

Migration Headache

Study Units

[Aquatic Life; People, Land, and Water](#)

Supplemental Information

About 145 of the 370 species of birds sighted in Iowa usually are found in a wetland habitat. There were some 4-6 million acres of wetlands in Iowa prior to European settlement. Today, Iowa marshes are essential stopover places for migrating waterfowl. The southern “prairie potholes” were probably favored over their more northern counterparts in pre-settlement times due to the longer growing season, but Iowa’s role as an important part of the North American “duck factory” was nearly eliminated by wetland drainage. The Mississippi and Missouri Rivers, including the wetland habitats along their lengths, continue to be major migration routes of waterfowl as well as a host of wetland birds. The Mississippi also is a major flyway for many Neotropical songbirds.

Efforts by governmental agencies and private groups are now helping to preserve and restore wetlands in Iowa. For more information about Iowa wetlands and preservation and restoration efforts in Iowa, see [Iowa’s Wetlands](#).

Teaching Suggestions

Add an Iowa stopover between the nesting and wintering grounds. Scatter tokens, pieces of candy, etc. between the habitats to represent food the birds need to continue their journey. Spread food tokens and habitat far enough apart that students are not simultaneously running to a single spot. Students must get at least one food token before they can land in Iowa. Birds that don’t make it through Iowa sit out one round just as they do if they “die” on the nesting or wintering grounds. Some factors that might affect birds at the Iowa stopover include: drainage, wetland restoration, drought, lead poisoning from eating shot, etc.

Optional: Copy and cut the **Habitat Cards**. Shuffle the cards and draw one card before each round of the game. Change the habitat according to the directions on the card.

Extensions: 1) Have students research some of the many different animals associated with Iowa wetlands. 2) Visit an Iowa wetland during migration. 3) Learn more about Iowan J. N. “Ding” Darling. 4) Find out more about the programs to preserve and restore wetlands in Iowa and how you can help.

Teacher Aids

- **Habitat Cards** (see below)
- Poster: Aquatic Life (Contact the [Iowa WILD office](#) if you do not have)

Additional Materials

- [Iowa’s Wetlands](#) (Iowa DNR)
- *NatureScope - Wading into Wetlands*. Washington, DC: National Wildlife Federation



Migration Headache: Habitat Cards

(Portions of text from Delaware Project WILD)

<p>A large oil spill from a supertanker has severely damaged a number of salt marshes that were prime wintering areas. Remove three paper plates from the wintering area.</p>	<p>Drought has been a problem for several years in succession. Remove one plate from the nesting area and one plate from the Iowa stopover.</p>
<p>Marshes have been drained in Iowa so land could be farmed. Remove two plates from the Iowa stopover.</p>	<p>A prime wetland has just been included in a national park. Human disturbance and hunting are reduced in the area. Add one plate in the wintering area.</p>
<p>Large increases in muskrat (eat cattails, removing hiding places) and raccoon (eat eggs) populations have reduced the value of a marsh for nesting. Remove one paper plate from the nesting area.</p>	<p>Prime duck habitat has been ruined by the use of the marsh as an irrigation pond. Remove one plate from the nesting area.</p>
<p>Backwaters of the Mississippi are filling with silt. The size of open water areas for resting are reduced. Remove one paper plate from the Iowa stop-over</p>	<p>Acid rain has reduced the number of invertebrates in marshes where nesting hens feed. Remove two plates from the nesting area.</p>
<p>A large condominium development has been built on a drained marsh that was prime wintering habitat. Remove one paper plate from the wintering area.</p>	<p>Dry conditions have lowered water levels and birds are picking up old lead pellets off the bottom as they feed. Remove one plate from the Iowa stopover</p>
<p>Marshes are being reclaimed through new programs. Add two plates to the Iowa stopover.</p>	<p>A coastal resort town has annexed a nearby town containing a wetland, which it has drained to allow a tourist hotel development. Remove one plate from the wintering area.</p>
<p>A canal was constructed to remove boat traffic from a river that was used by many ducks years ago and it is returning to the natural state. Add one plate to the wintering area.</p>	<p>Water in a constructed marsh has been drawn down to speed decomposition and consolidate the bottom. Remove one plate from the nesting area for one season and then add two the next season to show improved habitat.</p>

