

Plant Enhancement Activity - PLT18 – Increasing on-farm food production with edible woody buffer landscapes



Enhancement Description

This enhancement is for the enhancing of windbreaks, alley cropping, silvopasture, or riparian forest buffer systems with trees and shrubs that produce edible products for human or wildlife consumption.

Land Use Applicability

Cropland, Pastureland

Benefits

An edible landscape is special in that it is planted with trees and shrubs that produce foods that we can eat/sell or that are beneficial

for wildlife. Trees and shrubs can be used to provide shade, to improve microenvironments or to protect crops, or to mitigate challenging environmental issues. In an edible landscape they provide more than just a protective structure, they become sources of food that produce home grown and nutritious fruits and nuts, increase household food security, and create sites that provide critical habitat for pollinators and wildlife.

Conditions Where Enhancement Applies

This enhancement applies to all crop or pasture land use acres.

Criteria

1. Follow appropriate standard for basic agroforestry practice design.
2. Plant tree, shrub and bramble species that produce food and/or culinary items to create an edible landscape. Lists of suitable woody plants will be available at your local NRCS field office.
3. Maximize planting space by creating vertical structure with varying plant heights and plant sizes.
4. Use all of the following methods to improve edible food production:
 - a. Add at least one edible food producing row to existing agroforestry practices or incorporate at least one edible food producing row into new planting designs.
 - b. Adding planting masses in scattered clusters is encouraged.
 - c. Plant a variety of tree, shrub and bramble species (3 or more; use native species whenever possible) with varying flowering times to favor pollinator species and to add a longer harvest time frame. Choosing several fruit bearing cultivars can provide an extended period of seasonal production.



- d. Minimize herbicide use. Use spot weed treatments and avoid spraying when flowers are present.

Adoption Requirements

This enhancement is considered adopted when each selected acre has been planted to the desired tree, shrub and bramble species that produce food or culinary item.

Documentation requirements

1. List of edible food producing trees, shrubs and brambles.
2. Brief written description of the activities (criteria) completed with dates of application and receipts for planting stock, herbicides, etc.
3. Acreage of the enhancement activity.
4. Delineations on a map or aerial photo of landscape layout and placement.

References

Dana, M.N. 2001. Fruits and Nuts for Edible Landscaping. Purdue University Cooperative Extension Service. Landscape Horticulture, HO-190-W. <http://www.hort.purdue.edu/ext/HO-190.pdf>

Josiah, S.J. and J. Lackey. 2001. Edible Woody Landscapes for People and Wildlife. University of Nebraska Cooperative Extension. Lincoln, NE. <http://www.unl.edu/nac/brochures/sfp/sfp3.pdf>

USDA-NAC. 2008. Working Trees for Agriculture. USDA National Agroforestry Center, Lincoln, NE. <http://www.unl.edu/nac/workingtrees/wta.pdf>

USDA-NAC. 2006. Agroforestry: Sustaining Native Bee habitat for Crop Production. Agroforestry Notes – AF Note 32. USDA National Agroforestry Center. Lincoln, NE. http://plants.usda.gov/pollinators/Agroforestry_Sustaining_Native_Bee_Habitat_for_Crop_Pollination.pdf

USDA-NAC. 2006. Improving Forage for native Bee Crop Pollinators. Agroforestry Notes – AF Note 33. USDA National Agroforestry Center. Lincoln, NE. http://plants.usda.gov/pollinators/Improving_Forage_for_Native_Bee_Crop_Pollinators.pdf



United States Department of Agriculture
Natural Resources Conservation Service

IDAHO ADDENDUM 2013

Animal Enhancement Activity – PLT18 – *Increasing On-Farm Food Production with Edible Woody Buffer Landscapes*

Additional guidance:

Follow the appropriate practice standard (alley cropping, windbreaks and shelterbelts, silvopasture establishment, or riparian forest buffer) to assist with the enhancement design. Choice of appropriate introduced or native species to benefit wildlife will depend on the target wildlife species. Refer to the references below for additional information and guidance. References are also provided for Idaho woody plants used for human consumption.

References:

Idaho NRCS Plant Materials Technical Note 2A, Plants for Pollinators in the Intermountain West. ftp://ftp-fc.sc.egov.usda.gov/ID/programs/technotes/tn2a_pollinators_1011.pdf

Idaho NRCS Plant Materials Technical Note 2B, Plants for Pollinators in the Inland Northwest. ftp://ftp-fc.sc.egov.usda.gov/ID/programs/technotes/tn2b_pollinators_1011.pdf

Idaho NRCS Plant Materials Technical Note 24, *Conservation Plant Species for the Intermountain West*. ftp://ftp-fc.sc.egov.usda.gov/ID/programs/technotes/tn24_seedspecies

Idaho NRCS Plant Material Technical Note 24, Supplement: *Intermountain Planting Guide*, USDA-ARS Forage and Range Research Lab/Utah State Extension, AG 510. <ftp://ftp-fc.sc.egov.usda.gov/ID/programs/technotes/tn24supplement>.

Idaho NRCS Plant Materials Technical Note 43, *Tree Planting Care and Management*. ftp://ftp-fc.sc.egov.usda.gov/ID/programs/technotes/treecare_1007.pdf

University of Idaho Extension, Berries and Grapes reference list. [http://www.extension.uidaho.edu/resources2.asp?title=CROP%20PRODUCTION&category1=Crops&category2=Berries and Grapes&color=91A967&font=4B5F27](http://www.extension.uidaho.edu/resources2.asp?title=CROP%20PRODUCTION&category1=Crops&category2=Berries%20and%20Grapes&color=91A967&font=4B5F27)

University of Idaho Extension, Tree Fruits and Nuts reference list. [http://www.extension.uidaho.edu/resources2.asp?title=CROP%20PRODUCTION&category1=Crops&category2=Tree Fruits and Nuts&color=91A967&font=4B5F27](http://www.extension.uidaho.edu/resources2.asp?title=CROP%20PRODUCTION&category1=Crops&category2=Tree%20Fruits%20and%20Nuts&color=91A967&font=4B5F27)

USDA National Agroforestry Center, Agroforestry Note 12, *Alley Cropping: An Agroforestry Practice*, <http://www.unl.edu/nac/agroforestrynotes/an12ac01.pdf>

USDA National Agroforestry Center, Agroforestry Note 35, *Pesticide Considerations for Native Bees in Agroforestry*. <http://www.unl.edu/nac/agroforestrynotes/an35g09.pdf>

USDA National Agroforestry Center, Agroforestry Note 20, *Planning Agroforestry Practices*, <http://www.unl.edu/nac/afnotes/gen-3/gen-3.pdf>

Xerces Society. *Pacific Northwest Plants for Native Bees*. http://www.xerces.org/wp-content/uploads/2008/11/pnw_plants_bees_xerces

Xerces Society. *Pollinators in Natural Areas – A Primer on Habitat Management*. http://www.xerces.org/wp-content/uploads/2008/11/pollinators_in_natural_areas_xerces_society.pdf

**This activity may NOT be used with the following enhancements:
AIR08, ANM05, ANM07, ANM21, ANM32, ANM33, ENR01, PLT15,
WQL05, WQL09**

Potential Duplicate Practices:

311 - Alley Cropping, 380 – Windbreak/Shelterbelt Establishment, 650 - Windbreak/Shelterbelt Renovation, 391 - Riparian Forest Buffer, 612- Tree and Shrub Establishment, 381 - Silvopasture Establishment, 379 - MultiStory Cropping, 645 – Upland Wildlife Habitat Management, 647 – Early Successional Habitat Development/Management