Publication Brief



Wading Bird Use of Wetlands in Natural and Agricultural Settings in the U.S. Southeastern Coastal Plain

Wading birds (herons, egrets, ibis, and storks) are widespread and conspicuous top predators in wetlands. They need both suitable prey densities and shallow water for wetland foraging habitat. These conditions are often short-lived, causing birds to change wetland foraging locations frequently. Land use change has greatly altered the abundance, distribution and ecological functions of wetlands in today's landscapes. Approximately 70% of seasonally ponded wetlands in southwestern Georgia have been impaired by adjacent human activities including agriculture. Agricultural impacts include:

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- alteration of the time seasonal wetlands hold water
- clearing of vegetation
- creation of ditches and berms for irrigation



Flock of white ibis at seasonal wetland in late spring

Although less valuable than natural wetlands, modified wetlands can still provide important habitat. To assess the effects of agricultural impacts on wading birds, we compared their use of wetlands in both natural and agricultural settings. We found differences in timing of foraging, with the highest activity in agricultural wetlands in early spring versus late spring and early summer for natural wetlands. These results suggest that wading birds in the study area rely on a



matrix of both agricultural and natural wetlands, and their use of wetlands varies seasonally to maximize prey availability.

The protection of wetlands in natural settings offers the best chance of conserving wading birds, but the value of agricultural wetlands to these species should not be overlooked.

MORE INFORMATION

Herteux, C. E., D. E. Gawlik, and L. L. Smith. 2019. Habitat Characteristics Affecting Wading Bird Use of Geographically Isolated Wetlands in the U.S. Southeastern Coastal Plain. Wetlands 2019: 1-11. https://doi.org/10.1007/s13157-019-01250-y

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KEY POINTS

Seasonal wetlands in both natural and agriculturally settings are important foraging habitat for wading birds.

Wading birds primarily use agricultural wetlands in early spring and natural wetlands in late spring and early summer.

Receding water levels in both types of wetlands concentrate aquatic prey and provide important food resources for nesting wading birds.