

---

## In General . . .

- Rake and dispose of leaves away from the lake. Compost if possible. Do not burn leaves near shore. Nutrients concentrate in the ash and are easily washed into the lake.
- Avoid using herbicides near the lake, many are toxic to aquatic life.

## Fertilizing the Lawn

- If you don't use fertilizer, don't start now. If you do...
- Most lakeside lawns don't need phosphorus. Don't use fertilizer that contains phosphorus unless a soil test shows a need for it. Once in the lake, 1 pound of phosphorus can generate several hundred pounds of aquatic plants.
- Fertilizers are labeled with a 3-number system that indicates the percentage of the bag that contains nitrogen (first number), phosphorus (second number) and potassium (third number). Example: a 50-pound bag of 20-0-10 fertilizer contains 20% nitrogen (or 10 pounds), 0% phosphorus, and 10% potassium (5 pounds).
- Make sure the nitrogen is a slow-release type, such as sulfur-coated urea or IBDU.
- Use no more than 8 pounds of nitrogen per ¼-acre of lawn (¼-acre is about 100 by 100 feet).
- Don't fertilize the lawn until 3 weeks after the lawn begins to turn green in spring. If needed, the lawn may be lightly fertilized again in fall (late September through November) to promote root growth.
- When spreading fertilizer, don't allow fertilizer to land directly in the water.

## Irrigation

- Lightly water after fertilizer is applied. Too much water will cause the fertilizer to leach right past the lawn and into the lake; the turf roots will never get a chance to use it.
- Irrigation during the hot, dry period of late summer can prevent the grass from turning brown. At that time, it's better to water for short periods (10 to 15 minutes) daily, rather than heavy watering once per week.
- The best time to water is early afternoon, just prior to the hottest part of the day.

## Mowing

- Don't cut the grass too short! Near lakes, a mowing height of 3 to 3½ inches or higher is recommended.
- A general recommendation for mowing frequency is twice per week in spring, every two weeks in summer, and once per week in the fall.
- Return grass clippings back to the lawn. You can reduce the nitrogen needs of your lawn significantly by doing so. If possible, use a mulching lawn mower to aid in this process.

## Greenbelt

- A greenbelt is a strip of land along the lakeshore that contains plants to trap pollutants that would otherwise wash into the lake.
- A greenbelt should be at least 10 feet wide, but more than 30 feet wide is best.
- Don't fertilize the greenbelt.
- For a natural look, don't mow the greenbelt. Allow natural grasses and wildflowers to grow.

Guidelines are based on Michigan State University research

If you use a professional lawn care service, be sure to request a fertilizer that does not contain phosphorus.

If you don't apply lawn fertilizer to your property, don't start now! If you do, be sure to use a fertilizer that does not contain the nutrient phosphorus.

Phosphorus-free fertilizer is available from Village Hardware in Spring Lake; City Farmer and Grand Haven Garden House in Grand Haven; and Groeninks in Nunica. Commercial applicators that have phosphorus-free fertilizer formulations include True Green, AAA Lawn Care, and Classic Lawn Care in Grand Haven and Steele Enterprises in Holland. **Be sure to state you want phosphorus-free fertilizer from professional applicators.**

# Lakeside Landscaping

## Hardy Perennials

Sweet Flag	<i>Acorus calamus</i>
Astilbe	<i>Astilbe</i> spp.
Bergenia	<i>Bergenia cordifolia</i>
Marsh Marigold	<i>Caltha palustris</i>
Swamp Rose Mallow	<i>Hibiscus moscheutos</i>
Daylily	<i>Hemerocallis</i> spp.
Plantain Lily	<i>Hosta</i> spp.
Japanese Iris	<i>Iris kaempferi</i>
Red Iris	<i>Iris fulva</i>
Siberian Iris	<i>Iris sibirica</i>
Blue Flag	<i>Iris versicolor</i>
Cardinal Flower	<i>Lobelia cardinalis</i>
Snake Weed	<i>Polygonum bisorta</i>
	'Superflame'
Pickereel Weed	<i>Pontederia cordata</i>
Primrose	<i>Primula</i> spp.
Arrowhead	<i>Sagittaria sagittifolia</i>
	'Flore Pleno'
Lizard's Tail	<i>Saururus cernus</i>
Arum Lily	<i>Zantedeschia aethiopica</i>

## Hardy Ferns

Maidenhair Fern	<i>Adiantum pedatum</i>
Cinnamon Fern	<i>Osmunda cinnamomea</i>
Royal Fern	<i>Osmunda regalis</i>
Ostrich Fern	<i>Matteucia struthiopteris</i>

## Ground Covers

Ajuga or Bugleweed	<i>Ajuga reptans</i>
Crown Vetch	<i>Coronilla varia</i>
Pachysandra	<i>Pachysandra terminalis</i>
Periwinkle	<i>Vinca minor</i>

## Deciduous Shrubs

Autumn-Olive	<i>Elaeagnus umbellata</i>
Cotoneaster	<i>Cotoneaster</i> spp.
Dogwood, shrub form	<i>Cornus</i> spp.
Forsythia	<i>Forsythia</i> spp.
Honeysuckle	<i>Lonicera</i> spp.
Lilac, shrub form	<i>Syringa</i> spp.
Mockorange	<i>Philadelphus coronarius</i>
Ninebark	<i>Physocarpus opulifolius</i>
Privet	<i>Ligustrum</i> spp.
Rose-of-Sharon	<i>Hibiscus syriacus</i>
Viburnum	<i>Viburnum</i> spp.

## Evergreen Shrubs

Juniper	<i>Juniperus</i> spp.
Sheep Laurel	<i>Kalmia angustifolia</i>

## Deciduous Trees

Ash	<i>Fraxinus</i> spp.
Balsam Poplar	<i>Populus balsamifera</i>
Basswood	<i>Tilia americana</i>
Beech	<i>Fagus</i> spp.
Birch	<i>Betula</i> spp.
Black Locust	<i>Robinia pseudoacacia</i>
Crabapple	<i>Malus</i> spp.
Quaking Aspen	<i>Populus tremuloides</i>
Red Maple	<i>Acer rubrum</i>
Red Oak	<i>Quercus rubra</i>
Redbud	<i>Cercis canadensis</i>
Serviceberry	<i>Amelanchier</i> spp.
Silver Maple/Sugar	<i>Acer saccharinum</i>
Maple	<i>Acer saccharum</i>
White Oak	<i>Quercus alba</i>

## Evergreen Trees

Baldcypress	<i>Taxodium</i> spp.
Canadian Hemlock	<i>Tsuga canadensis</i>
Cedar	<i>Cedrus</i> spp.
Eastern Red Cedar	<i>Juniperus virginiana</i>
Red Pine	<i>Pinus resinosa</i>
Tamarix	<i>Tamarix</i> spp.
White Pine	<i>Pinus strobus</i>

Lakeside landscaping involves planting or preserving a zone of natural vegetation, a **greenbelt**, around the lake's edge. This vegetation acts as a buffer, trapping runoff and absorbing nutrients before they can enter the lake.

The lakefront should be landscaped to allow full recreational use of the lake and still provide water quality protection. Lawns alone do not make good greenbelts. Plant varieties should be selected that are attractive, easily maintained, and effective buffers.

To minimize the amount of leaves falling into the water, deciduous trees (i.e., trees that lose their leaves at the end of the growing season) should be planted as far from the water's edge as practical. Ideally, deciduous trees should be set back from the water's edge a distance equal to twice the mature height of the tree. Evergreens can be established closer to the lake shoreline. See list at left for some native greenbelt varieties.

