintain current levels of canopy cover over the next century, translocation of native trees from hotter and drier seed zones needs to be incorporated into ongoing management actions. **Therefore**, we should immediately begin translocating drought-adapted trees in my landscape.

Q12.7

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study using a 5-year data set (2016 - 2021) suggests timber biomass growth rates will decline by on average 30% over the next 100 years due to increased temperature and moisture stress, despite lengthening of the growing season, CO2 enrichment, and increased water use efficiency. Models suggest to ensure current levels of timber production, translocation of native trees from hotter and drier seed zones needs to be incorporated into ongoing management actions. **Therefore**, we should immediately begin translocating drought-adapted trees in my landscape.

Q12.8 Please indicate the soundness of this argument.

- Not at all sound (1)
 - Slightly sound (2)
 - Moderately sound (3)
 - Very sound (4)
 - Extremely sound (5)
-

Q12.9 Please explain your answer.

End of Block: SHORT-term PRO-translocation

Start of Block: SHORT-term ANTI-translocation

Q13.1 A research team recently published the results of a series of studies on translocation as an adaptation to climate change in the Pacific Northwest. The studies had three major findings. For each finding, please rate how useful the information is for your job.

The research team used 5-year datasets (2016 - 2021) in their models.

Q13.2

One study suggests there is an 80% chance of collapse of meadow pollinators over the next 100 years due to trophic asynchronies between meadow plants and pollinators. The model predicts immediately incorporating translocation of later-blooming meadow plants into management actions will have a statistically insignificant impact on the probability of collapse over the next 100 years.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q13.3

One study suggests soil moisture will be below values associated with physiological moisture stress for twice as many days in the next 100 years due to increased temperature from climate change. The model predicts translocation of native trees from hotter and drier seed zones into current management actions to account for decreasing soil moisture will not have a statistically significant impact on canopy cover by the end of the century.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q13.4

One study suggests timber biomass growth rates will increase on average by 30% over the next 100 years due to lengthening of the growing season, CO₂ enrichment, and increased water use efficiency, despite increasing heat and moisture stress. Models predict translocation of native trees from hotter and drier seed zones will not be necessary to ensure current levels of timber production over the next century.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Page Break

Q13.5

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study using a 5-year data set (2016 - 2021) suggests there is an 80% chance of collapse of meadow pollinators over the next 100 years due to trophic asynchronies between meadow plants and pollinators. The model predicts immediately incorporating translocation of later-blooming meadow plants into management actions will have a statistically insignificant impact on the probability of collapse over the next 100 years. **Therefore**, we should not translocate later-blooming meadow plants onto my landscape.

Q13.6

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study using a 5-year data set (2016 - 2021) suggests soil moisture will be below values associated with physiological moisture stress for twice as many days in the next 100 years due to increased temperature from climate change. The model predicts translocation of native trees from hotter and drier seed zones into current management actions to account for decreasing soil moisture will not have a statistically significant impact on canopy cover over by the end of the century. **Therefore**, we should not translocate drought-adapted trees to my landscape.

Q13.7

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study using a 5-year data set (2016 - 2021) suggests timber biomass growth rates will increase on average by 30% over the next 100 years due to lengthening of the growing season, CO2 enrichment, and increased water use efficiency, despite increasing heat and moisture stress. Models predict translocation of native trees from hotter and drier seed zones will not be necessary to ensure current levels of timber production over the next century. **Therefore**, we should not translocate drought-adapted trees to my landscape.

Q13.8 Please indicate the soundness of this argument.

- Not at all sound (1)
 - Slightly sound (2)
 - Moderately sound (3)
 - Very sound (4)
 - Extremely sound (5)
-

Q13.9 Please explain your answer.

End of Block: SHORT-term ANTI-translocation

Start of Block: LONG-term PRO-salvage

Q14.1 A research team recently published the results of a series of studies on the effects of salvage logging on impacts from subsequent fires. The studies had three major findings. For each finding, please rate how useful the information is for your job.

The research team conducted their studies over 10 years, concluding in 2021.

