

**Animal Enhancement Activity – ANM45 – Manipulate vegetation on fields where rainfall is to be captured and retained**



**Enhancement Description**

This enhancement benefits seasonal, shallow water habitats for migratory waterfowl, wading birds, and shorebirds by manipulating vegetation.

**Land Use Applicability**

Cropland

**Benefits**

Harvested and idled agricultural lands, notably those occurring within rice rotations, contain high densities of residual (i.e., waste) grain and natural seeds

following harvest (Eadie et al. 2008, Marty 2013). Seed densities in harvested rice fields may rival those documented in intensively managed moist-soil units, especially in the Gulf Coast and Central Valley of California (Eadie et al. 2008, Marty 2013). When flooded to shallow depths during fall and winter, these agricultural fields provide ideal foraging habitat for myriad species of waterfowl and wading birds (Eadie et al. 2008). In addition, flooded conditions promote establishment of aquatic invertebrate populations, thus providing protein-rich food sources for shorebirds as well as waterfowl and wading birds (Elphick et al. 2010). In many cases, light manipulation of dense vegetation is needed to improve the accessibility of food resources to waterfowl, wading birds, and shorebirds (Havens 2007).

**Conditions Where Enhancement Applies**

This enhancement applies to crop land use acres with leveed fields that contain robust vegetation (e.g., post-harvest rice stubble, annual grasses and sedges) and are capable of holding water at an average depth of 6 to 18 inches for the duration of the activity.

**Criteria**

Implement the following:

1. Develop a wildlife habitat management plan for the suite of species targeted.
2. Manipulation vegetation by either lightly disking or bush hogging, or rolling the majority (50-80 percent) of the contracted acres during early to late fall.
  - a. For fields where harvest of the crop occurs later (e.g., ratoon rice), manipulation must be conducted within 7 days following harvest.
  - b. Manipulation shall not be done in a large, continuous block. Strip disking and/or mowing in mosaic or other irregular patterns is required.
  - c. Manipulation can occur prior to or during the water holding period, but manipulation must not affect greater than 80 percent of the field.



United States Department of Agriculture  
Natural Resources Conservation Service

2015 Ranking Period 1

Note: This activity should be paired with Animal Enhancement Activity-ANM44-Close structures to capture and retain rainfall for waterfowl and wading birds during winter.

### **Adoption Requirements**

The enhancement is considered adopted when vegetation has been manipulated on the land use acre as specified in the criteria.

### **Documentation Requirements**

1. Copy of the wildlife habitat management plan
2. Date of harvest (if applicable)
3. Date of vegetation manipulation
4. The method used to manipulate vegetation
5. The percent of field manipulated and the pattern in which it was manipulated
6. Representative digital photographs of the manipulated habitat

### **References**

Eadie, J. M., C. S. Elphick, K. J. Reinecke and M. R. Miller. 2008. Wildlife values of North American ricelands. Pages 7-90 in Conservation in Ricelands of North America (S. W. Manley, Ed.). The Rice Foundation, Stuttgart, Arkansas.

Elphick, C. S., O. Taft, and P. M. Lourenco. 2010. Management of rice fields for birds during the non-growing season. *Waterbirds* 33:181-192.

Havens, J. H. 2007. Winter abundance of waterfowl, waterbirds, and waste rice in managed Arkansas rice fields. Thesis, Mississippi State University, Mississippi State, MS, USA.

Marty, J. R. 2013. Seed and waterbird abundances in ricelands in the Gulf Coast Prairies of Louisiana and Texas. Thesis, Mississippi State University, Mississippi State, MS, USA.