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LANDSCAPING FOR WILDLIFE

I. PRINCIPLES OF LANDSCAPING FOR WILDLIFE:

Landscaping for wildlife involves some new principles which are beyond the scope of traditional landscape practices. This is because most traditional landscaping programs do not address wildlife needs. A landscaping strategy that incorporates wildlife adds new criteria based on wildlife benefits and follows these six basic principles:

A. PROVIDE FOUR BASIC NEEDS OF WILDLIFE:

1. Food- Every species has its own unique food requirements. These change with life stage and from season to season. Several types of food can be provided: fruits and berries, grains and seeds, nectar sources, nuts and acorns, browse plants (woody twigs and buds), forage plants (grasses and legumes), and aquatic plants. In addition, insects and other invertebrates are attracted to trees and shrubs. These also provide a food source for wildlife.

2. Water- The importance of water cannot be overemphasized! A water source can be as simple as a traditional birdbath, a natural or constructed creek or stream, or even a wetland.

3. Shelter- This is important for protection from adverse weather and for hiding from predators. Shelter or cover can take many forms from trees, shrubs, flowers, and grasses, to brush piles, bird houses, hollow trees, and rock piles.

4. Space- Every species has a unique pattern of space or territorial needs. These specific needs will determine how much wildlife can reasonably be expected to occupy your property.

B. FUNCTION:

The function served by plants and structures of a wildlife plan is more important than appearance. Don't base your planting decisions on whether or not a plant is "attractive." Find out if it provides good nesting or winter cover, edible food or other factors of value to wildlife. Assess each plant in terms of the four basic requirements.

C. DIVERSITY:

High species diversity is an important part of the wildlife landscape. Planting a number of different species helps to protect against drastic changes caused by plant diseases or insect pests. This also attracts a higher diversity of wildlife for you to see and enjoy. There are three types of diversity: 1) plant diversity (different plant species in the landscape); 2) structural diversity (non-vegetative structures such as feeders, brush piles, dead trees, or water sources); and 3) vertical diversity (levels of habitats- some wildlife species live

underground, others in low, bushy cover, yet others in tree tops).

D. SEASONALITY:

It is necessary to provide the four basic needs of wildlife through all four seasons of the year if you want year-long wildlife activity. For example, a landscape for song birds might consist of the following: conifers such as spruce to provide winter cover and summer nesting sites, elderberry for summer fruits, redosier dogwood and mountain ash for fall fruits, and crabapple and highbush cranberry for fruits in winter and spring.

E. ARRANGEMENT:

Habitat components need to be properly arranged or interspersed to maximize their value to wildlife. For example, a food plot with no nearby cover serves little purpose. Generally, food, water, and cover need to be located close together. It also is important to consider the direction of prevailing winds with regard to protection and to mimic nature as much as possible in the arrangement of the plants- trees and shrubs in the forest do not grow in neat rows.

F. PROTECTION:

A good plan considers how to protect wildlife from unnecessary mortality. This includes protection from the elements as well as from household pets (cats and dogs), structural hazards (picture windows or reflective glass), and agricultural chemicals (misapplied herbicides, insecticides, fungicides).

II. COMPONENTS OF THE WILDLIFE HABITAT:

There are basically 16 landscape components necessary to fulfill the major habitat needs of wildlife—8 are living plant components and 8 are non-living structural components.

A. PLANT COMPONENTS:

These are primarily organized by the season in which they provide major food and cover values. Refer to attached list for wildlife attributes of specific plants.

1. Conifers- Important as escape cover, winter shelter, and as summer nesting sites. In addition, sap, needles, twigs, buds, and seeds are food sources.

2. Grasses and Legumes- Provide summer cover for ground nesting birds, winter cover, and forage food for plant-eating animals, and seeds for seed-eating winter birds.

3. Butterfly, Bee, and Moth Plants- Provide nectar sources for adult butterflies and food for caterpillars. Consists of a wide variety of plants, including trees, shrubs, and herbaceous plants.

4. Hummingbird Plants- A good strategy is to provide a constant source of nectar from plants that bloom in early summer and in late summer.

5. Summer Fruit, Berry, and Cover Plants- Provide food and nesting cover from June through August with emphasis on plants that produce fruits and berries in the summer. These consist of a wide variety of trees, shrubs, and vines.