Q14.2

One study suggests post-fire salvage logging after a high severity fire reduces future impacts to soil health after another fire. In this study, stands that were salvage logged after a high-severity fire experienced less soil erosion after a second fire than stands that were not salvage logged.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q14.3

One study suggests post-fire salvage logging after a high severity fire improves post-fire recovery in areas that burn over a second time. In this study, stands that were salvage logged after a high severity fire had higher tree recruitment and survival after a second fire than stands that were not salvage logged.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q14.4

One study suggests salvage logging after high-severity fires improves air quality during a subsequent fire. The study found stands that were salvage logged generated less smoke during subsequent fires than stands that were not salvage logged.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Page Break

Q14.5

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 10 years concluding in 2021 suggests post-fire salvage logging after a high severity fire reduces future impacts to soil health after another fire. In this study, stands that were salvage logged after a high-severity fire experienced less soil erosion after a second fire than stands that were not salvage logged. **Therefore**, salvage logging should be used on my landscape.

Q14.6

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 10 years concluding in 2021 suggests post-fire salvage logging after a high severity fire improves post-fire recovery in areas that burn over a second time. In this study, stands that were salvage logged after a high severity fire had higher tree recruitment and survival after a second fire than stands that were not salvage logged. **Therefore**, salvage logging should be used on my landscape.

Q14.7

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 10 years concluding in 2021 suggests salvage logging after high-severity fires improves air quality during a subsequent fire. The study found stands that were

salvage logged generated less smoke during subsequent fires than stands that were not salvage logged. **Therefore**, salvage logging should be used on my landscape.

Q14.8 Please indicate the soundness of this argument.

- Not at all sound (1)
 - Slightly sound (2)
 - Moderately sound (3)
 - Very sound (4)
 - Extremely sound (5)
-

Q14.9 Please explain your answer.

End of Block: LONG-term PRO-salvage

Start of Block: LONG-term ANTI-salvage

Q15.1 A research team recently published the results of a series of studies on the effects of salvage logging on impacts from subsequent fires. The studies had three major findings. For each finding, please rate how useful the information is for your job.

The research team conducted their studies over 10 years, concluding in 2021.

Page Break

Q15.2

One study suggests post-fire salvage logging after a high severity fire worsens future impacts to soil health after another fire. In this study, stands that were salvage logged after a high-severity fire experienced more soil erosion after a second fire than stands that were not salvage logged.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q15.3

One study suggests post-fire salvage logging after a high severity fire hinders post-fire recovery in areas that burn over a second time. In this study, stands that were salvage logged after a high severity fire had lower tree recruitment and survival after a second fire than stands that were not salvage logged.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q15.4

One study suggests salvage logging after high-severity fires does not improve air quality during a subsequent fire. The study found stands that were salvage logged generated about the same amount of smoke during subsequent fires than stands that were not salvage logged.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Page Break

Q15.5

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 10 years concluding in 2021 suggests post-fire salvage logging after a high severity fire worsens future impacts to soil health after another fire. In this study, stands that were salvage logged after a high-severity fire experienced more soil erosion after a second fire than stands that were not salvage logged. **Therefore**, salvage logging should not be used on my landscape.

Q15.6

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 10 years concluding in 2021 suggests post-fire salvage logging after a high severity fire hinders post-fire recovery in areas that burn over a second time. In this study, stands that were salvage logged after a high severity fire had lower tree recruitment and survival after a second fire than stands that were not salvage logged. **Therefore**, salvage logging should not be used on my landscape.

Q15.7

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 10 years concluding in 2021 suggests salvage logging after high-severity fires does not improve air quality during a subsequent fire. The study found stands that

were salvage logged generated about the same amount of smoke during subsequent fires than stands that were not salvage logged. **Therefore**, salvage logging should not be used on my landscape.

Q15.8 Please indicate the soundness of this argument.

- Not at all sound (1)
 - Slightly sound (2)
 - Moderately sound (3)
 - Very sound (4)
 - Extremely sound (5)
-

Q15.9 Please explain your answer.

End of Block: LONG-term ANTI-salvage

Start of Block: LONG-term PRO-thinning

Q16.1 A research team recently published the results of a series of studies on the effects of variable density thinning of mature growth stands. The studies had three major findings. For each finding, please rate how useful the information is for your job.

The research team conducted their studies over 10 years, concluding in 2021.

Page Break

Q16.2

One study used a 20-year data set to model the effects of variable density thinning. The study suggests variable density thinning accelerates the transition of mature growth forests to old growth forests. Compared to mature stands that aren't thinned, models suggest thinned mature growth stands approach the structure and function of old growth 50 - 100 years sooner.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q16.3

One study suggests variable density thinning increases fire resistance of mature growth stands. Compared to control mature growth stands under similar weather conditions, variable thinned stands experience less extreme fire behavior.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q16.4

One study suggests variable density thinning of mature growth stands decreases drought stress. Compared to control stands, variable thinned stands have higher soil moisture content and are less likely to experience drought stress.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Page Break

Q16.5

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study used a 20-year data set concluding in 2021 to model the effects of variable density thinning. The study suggests variable density thinning accelerates the transition of mature growth forests to old growth forests. Compared to mature stands that aren't thinned, models suggest thinned mature growth stands approach the structure and function of old growth 50 - 100 years sooner. **Therefore**, mature growth stands should be thinned on my landscape.

