

# Dragonfly Pond

## Study Units

[Iowa's Waters](#); [The World in a Pond](#); [People, Land, and Water](#)

## Supplemental Information

There are “Dragonfly Ponds” all over Iowa. The most problematic pollutant in Iowa waters is silt (fine soil). Most silt is in our waters because of land use practices in the watersheds (land draining to a body of water). See [People, Land, and Water](#) resources page for information about impacts of land use on water bodies.

## Teaching Suggestions

Have students complete the activity as written. Older students can arrange the additional land uses on the **Supplemental Sheet of Land Uses** around Dragonfly Pond or create your own sheet of land uses based on those in your area. You might want students to do the **Student Worksheet** together in preparation for the activity or as individuals after the activity to reinforce the concepts. Older students: Elaborate on the impacts of land uses, especially homes and stores. Discuss the “ripple effect” of providing electricity, water, roads, and sewage disposal to these areas.

Extend the activity by doing the activity, “Watershed” and /or by including use of the EnviroScape model to demonstrate how activities in the watershed impact a pond or lake.

## Evaluation

See the **Student Worksheet** and the *Aquatic WILD* Guide.

## Student Materials

- **Supplemental Sheet of Land Uses**
- **Student Worksheet**

*Answers for student worksheet:* These may vary; the key is for students to be able to justify their answers based on ecological concepts.

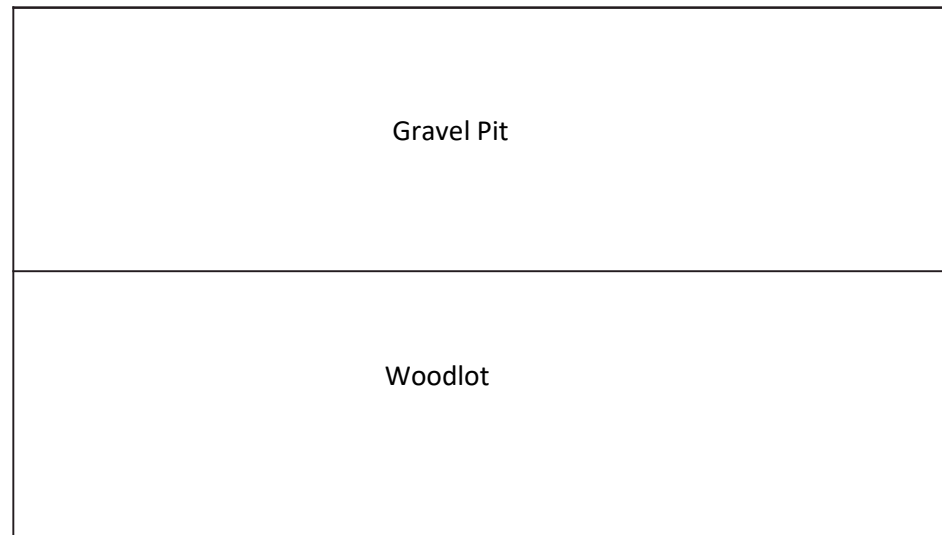
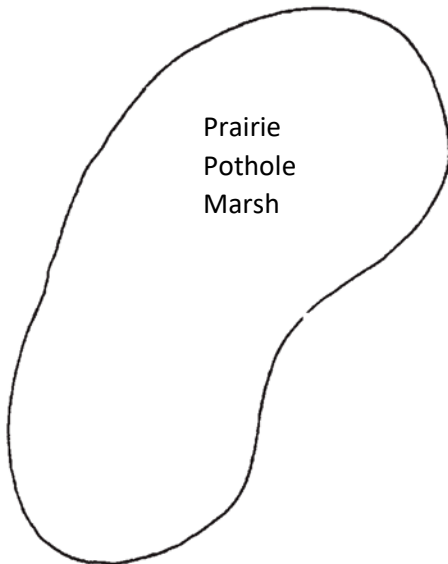
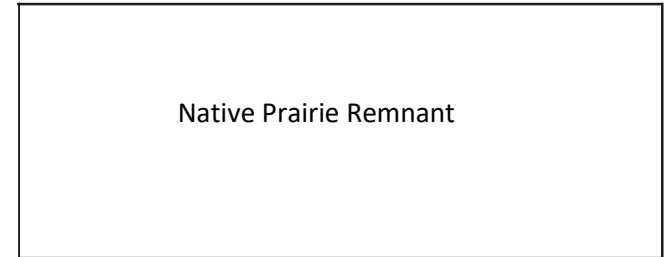
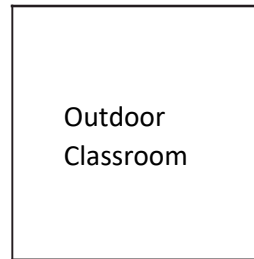
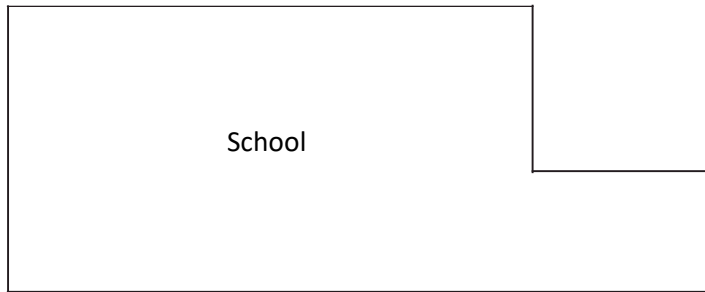
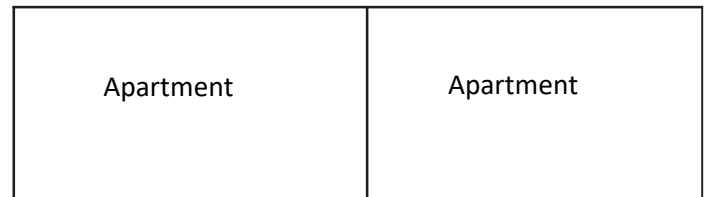
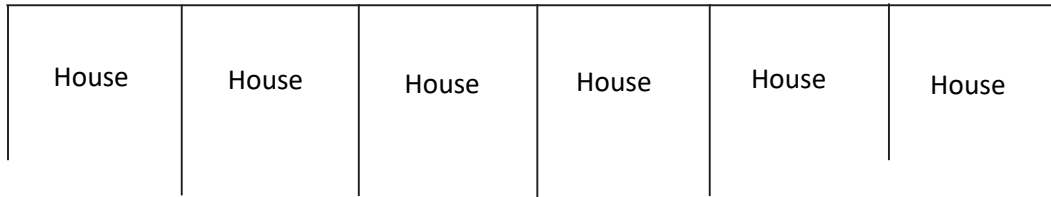
## Teacher Aids

