



CONSERVATION ENHANCEMENT ACTIVITY

E666R

CONSERVATION STEWARDSHIP PROGRAM

Forest songbird habitat maintenance

Conservation Practice 666: Forest Stand Improvement

APPLICABLE LAND USE: Forest, Associated Ag Land, Farmstead

RESOURCE CONCERN: Animals

ENHANCEMENT LIFE SPAN: 10 Years

Enhancement Description

Adopts guidelines and methods developed by the Forest Bird Initiative of the Vermont Audubon Society, to preserve habitat features following a forest stand improvement treatment designed to create habitat for a suite of forest-dwelling neotropical migratory songbirds. It includes developing or updating a forest management plan, inspecting and tending forest habitat, and monitoring bird populations. It protects investments in habitat creation by providing for follow-up activities that require the expertise of a professional forester or biologist. This enhancement is appropriate for states in forest songbird flyways, and is applicable in middle-aged, older-aged, or all-aged forests.

Criteria

States will apply general criteria from the NRCS National Conservation Practice Standard (CPS) Forest Stand Improvement (Code 666) as listed below, and additional criteria as required by the NRCS State Office.

- This enhancement is used periodically following an initial treatment designed to create habitat elements specifically for neotropical migratory forest songbirds; habitat creation may include forest gaps, snags, cavities, supplemental plantings of trees or shrubs, removal of undesirable invasive species, etc. States will determine when to use the enhancement; one year following the initial treatment is the soonest it should be applied, and after that it should be used every three to five years to check for changed conditions.



CONSERVATION STEWARDSHIP PROGRAM

- Update the current Forest Management Plan (FMP) to include guidelines to maintain habitat for forest birds. The FMP will include guidelines for inspection and monitoring, identify the types of forest health impacts or stand damage to look for during inspections, and will describe the types of activities that may be needed to preserve existing habitat conditions.
- A forestry specialist will inspect the stand and identify species of harmful insects, tree diseases, invasive plants, as well as other biotic and abiotic (i.e. ice storms, drought, flooding, etc.) impacts on forest growth, health, structure and/or composition.
- The forestry specialist will make recommendations for short-term treatments as needed. A skilled laborer will implement appropriate activities, such as applying mechanical and spot chemical treatments.
- The forestry specialist will make recommendations for additional practices needed to correct undesirable forest health conditions. Practices may include: NRCS Conservation Practice Standards Integrated Pest Management (Code 595), Brush Management (Code 314), and Herbaceous Weed Control (Code 315).
- A forestry or wildlife specialist will evaluate and report on the condition of songbird habitat elements using protocols in “Bird Habitat Inventory Field Procedures” from Audubon Vermont (http://vt.audubon.org/sites/g/files/amh751/f/bidhab_protocol_web_0.pdf), or a similar set of protocols adopted by the respective state’s wildlife management agency or equivalent state-level entity. The forestry specialist will recommend initial treatments and additional practices, if needed, to the participant(s) and NRCS.
- During the bird breeding season, a trained forestry or wildlife specialist will conduct a bird census according to protocols adopted by the respective state’s wildlife management agency or equivalent state-level entity.
- The participant will control access to the stand as needed to prevent resource damage, and to reduce disturbance to songbirds and other wildlife.



CONSERVATION STEWARDSHIP PROGRAM

Documentation and Implementation Requirements:

Participant will:

- Prior to implementation, review the NRCS Conservation Practice Standard Forest Stand Improvement (Code 666) or appropriate state guidance document and use the information to meet the criteria of this enhancement. Also review Forest Bird Initiative guidance from the Vermont Audubon Society at <http://vt.audubon.org/conservation/working-lands/forest-bird-initiative-1>, or equivalent state-level guidance provided by NRCS.
- Prior to implementation, the participant will obtain a current or updated Forest Management Plan (FMP) that includes activities required to implement this enhancement. The FMP will include guidelines for inspection and monitoring, the types of forest health impacts or stand damage to look for during inspections, and potential activities that may be needed to preserve existing habitat conditions. The participant will make the FMP available for NRCS review.
- Prior to implementation, make arrangements for a forestry and/or wildlife specialist to inspect the stand and complete a habitat monitoring report, conduct a bird survey, and accomplish other tasks called for in the enhancement.
- During implementation, notify NRCS if there are any planned changes, to verify that they meet enhancement criteria.
- During implementation, keep a written log and take digital photos.
- After implementation, retain a map showing the location of activities, and photos. Make the map and photos available to NRCS for verification.
- After implementation, notify NRCS that the work was completed, and make the following information available to NRCS: dates that inspection was conducted, methods used, reports on bird surveys and habitat monitoring, photos, and a map showing bird monitoring points.
- After implementation, control access to the stand as needed to prevent resource damage, and to reduce disturbance to songbirds and other wildlife.