Q16.6

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 10 years concluding in 2021 suggests variable density thinning increases fire resistance of mature growth stands. Compared to control mature growth stands under similar weather conditions, variable thinned stands experience less extreme fire behavior. **Therefore**, mature growth stands should be thinned on my landscape.

Q16.7

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 10 years concluding in 2021 suggests variable density thinning of mature growth stands decreases drought stress. Compared to control stands, variable thinned stands have higher soil moisture content and are less likely to experience drought stress.

Therefore, mature growth stands should be thinned on my landscape.

Q16.8 Please indicate the soundness of this argument.

- Not at all sound (1)
 - Slightly sound (2)
 - Moderately sound (3)
 - Very sound (4)
 - Extremely sound (5)
-

Q16.9 Please explain your answer.

End of Block: LONG-term PRO-thinning

Start of Block: LONG-term ANTI-thinning

Q17.1 A research team recently published the results of a series of studies on the effects of variable density thinning of mature growth stands. The studies had three major findings. For each finding, please rate how useful the information is for your job.

The research team conducted their studies over 10 years, concluding in 2021.

Page Break

Q17.2

One study used a 20-year data set to model the effects of variable density thinning. The study suggests variable density thinning doesn't accelerate the transition of mature growth forests to old growth forests. Compared to mature stands that aren't thinned, models suggest thinned mature growth stands approach the structure and function of old growth at approximately the same rate.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q17.3

One study suggests variable density thinning decreases fire resistance of mature growth stands. Compared to control mature growth stands under similar weather conditions, variable thinned stands experience more extreme fire behavior.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q17.4

One study suggests variable density thinning of mature growth stands increases drought stress. Compared to control stands, variable thinned stands have lower soil moisture content and are more likely to experience drought stress.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Page Break

Q17.5

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study used a 20-year data concluding in 2021 set to model the effects of variable density thinning. The study suggests variable density thinning doesn't accelerate the transition of mature growth forests to old growth forests. Compared to mature stands that aren't thinned, models suggest thinned mature growth stands approach the structure and function of old growth at approximately the same rate. **Therefore**, mature growth stands should not be thinned on my landscape.

Q17.6

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 10 years concluding in 2021 suggests variable density thinning decreases fire resistance of mature growth stands. Compared to control mature growth stands under similar weather conditions, variable thinned stands experience more extreme fire behavior. **Therefore**, mature growth stands should not be thinned on my landscape.

Q17.7

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study conducted over 10 years concluding in 2021 suggests variable density thinning of mature growth stands increases drought stress. Compared to control stands, variable thinned

stands have lower soil moisture content and are more likely to experience drought stress. **Therefore**, mature growth stands should not be thinned on my landscape.

Q17.8 Please indicate the soundness of this argument.

- Not at all sound (1)
 - Slightly sound (2)
 - Moderately sound (3)
 - Very sound (4)
 - Extremely sound (5)
-

Q17.9 Please explain your answer.

End of Block: LONG-term ANTI-thinning

Start of Block: LONG-term PRO-translocation

Q18.1 A research team recently published the results of a series of studies on translocation as an adaptation to climate change in the Pacific Northwest. The studies had three major findings. For each finding, please rate how useful the information is for your job.

The research team used 20-year datasets (2001 - 2021) in their models.

Page Break

Q18.2

One study suggests there is an 80% chance of collapse of meadow pollinators over the next 100 years due to trophic asynchronies between meadow plants and pollinators. The model predicts immediately incorporating translocation of later-blooming meadow plants into management actions will reduce the probability of collapse over the next 100 years to 10%.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q18.3

One study suggests soil moisture will be below values associated with physiological moisture stress for twice as many days in the next 100 years due to increased temperature from climate change. Models suggest to maintain current levels of canopy cover over the next century, translocation of native trees from hotter and drier seed zones needs to be incorporated into ongoing management actions.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q18.4

One study suggests timber biomass growth rates will decline by on average 30% over the next 100 years due to increased temperature and moisture stress, despite lengthening of the growing season, CO2 enrichment, and increased water use efficiency. Models suggest to ensure current levels of timber production, translocation of native trees from hotter and drier seed zones needs to be incorporated into ongoing management actions.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Page Break

Q18.5

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study using a 20-year data set (2001 - 2021) suggests there is an 80% chance of collapse of meadow pollinators over the next 100 years due to trophic asynchronies between meadow plants and pollinators. The model predicts immediately incorporating translocation of later-blooming meadow plants into management actions will reduce the probability of collapse over the next 100 years to 10%. **Therefore**, we should immediately begin translocating later-blooming meadow plants onto my landscape.

