2008 Conservation Security Program Wildlife Enhancement Activity—Pollinator Areas

Alabama Requirements for Establishing and Maintaining Pollinator Areas

Pollinator Areas Overview

Habitat for pollinators can be encouraged by the use of nectar producing plant corridors in non-cropped areas such as field borders, vegetative barriers, contour buffer strips, waterways, shelterbelts, windbreaks, riparian forest and herbaceous buffers.

Agricultural productivity is directly dependent on pollinators. Approximately 75% of all cultivated crops require pollination to produce seed and fruit. The majority of pollinators are insects but some birds and bats also play a major role. The services of native pollinators are worth an estimated \$4.1 billion dollars a year to U.S. agriculture. Both native and domestic pollinators are disappearing, largely due to habitat loss. Nectar corridors can provide the proper habitat for pollinators as well as other resource benefits.

Benefits

Increased habitat for pollinators will increase plant health and vigor, improve fruit set and overall quality, increase fruit size, increase productivity per acre, increase biodiversity, increase the population of beneficial insects, decrease the use of pesticides, enhance wildlife habitat, and increase the prey base for many wildlife species.

<u>Criteria for Pollinator Areas Enhancement Activity</u>

This enhancement requires site preparation and the planting of flowering trees, shrubs, forbs, legumes, and vines. It will also require management and maintenance of the activity.

Planting and Maintenance

Pollinator habitat areas will be at least ½ acre in size and include a minimum of ten (10) flowering plant species. The attached list shows eight plants highlighted that are *required* in the planting. One additional plant species listed under the late flowering list is required, as is one additional plant species under either the early or mid-flowering lists. *These last two plants are to be chosen by the landowner.*

If the area to be planted has introduced grasses, such as bahia, Bermuda, centipede, or other grasses that form thick sods, then it must be sprayed with an appropriate herbicide to kill these grasses before planting. Seedbed should be prepared by disking. Broadcast seed on the surface of very finely-disked and firmly rolled (fully settled) conventional seedbed, then roll seed into the top 1/4 to 1/2 inch of topsoil. Do not disk or rake in seed, as this would cover the small seeds too deeply preventing germination. Do not apply fertilizer at planting, as this increases unwanted competition.

Once established, management or maintenance activities such as burning or grazing should be conducted to maintain the habitat. They must be done outside of the growing season or period of bloom. For example, incidental grazing will only be allowed during winter as part of gleaning of crop stubble in adjoining fields. Burning is the preferred method of maintaining habitat.

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Insecticides kill pollinators and should not be used in the habitat area. Herbicides destroy plants that provide food and shelter for pollinators. Even natural herbicides and botanical insecticides can harm bees. If pesticides are used in adjoining fields, consider applying them in the evening when most insect pollinators are not active.

The habitat areas will be regularly inspected for presence of invasive or noxious plants or other weeds, which may comprise the intended purpose. Spot spraying of herbicides may be necessary occasionally in order to remove introduced grasses, woody brush or invasives.

Any use of the Pollinator Habitat area must not compromise its intended purpose.

References:

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Early Flowering Species

Illinois Bundleflower (Desmanthus illinoensus)	1 pound per acre
Smooth Beardtongue (Penstemon laevigatus)	1/8 pound per acre
Butterfly Weed (Asclepias tuberose)	1/8 pound per acre
Lanceleaf Tickseed (Coreopsis lanceolata)	2 pounds per acre
Purple Coneflower (Echinacea purpurea)	2 pounds per acre
Mid-Season Flowering Species	
Partridge Pea (Chamaecrista fasciculate/Chamaecrista nictitans)	2 pounds per acre
Golden Tickseed (Coreopsis tinctoria)	1 pound per acre
Tall Tickseed (Coreopsis tripteris)	1/8 pound per acre
Swamp Milkweed (Asclepias incarnate)	1/8 pound per acre
Black-Eyed Susan (Rudbeckia hirta)	1 pound per acre
Black-Eyed Susan (<i>Rudbeckia hirta</i>) Joe-Pye Weed (<i>Eupatorium fistulosum</i>)	1 pound per acre 1/8 pound per acre
Joe-Pye Weed (Eupatorium fistulosum)	1/8 pound per acre
Joe-Pye Weed (Eupatorium fistulosum) Milkweed (Asclepias syriaca)	1/8 pound per acre 1/8 pound per acre
Joe-Pye Weed (Eupatorium fistulosum) Milkweed (Asclepias syriaca) Maypop Vine (Passiflora incarnate)	1/8 pound per acre 1/8 pound per acre
Joe-Pye Weed (Eupatorium fistulosum) Milkweed (Asclepias syriaca) Maypop Vine (Passiflora incarnate) Late Flowering Species	1/8 pound per acre 1/8 pound per acre 1/8 pound per acre
Joe-Pye Weed (Eupatorium fistulosum) Milkweed (Asclepias syriaca) Maypop Vine (Passiflora incarnate) Late Flowering Species Swamp Sunflower (Helianthus angustifolius)	1/8 pound per acre 1/8 pound per acre 1/8 pound per acre 1/8 pound per acre
Joe-Pye Weed (Eupatorium fistulosum) Milkweed (Asclepias syriaca) Maypop Vine (Passiflora incarnate) Late Flowering Species Swamp Sunflower (Helianthus angustifolius) Cardinal Flower (Lobelia cardinalis)	1/8 pound per acre 1/8 pound per acre 1/8 pound per acre 1/8 pound per acre 1/2 pound per acre 1/8 pound per acre