

Animal Enhancement Activity – ANM43 – Removal of woody vegetation from rice field levees to improve habitat for nesting king rail



Enhancement Description

This enhancement is to improve the suitability of rice fields for nesting king rail and other secretive marsh birds by removing trees and shrubs from rice field levees.

Land Use Applicability

Cropland

Benefits

Rice fields with levees or similar ecosystems mimic marsh type habitats and are shown to provide suitable nesting habitat for king rail (*Rallus elleganus*) and for other species of secretive marsh birds such as purple gallinule (*Porphyrio martinica*) and least bittern (*Ixobrychus exillis*). Research has shown king rail will avoid nesting in rice field levees with as little as 10 percent woody vegetation on the field perimeter; which indicates king rail avoid areas with trees and shrubs because the vegetation provides perches for raptors, such as hawks and owls. Removal of the woody vegetation which serve as potential predator perches from perimeter levees will make rice fields more attractive to nesting king rail or other species of secretive marsh birds.

Conditions Where Enhancement Applies

This enhancement applies to crop land use acres with leveed fields in an active rice culture rotation or similar where tall herbaceous vegetation and levee surface is available to secretive marsh birds.

Criteria

Implement the following:

1. Develop a wildlife habitat management plan for the suite of species targeted.
2. Apply to fields with levees in an active rice rotation or a similar ecosystem.
3. Eligible fields must have more than 10 percent of the leveed field perimeter vegetated in trees and shrubs.
4. Woody vegetation must be reduced to less than or equal to 10 percent of the leveed field perimeter.
5. Standing dead vegetation must be removed from the leveed field perimeters. All stumps must be less than or equal to 18 inches tall.

Adoption Requirements

The enhancement is considered adopted when the woody vegetation on the leveed field perimeter of rice fields is managed to be less than or equal to 10 percent.



United States Department of Agriculture
Natural Resources Conservation Service

2015 Ranking Period 1

Documentation Requirements

1. Copy of the wildlife habitat management plan,
2. Dated digital photography of the conditions existing pre- and post-treatment, and
3. Description of the method employed to remove the woody vegetation.

References

Pickens, B. A. and S. L. King. 2012. Predicting the Spatial Distribution of King Rails in an Agricultural Landscape. *The Condor* 114(1); 113-122. The Cooper Ornithological Society

Pierluzzi, S. and S. L. King. 2008. Relative Nest Density, Nest Success, and Site Occupancy of King Rails in Southwestern Louisiana Rice Fields. *Waterbirds* 31(4): 530-540