Q18.6

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study using a 20-year data set (2001 - 2021) suggests soil moisture will be below values associated with physiological moisture stress for twice as many days in the next 100 years due to increased temperature from climate change. Models suggest to maintain current levels of canopy cover over the next century, translocation of native trees from hotter and drier seed zones needs to be incorporated into ongoing management actions. **Therefore**, we should immediately begin translocating drought-adapted trees in my landscape.

Q18.7

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study using a 20-year data set (2001 - 2021) suggests timber biomass growth rates will decline by on average 30% over the next 100 years due to increased temperature and moisture stress, despite lengthening of the growing season, CO2 enrichment, and increased water use efficiency. Models suggest to ensure current levels of timber production, translocation of native trees from hotter and drier seed zones needs to be incorporated into ongoing management actions. **Therefore**, we should immediately begin translocating drought-adapted trees in my landscape.

Q18.8 Please indicate the soundness of this argument.

- Not at all sound (1)
 - Slightly sound (2)
 - Moderately sound (3)
 - Very sound (4)
 - Extremely sound (5)
-

Q18.9 Please explain your answer.

End of Block: LONG-term PRO-translocation

Start of Block: LONG-term ANTI-translocation

Q19.1 A research team recently published the results of a series of studies on translocation as an adaptation to climate change in the Pacific Northwest. The studies had three major findings. For each finding, please rate how useful the information is for your job.

The research team used 20-year datasets (2001 - 2021) in their models.

Q19.2

One study suggests there is an 80% chance of collapse of meadow pollinators over the next 100 years due to trophic asynchronies between meadow plants and pollinators. The model predicts immediately incorporating translocation of later-blooming meadow plants into management actions will have a statistically insignificant impact on the probability of collapse over the next 100 years.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q19.3

One study suggests soil moisture will be below values associated with physiological moisture stress for twice as many days in the next 100 years due to increased temperature from climate change. The model predicts translocation of native trees from hotter and drier seed zones into current management actions to account for decreasing soil moisture will not have a statistically significant impact on canopy cover by the end of the century.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Q19.4

One study suggests timber biomass growth rates will increase on average by 30% over the next 100 years due to lengthening of the growing season, CO₂ enrichment, and increased water use efficiency, despite increasing heat and moisture stress. Models predict translocation of native trees from hotter and drier seed zones will not be necessary to ensure current levels of timber production over the next century.

Please rate how useful this information is for your job.

- Not at all useful (1)
 - Slightly useful (2)
 - Moderately useful (3)
 - Very useful (4)
 - Extremely useful (5)
-

Page Break

Q19.5

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study using a 20-year data set (2001 - 2021) suggests there is an 80% chance of collapse of meadow pollinators over the next 100 years due to trophic asynchronies between meadow plants and pollinators. The model predicts immediately incorporating translocation of later-blooming meadow plants into management actions will have a statistically insignificant impact on the probability of collapse over the next 100 years. **Therefore**, we should not translocate later-blooming meadow plants onto my landscape.

Q19.6

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study using a 20-year data set (2001 - 2021) suggests soil moisture will be below values associated with physiological moisture stress for twice as many days in the next 100 years due to increased temperature from climate change. The model predicts translocation of native trees from hotter and drier seed zones into current management actions to account for decreasing soil moisture will not have a statistically significant impact on canopy cover over by the end of the century. **Therefore**, we should not translocate drought-adapted trees to my landscape.

Q19.7

We are now going to show you an example of an argument. Arguments include at least one premise and one conclusion. Arguments are said to be sound when the conclusion follows from the premise. Please evaluate the soundness of this argument, regardless of whether you agree or disagree with the conclusion.

A study using a 20-year data set (2001 - 2021) suggests timber biomass growth rates will increase on average by 30% over the next 100 years due to lengthening of the growing season, CO2 enrichment, and increased water use efficiency, despite increasing heat and moisture stress. Models predict translocation of native trees from hotter and drier seed zones will not be necessary to ensure current levels of timber production over the next century. **Therefore**, we should not translocate drought-adapted trees to my landscape.