CONSERVATION STEWARDSHIP PROGRAM

NRCS will:

- Prior to implementation, verify the enhancement activity is planned for acres that meet the criteria in the enhancement guide sheet, by reviewing the existing FMP or other documentation of treatment objectives and implementation, and through field verification.
- Prior to implementation, assist with the interpretation of a current or updated FMP on acres targeted by this enhancement.
- Prior to implementation, provide and explain the following NRCS Conservation Practice Standards as they relate to implementing this enhancement:
 - Forest Stand Improvement (Code 666)
 - Integrated Pest Management (Code 595)
 - Brush Management (Code 314)
 - Herbaceous Weed Control (Code 315)
- As needed, prior to implementation, NRCS will provide technical assistance by:
 - Providing and explaining the Forest Bird Initiative guidance from the Vermont Audubon Society at <http://vt.audubon.org/conservation/working-lands/forest-bird-initiative-1>, or equivalent state-level guidance on habitat for migratory forest-dwelling birds.
 - Providing methods to be used for conducting bird surveys, using protocols adopted by the state wildlife management agency or equivalent state-level entity.
 - Preparing specifications for applying this enhancement for each site using approved specification sheets, job sheets, technical notes, and narrative statements in the conservation plan, or other acceptable documentation, and will discuss the details with the participant.
- During implementation, provide technical assistance if requested by the participant.
- During implementation, evaluate any planned changes to verify they meet enhancement criteria.



- After implementation, certify that the enhancement was completed according to the NRCS Conservation Practice Standard Forest Stand Improvement (Code 666) specifications and the enhancement criteria.

CONSERVATION STEWARDSHIP PROGRAM





NRCS Documentation Review:

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

**CONSERVATION
STEWARDSHIP
PROGRAM**

Participant Name _____ Contract Number _____

Total Amount Applied _____ Fiscal Year Completed _____

NRCS Technical Adequacy Signature _____ Date _____





**OREGON SUPPLEMENT TO
CONSERVATION ENHANCEMENT ACTIVITY**

**CONSERVATION
STEWARDSHIP
PROGRAM**

E666R

Enhancement Description: Forest songbird habitat maintenance

Where forest ESD's are available use them to determine site characteristics and needs. When ESD's are not available, consider the following:

Stand has not been high graded, removing the largest and best while leaving the smallest and poorly formed.

Refer to local ODF, regional, or state forester for stocking assistance for specific geographic considerations.

Forest Practice Permits are filed, and stand is compliant. This ensures that best management practices for water quality are met.

It shall be the responsibility of the client to obtain all necessary permits and/or rights, and to comply with Oregon Forest Practices Act and local ordinances and laws pertaining to the application of this practice

If fire danger is a concern or if prescribed fire is planned, understory should be reduced to approximately 24" in height and standing trees should be pruned to 50% live crown.

Snags, downed woody material and potential roost trees are protected and maintained as per state regulations. This is typically 2 snags, 2 downed logs and 2 roost or recruitment trees per acre of forest land.

When implementing this enhancement avoid cutting pine stands during the growing season, green slash often will encourage beetle movement, potentially damaging healthy trees.

Where Terrestrial Habitat resource concern is selected follow state wildlife guidance.

- Use an Oregon Wildlife Habitat Evaluation Guide to determine general habitat condition.



**OREGON SUPPLEMENT TO
CONSERVATION ENHANCEMENT ACTIVITY**

**CONSERVATION
STEWARDSHIP
PROGRAM**

E666R

[eFOTG: Section 3: Oregon Conservation Planning Documents: Wildlife Habitat Inventory Documents:](#)

- Use the CSP State Wildlife Species List for the WHEG for the species of interest. Direct any additional questions regarding this WHEG guidance to your basin or state wildlife biologist.

