

Ponds and Wildlife

How to Attract Beneficial Wildlife While Discouraging Unwelcome Visitors

Steven P. Smith

Providing wildlife habitat involves management or manipulation of three basic components of the environment, food, cover and water. How each habitat component is managed influences the type and amount of wildlife using the site. Natural functioning wetlands in your area provide a good reference model for predicting wildlife response to your situation.

Identifying your goals and objectives is an important step in creating pond or wetland habitat. During this planning stage, the species you want to attract or discourage should be identified. This is also an opportunity to identify potential conflicts between your objectives and wildlife that may be attracted to your pond or wetland whether you want them or not.

Meeting your wildlife habitat objectives begins with your pond or wetland design. The design considerations should include:

- Pond size,
- Number of ponds,
- Water source,
- Pond depth,
- Edge
- Vegetation management.

Pond size and number will greatly influence the amount and diversity of wildlife visiting your site. Your water source will influence the management options available to you to attract wildlife species by managing for habitats preferred by specific wildlife species or groups of species. Managing water within and among ponds and wetlands is the most effective tool for influencing species attracted to a site, controlling pests and developing food and cover for wildlife. This makes evaluating the source and availability of water critical to designing and managing your pond.

The characteristics of pond edge are another important factor in determining the habitat diversity within pond, as well as the potential for managing for or against specific species of wildlife. I prefer to design ponds and wetland habitat with "low profile" edges. Low profile edge is best described as sites with irregular shorelines, varied water depths and long slopes into the water and on to the adjacent upland.

Birds and amphibians prefer water depths less than 24 inches. Shallow water depth ensures high vertebrate production in spring & summer months, encourages a high diversity of aquatic vegetation development, and makes the food resource available.

Long slopes into ponds provide draw down and flood up zones. These zones allow wildlife to access food, cover and nesting substrate throughout the year. They also provide the pond manager with the potential to select what species of plants are Encouraged or discouraged within the pond.

Another key component of low profile edge is the design of the levee or berm used to impound water. Slopes on levees and pond edges that exceed a 1:10 slope increase the edge profile and often encourages habitat for pest species like nutria. Nutria utilize edge areas where burrows can be excavated into the bank creating dens for nesting and escape routes from predators. Traditional pond designs often built pond levees and side slopes 1:3 or greater. This creates significant upland zones above the water line called "freeboard." Freeboard areas are excellent sites for establishment of invasive non-wetland plants like blackberries.

There are numerous enhancement activities that can be implemented for enhancing the attractiveness of a pond for wildlife. Landowners should carefully weigh the affect individual species can have on their operation. If you decide to diversify habitat diversity to attract wildlife, vegetation type and structure will become important. Some vegetation features that will have significant influence on the diversity of wildlife using you pond include:

- Selecting plants based on seed production and/or invertebrate production value,
- Adding dead and down wood in and around ponds,
- Providing herbaceous plant to provide cover for ground nesting birds, reptiles and amphibians,
- Providing trees and shrubs for hiding cover, perches and nesting habitat for birds.
- Providing artificial nest structures for bats, birds and invertebrates.

In conclusion, ponds and wetlands have the capability to attract numerous species of wildlife for viewing and recreational values. Whether designing a new pond or modifying an existing pond, landowners can incorporate design features to attract or discourage specific groups and species of wildlife. Every site is unique and offers different ways to meet the seasonal or year round habitat preferences of wildlife. The bottom line is ***"every pond provides habitat for something – so design it to meet your personal needs."*** The rewards will be worth the extra effort!