Q19.8 Please indicate the soundness of this argument.

- Not at all sound (1)
 - Slightly sound (2)
 - Moderately sound (3)
 - Very sound (4)
 - Extremely sound (5)
-

Q19.9 Please explain your answer.

End of Block: LONG-term ANTI-translocation

Start of Block: Sense of Belonging

Q20.1 The next section covers your opinions about your workplace and the public. As a reminder, you may skip any question you do not want to answer, and all answers are anonymous.

Q20.2 I get along with the people in my unit.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q20.3 My coworkers have similar interests and hobbies as me.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q20.4 I am friends with my coworkers.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q20.5 I agree with the values of my agency.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q20.6 I agree with the priorities of my unit.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q20.7 My supervisor and I have similar values.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

End of Block: Sense of Belonging

Start of Block: Threat

Q21.1 The next section has to do with your assessment of public opinion and your agency and unit. For this section, **we do not mean the general American public**. Please answer the following questions with reference to **the communities near where you work and affected by your unit's decisions**.

Q21.2 The public doesn't understand the objectives of my unit.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q21.3 The public supports the decisions of my unit.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q21.4 I am always prepared for someone in the public to legally challenge my unit's decisions.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q21.5 The public trusts the professional expertise of my unit.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q21.6 On my unit, we struggle to find decisions supported by most members of the public.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Q21.7 My unit has a good relationship with the public.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

End of Block: Threat

Start of Block: Demographics

Q22.1 Thank you for your responses thus far. In this final section of the survey, we would like to know a little bit more about you. As a reminder, you may skip any questions you do not wish to answer. All your answers are anonymous.

Q22.2 Which agency do you currently work for?

- Bureau of Land Management (1)
 - National Park Service (2)
 - US Forest Service (3)
 - US Fish and Wildlife Service (7)
 - Oregon Department of Forestry (4)
 - Washington Department of Natural Resources (5)
 - Other (6) _____
-

Q22.3 Approximately how many years have you worked in your current job?

Q22.4 Approximately how many years have you worked in natural resource management?

Q22.5 Which of the following topic areas are most relevant to your day-to-day job? Please choose up to three.

- Forestry and silviculture (1)
- Fire management (2)
- Hydrology (3)
- Wildlife biology (4)
- Aquatic biology (5)
- Plant biology (9)
- Soil science (6)
- Recreation (7)
- Community development/economics (8)
- Invasive species management (10)
- Other (11) _____
- None of the above (12)

Q22.6 Which of the following ecoregions most accurately describe the landscapes you manage? Options are drawn from the EPA ecoregions maps for Oregon and Washington.

Please select all that apply.

- Coast Range (1)
 - Puget Lowland (11)
 - Willamette Valley (4)
 - Western Cascades (5)
 - Eastern Cascades Slopes and Foothills (2)
 - North Cascades (12)
 - Northern Rockies (13)
 - Columbia Plateau (6)
 - Blue Mountains (3)
 - Snake River Plain (7)
 - Klamath Mountains (8)
 - Northern Basin and Range (9)
-

Q22.7 What is your highest level of education completed?

- Some high school (1)
 - High school or GED (2)
 - Associate's degree or some college (3)
 - Bachelor's degree (4)
 - Graduate degree (e.g., PhD, MS, Masters of Forestry) (7)
 - Other (5) _____
 - Prefer not to say (6)
-

Q22.8 Which of the following best describes your gender?

- Male (1)
 - Female (2)
 - Other/Prefer not to say (3)
-

Q22.9

The US Census uses the following categories to define ethnic and/or racial identity. Please select all that apply.

- White (e.g., German, Irish, Italian, Polish, etc.) (1)
 - Hispanic, Latino, or Spanish origin (e.g., Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, etc.) (2)
 - Black or African American (e.g., African American, Jamaican, Haitian, Somalian, etc.) (3)
 - Asian (e.g., Chinese, Filipino, Asian Indian, Korean, etc.) (4)
 - Indigenous American or Alaska Native (e.g., Navajo Nation, Blackfeet Tribe, Mayan, etc.) (5)
 - Middle Eastern or North African (e.g., Lebanese, Iranian, Egyptian, etc.) (6)
 - Native Hawaiian or Other Pacific Islander (e.g., Samoan, Fijian, etc.) (7)
 - Some other race, ethnicity, or origin (8)
-
- Prefer not to say (9)

End of Block: Demographics