[Slicer – Priority Oregon Wildlife Species](#)

General Information:

Managing Forest Habitats for Migrant Songbirds

<https://woodlandfishandwildlife.com/wp-content/uploads/2015/05/migrant-songbirds.pdf>

Land Manager’s Guide to Cavity-Nesting Bird Habitat and Populations in Ponderosa Pine Forests of the Pacific Northwest

<https://www.birds.cornell.edu/landtrust/wp-content/uploads/2023/10/Ponderosa-Pine-bird-guide.pdf>

Bird Habitat and Populations in Oak Ecosystems of the Pacific Northwest

<https://abcbirds.org/wp-content/uploads/2015/05/QuercusGuidePart1.pdf>

Considerations for enhancing understory complexity:

- When possible, in a thinning operation, leave logs or trees that will become logs in a stand with needles and fine wood in the forest.
- If harvesting whole trees, retain on-site and scatter tops, limbs, and smaller trees but avoid adding too many fuels to the forest floor.
- Planting of native plant species can promote diversity in areas that desirable plant community or understory.

Considerations for enhancing habitat with snags and cavity trees:

- Retain as many snags as possible. Ideally, aim for at ≥ 4 snags or cavity trees per acre. Larger diameter and height trees are better.
- In older stands with few snags or cavity trees, consider strategically managing select trees to create snags with a minimum 20-inch diameter at breast height (DBH). Spaced girdling of some trees will allow adjacent trees to grow a wider canopy. Note: girdled trees may not stand as long as naturally decayed trees.
- Where snags are felled for safety reasons, leave in place to provide coarse woody material on the forest floor if lacking.
- Identify and retain some trees for future snags including larger trees with broken tops, large dead limbs, or other signs of potential decay, ensure that tree is not affected by a harmful pest.
- If using mechanical equipment, create snags by topping standing trees.

Considerations for creating gaps in your forest or closed canopies:

- Consider implementing multi-aged management to create a mosaic of gaps and openings of different sizes across a forest. Try group selections up to 1 acre, or shelterwood harvests that open gaps around large trees to promote regeneration.
- Limit the number of gaps, according to levels that match historic ecological site conditions.

References:

Audubon Vermont, 2012. *Bird Habitat Inventory Field Procedures*.

Forest Stewards Guild, 2022. *Forestry for Birds Western Oregon: A guide to Enhancing Habitat for Birds and Humans*.

Woodland Fish and Wildlife. *Managing Forest Habitats for Migrant Songbirds*

Design Approvals & Acknowledgements:

Design Approval	Date	Job Approval Authority
Designed by:		
Approved by:		

Client's Acknowledgement Statement:

The client acknowledges:

- I have received a copy of the specification and understand the contents and requirements.
- It is my responsibility to obtain all necessary permits and/or rights and to comply with all ordinances and laws pertaining to the application of this practice.
- I will not begin installation of this practice until I have received appropriate approval to do so. I understand NRCS also has Federal and state laws to comply with that may take some time to address (e.g. cultural resources).

Client's	Date
Signature	

Certification Documentation:

	Field Evaluation: Post-treatment inventory, measurements, notes, as-built, and supporting documentation (document completion in conservation plan), as required.
	Map(s): Including field numbers, fields treated, and units treated (may document on conservation plan map), as required.
	Photos or other supporting documentation (e.g., seed tags, soil tests, receipts, invoices, spray records, fertilizer records, etc.)
Brief Description of Work Accomplished (types of equipment used, date of application, extents and quantities installed, etc.)	

Certification Statement:

The employee certifies the implementation of this conservation practice:

- Meets the purpose, general criteria, and any required additional criteria as documented in the conservation practice standard and/or enhancement sheet.
- Meets the specifications contained herein and is complete.
- Conforms to my existing Job Approval Authority controlling factors and levels.

Name	Date	Job Approval Authority

Field Level Certification – For multiple applications of this design.				
Land Unit/ Contract Item Number	Date	Unit(s)	Amount Installed	Certifier