

POND CARE: PLANNING YOUR POND

Pick a fairly **sunny site** for your pond. Many aquatic plants need **four or more hours** of sunlight to achieve **good flowering**. In Kansas, morning sun is preferable to late afternoon sun. Avoid areas adjacent to deciduous trees and shrubs. Falling leaves foul the water, which can cause conditions toxic to fish during late fall/winter.

Call **1-800-DIGSAFE** or your local utility companies and have them flag any underground lines which may exist in the area.

Plan It. To plan your pond margins, **use garden hoses or extension cords** to outline the pond perimeter. Outline both the inside (water's edge), and the outside (stone's edge). **Avoid extreme curves in your design.** Allow approx. **18-24" width** for the stone margin. When satisfied with design, mark edges with flour or paint for excavation guidelines.

- Include a deep water area (24-30") for lilies and for over-wintering plants, fish and scavengers.
- Include marginal shelves (12-15") for plants which require a shallower depth of water.
- An additional shelf 18" deep and 2' wide is perfect for lotus year-round.
- Include a rock shelf, so that during the growing season one rock will be below the water to hide the liner.

Dig It. Well outside the excavation area, set 2' stakes around the pond at just less than 4' intervals. Mark 1' above desired water level on one stake. On hillsides, longer stakes may be used for the downhill side. Using a 4' carpenter's level, mark the rest of the stakes accordingly. This way you can swing the level out over the hold from any stake to measure the depths of the excavation as you're digging. (Stakes in-pond and swing lines are awkward during the "dig").

All depths should be measured relative to the stakes. **Remove only the dirt necessary** to conform to the plan. Sides should be dug at a slight angle to accommodate winter ice heaving. Build the reinforced concrete footing. Remove the forms and fine-tune the excavation, removing all stones, roots and sharp objects. Cover the floor and shelves with 1-2" of well-tamped sand or other underlayment material. Use underlayment material when necessary for rough sides. **You're ready for your liner!!**



Determine Liner Size. