



## Featured Species Habitat Management Guidance for Mallard

**Latin Name:** *Anas platyrhynchos*

**Scope:** Statewide

**Rationale** - *why we value the species and the problem for the species:*

Mallards are a highly valued game species in Michigan and represent approximately 47% of the state's annual duck harvest. The DNR is a committed partner with the Upper Mississippi River and Great Lakes Joint Venture (UMRGLJV) and the JV lists the mallard as a focal species. There has been a long-term decline in the estimated number of Michigan's breeding mallards; down from 567,000 in 1998 to 259,000 in 2009. The loss or degradation of Michigan's emergent wetlands is the primary habitat concern (Ducks Unlimited 2005).

**Habitat Need** - *the cause & effect relationship between habitat and species and its primary limiting habitat need:*

Coluccy et. al. (2008) found that mallard populations in the Great Lakes region appeared to be most sensitive to changes in habitat associated with nest success and duckling survival. Seasonal and permanent marshes are most often used for breeding and brood rearing. Mallards prefer complexes of grassland and shallow seasonal or semi-permanent marshes in association with permanent hemi-marshes. Mallard pair-bonding wetlands are typically 0.25 to 20 acres in size and brood rearing wetlands are typically 1.2 to 30 acres in size. Mallard nests are normally < 218 yards from water. (UMRGLJV 2007).

**Habitat Objectives** - *the treatment or management to address the primary limiting habitat need:*

Michigan's goals as a JV partner include:

- 1) Protect 288,000 acres, which includes acquisition and conservation easements, and restore/enhance 69,000 acres of "shallow semi-permanent marsh and hemi-marsh" as mallard breeding habitat; protect 132,000 acres and restore/enhance 5,100 acres of "shallow semi-permanent marsh and hemi-marsh" as non-breeding habitat (UMRGLJV 2007).
- 2) Hemi-marshes, with a 50/50 open water to emergent marsh ratio (or equal ratio), for both breeding and non-breeding habitat. Optimal hemi-marsh sites are > 2.5 acres with open water portions having extensive portions < 3 feet deep and 4-to-1 ratio area of adjacent grasslands to hemi-marsh (UMRGLJV 2007).

**Priority Geographic Areas** – *the specific geographic areas where we should focus management for the species:*

The UMRGLJV (2007) priority areas; and the 12 Regional State Forest Management Plans Management Areas (1 EUP, and 11 NLP) and 100 WLD Project Areas (17 UP, 39 NLP, 28 SELP, and 16 SWLP) which identify mallard as a featured species.

**Priority Landscapes** – *the landscape, setting, or cover-type where we should focus management within the areas above:*

Nest cover includes: grasslands, hayfields, marshes, and shrublands. Brood cover includes hemi-emergent vegetation associated with hemi-marshes: cattail, bulrush, arrowhead, grasses, and sedges.

**Population Goal** - *the goal for the species, its habitat, or a stakeholder's actions:*

Maintain 420,000 breeding mallards in Michigan, when Great Lakes water levels are near their long-term average (WLD Waterfowl Workgroup).

**Evaluation Method** - *the monitoring method to measure progress towards the goal above:*

Annually conduct aerial spring breeding survey and mid-winter inventory. Utilize information from annual harvest surveys and leg-band recovery analysis.

**Incidental Species** – *other species which may benefit from management for this species:*

American bittern; eastern fox snake; massasauga rattlesnake; and ring-necked pheasant.

**References** - *citation for documents referenced in this guidance:*

Coluccy, J.M., T. Yerkes, R. Simpson, J.W. Simpson, L. Armstrong, and J. Davis. 2008. Population dynamics of breeding mallards in the Great Lakes states. *Journal of Wildlife Management* 72(5):1181-1187.

Ducks Unlimited. 2005. Updating the National Wetland Inventory for Southern Lower Peninsula of Michigan. Final Report submitted to the U.S. Fish and Wildlife Service. DU Great Lakes/Atlantic Regional Office, Ann Arbor, Michigan.

Upper Mississippi River and Great Lakes Joint Venture (UMRGLJV). 2007. Upper Mississippi River and Great Lakes Joint Venture, Waterfowl Habitat Conservation Strategy. U.S. Department of Interior, Fish and Wildlife Service, Minneapolis, Minnesota, USA.