None

## Additional Materials

**Demonstration Models** including EnviroScapes may be available in Iowa near you. Check out this [Google Sheet of what is available](#) and contact your nearest local resource!





Additional Land Uses – Dragonfly Pond



## Dragonfly Pond: Student Worksheet

1. There are “pros” and “cons” associated with all types of land uses. Put a **P** in the blank to the left of the effect of the land use if it is a “pro” (beneficial) and a **C** in the blank if it is a “con” (harmful).

Land Use	Effect
Farming	<p>_____ Soil erosion</p> <p>_____ Draining of wetlands</p> <p>_____ Produces food</p> <p>_____ Provides jobs</p> <p>_____ Run-off of fertilizers and pesticides</p>
Homes	<p>_____ Shelter for people</p> <p>_____ Loss of animal homes</p> <p>_____ Provide jobs</p> <p>_____ Use water</p> <p>_____ Produce sewage</p>
Factories	<p>_____ Provide jobs</p> <p>_____ Air / water pollution</p> <p>_____ Use much water</p> <p>_____ Loss of animal homes</p> <p>_____ Provide products people need</p>



2. List three other land uses. What are the pros and cons of each of these?

A. Land Use 1: \_\_\_\_\_  
\_\_\_\_\_

B. Land Use 2: \_\_\_\_\_  
\_\_\_\_\_

C. Land Use 3: \_\_\_\_\_  
\_\_\_\_\_

3. What are some actions that could be taken to decrease negative effects of the following land uses on our waters?

A. Factory: \_\_\_\_\_  
\_\_\_\_\_

B. Corn field: \_\_\_\_\_  
\_\_\_\_\_

C. Houses: \_\_\_\_\_  
\_\_\_\_\_

D. Gravel pit: \_\_\_\_\_  
\_\_\_\_\_

