#### **How to Plant and Maintain Native Plants**

#### 1. Site Selection

The site should be determined by the wildlife you wish to attract and the habitat for which your schoolyard is best suited.

### 2. Size Selection

Start with a small site or with the minimum amount of land (space) required to attract and sustain your wildlife species of choice. Enlarging this habitat can occur at a later date.

## 3. Site Preparation

Site preparation is the **most important step in a successful habitat.** A smooth, weed-free seed bed should be prepared. Eliminate preexisting vegetation by smothering, cultivating, herbiciding (be sure to check the regulations regarding the use of herbicides on public grounds) or a combination of these methods.

## 4. Seed/Plant Selection

Plants that are grown from seeds native to an area within a 50-mile radius of your site or native plant seeds raised within that same area are preferred. Native plants should always be your first choice. Always consider the mature size of the plant before purchase.

## Herbaceous (soft-stemmed plants and grasses)

For small areas, transplants develop quicker and flower sooner but are more costly than seeds.

For larger areas (greater than 1,000 sq. ft.), seeds take longer to develop into plants that produce flowers but are cheaper to purchase than plants.

<u>Trees:</u> Look for healthy specimens with one main leader, a straight trunk and white roots that are not broken, circling the container or dried out.

Shrubs: Look for healthy specimens that are bushy and branched to the ground. Stem(s) should be strong, supple and unbroken. The root ball should be soft and moist to the touch

Bulbs: Choose only healthy bulbs that have no cracks, cuts, soft spots or signs of disease.

# 5. <u>Seed/Plant Storage</u>

Until you are ready to plant, seeds should be stored in rodent-proof containers in a cool and dry location. Do not use plastic bags. Check the seed label for specific storage requirements.

<u>Plant Plugs:</u> Keep pots moist and out of direct sunlight. Transplant as soon as possible.

<u>Trees and Shrubs ("Woody" Plants):</u> These plants may be purchased as bare root (usually available only in spring), container-grown or balled-and-burlapped plants. Keep them moist, covered, out of direct sunlight and protected from drying winds. Plant them as soon as possible.

<u>Bulbs:</u> Store bulbs in a cool, dry place and out of direct sunlight (a refrigerator works well).

### 6. Planting Dates

<u>Herbaceous:</u> Transplants are best when planted in the spring. Seeds may be planted in late spring, early summer or fall. If planted in fall, they should be planted late enough to avoid germination, usually after the first killing frost.

<u>Trees and Shrubs</u>: Trees and shrubs are best planted in fall with spring as the second choice. If they are bare-rooted plants, they should be planted in the spring, immediately after purchase. Bulbs: Plant when soil temperatures fall below 60°F, generally in late October to early

November, but definitely before the ground freezes.

# 7. Seeding/Planting Rates

Planting and seeding rates vary according to the habitat and desired outcome.

Herbaceous

General: Seeds by weight: 20 lbs./acre or 40 seeds/sq. foot, if hand broadcasting

Transplants: spacing one to three feet apart

Prairies: 50 percent-70 percent grass seed and 50 percent-30 percent wildflower (forb) seeds or transplants

<u>Trees and Shrubs:</u> Consider available space and mature size (height and width).

**Bulbs:** Follow directions on packaging for desired effect.

## 8. Planting Methods

Follow the planting instructions that accompany your plant materials.

## **General Instructions**

<u>Herbaceous:</u> Water regularly for the first six to eight weeks for 15-30 minutes in the early morning.

<u>Seeds:</u> Hand broadcast, if the area is less than an acre or two in size. Use mechanical seed planting with a no-till drill for larger areas. Make sure there is good seed-to-soil contact. Use a roller or have the students walk over the site.

<u>Transplants:</u> Place transplants deep enough in the soil so that the bud/crown is one inch below the soil. Gently compress the soil around the plant. You may want to mulch with two to three inches of weed-free straw or other mulch to retain moisture and keep weeds under control.

<u>Trees and Shrubs:</u> Water slowly and thoroughly after planting and for the entire first year. Follow the planting instructions that accompanied your purchase. General instructions may be found on the "Woodland/Open Woodland (Savanna)/ Edge" section of the Habitats handout. Mulch with two to three inches of wood chips or bark, out to the drip line, but do not let mulch touch the trunk.

<u>Bulbs</u>: Keep the soil moist (about one inch of water per week during dry spells), but do not overwater.

General Rule: Plant bulbs twice as deep as they are tall. It is best to prepare the entire bed area rather than use a bulb planter. The planted area may be covered with three inches of mulch. There is no need to fertilize native bulbs. Consult specific instructions on the packaging.

9. <u>Weed Control:</u> Weeds strongly compete with your planting material for water, light and nutrients, so their elimination is essential. Shallow cultivation is recommended for weed control until planting.

### **Herbaceous**

First Year: Disturb the soil as little as possible. Cut off large weeds with shears to avoid seed drop.

- Second Year: In the spring, mow and rake off plant debris. If weeds persist, mow again in late spring or early summer but not after the plants have reached a height of one foot or more (could harm nesting birds).
- Third Year: A prescribed burning schedule can begin in early or mid-spring. Rotational burning of one-third to one-half of the area annually is recommended to preserve wildlife. If burning is not an option, mow at low setting and rake off plant debris in mid-spring. Seek professional help, if you are not familiar with the techniques and safety issues. **No students should participate in the burn.**
- <u>Wetlands:</u> Occasional prescribed burning of dry areas in wetlands in late fall or early spring is of benefit to the plant community and thus to the wildlife. One-third to one-half of the emergent plants (grasses, sedges, cattails) can be burned annually, avoiding the spring and fall waterfowl migrations and the summer nesting season.
- Trees, Shrubs and Bulbs: Removal of weeds is recommended. Hand-pulling is preferred, being careful not to disturb developing root systems. Landscape cloth is not recommended. It is better to cover the area with four to six pages of newspaper (to block out the light) and top off with several inches of mulch. Do not use herbicide. Chemical drift could seriously damage your plants and harm wildlife. Prescribed burning of woodlands is of benefit, although only half of the woodland should be burned at any one time and not during nesting season.

For further information, consult Illinois Department of Natural Resources publications or contact your county University of Illinois Extension Office.