6. Fall Fruit, Grains, and Cover Plants- Comprised mainly of shrubs, vines, and grain crops which are of food value in the fall and also provide some shelter. Fall food sources are very important, especially for migratory birds to buildup fat reserves prior to migration and for non-migratory birds to buildup food stores for winter survival.

7. Winter Fruits and Cover Plants- Characterized as being persistent and having low appeal to wildlife when first mature. In the later case, many of these fruits are bitter when they first ripen and require freeze/thaw cycles to make them more palatable. These are extremely important to late winter survival when other food supplies are limited or exhausted.

8. Nuts and Acorns- Nuts and acorns (called mast) are very important landscape

components. They provide a significant food source for a variety of animals in fall and winter. They consist mainly of hardwoods and some shrubs. The hardwoods are especially important because they have long-term value since they are typically long-lived trees.

B. STRUCTURAL COMPONENTS:

1. Nest Boxes- Provide nesting areas which supplement natural cavities in trees.

2. Dead Trees (Snags) and Fallen Trees- Valuable for nesting and perching sites and for food sources which consist mainly of insects.

3. Brush and Rock Piles- Provide escape cover and nesting and den sites.

4. Cut Banks, Cliffs, and Caves- Natural components of a landscape, typically not incorporated into a backyard wildlife habitat.

5. Dust and Grit- Used by many birds to satisfy a variety of special needs; dust baths help to control external parasites of many birds and grit is necessary in a bird's gizzard to grind up seed and other food.

6. Salt- Provides a source of salt during the winter; this may be illegal in some states.

7. Water- VERY important; provided by a wide variety of sources such as bird baths, streams, or ponds.

8. Feeders- Provide supplemental foods to those already available from trees, shrubs, flowers, and food plots.

III. HOW TO BEGIN LANDSCAPING FOR WILDLIFE:

No matter what the size or location of your yard you can take measures to attract wildlife. Ecologists have shown that a single, minor change in a landscape can bring from 5-10 times as many birds to a yard.

A. SET YOUR OBJECTIVES AND PRIORITIES:

Decide what species or groups of wildlife that you want to attract. Be realistic in setting your expectations. Take into account your location and yard size. For example, you can decide to focus on attracting one type of wildlife such as butterflies, songbirds, or hummingbirds.

B. DRAW A MAP OF YOUR PROPERTY:

By doing this, you can identify existing features such as buildings, cables, septic tanks, trees, and vegetation that need to be considered in the landscape plan. It will also allow you to determine the direction of the prevailing wind. It is important to check the nutritional status and pH of the soil before planting new stock in order to optimize plant growth and vigor.

C. REVIEW THE 16 COMPONENTS:

Decide what components are already there, especially with respect to the type(s) of wildlife that you've decided to attract, and what needs to be added or removed. It is important to remember that most yards aren't large enough to cover all 16 components nor are all 16 components necessary. Here one can also utilize the components located in neighboring areas. Wildlife does not adhere to property lines, so it will help to be sensitive to neighboring properties.

D. CONFER WITH RESOURCE PEOPLE AND CHECK REFERENCES:

A wealth of information is available- many books, guides, and organizations can serve as important references. Garden centers are good places to observe physical characteristics and other features of the plants you may be considering for your plan.

E. DEVELOP YOUR PLAN:

Sketch a map with the plants that you intend to install. Try to include some sense of scale—remember various trees and shrubs will have different heights when full grown. Your plan should also take into account the amount of money that you want to spend and how long you want to take to develop the complete plan. It is important to consider that the project doesn't have to be

completed in one year. Many plans are set up for completion over a 5 year period.

F. IMPLEMENT YOUR PLAN:

It is important to start right now with the parts of your plan that can be accomplished in the current season. For example, during the winter, you can consider building bird houses, nest boxes, or ordering seed. If spring, start with soil preparation, ordering plants, or planting.

G. MAINTAIN YOUR PLAN:

New plantings often require extra care and attention with regard to cultural factors and pest problems. It is important to maintain plant vigor and health as much as possible since loss of leaves, berries, or plants can have an impact on the wildlife you are trying to attract.

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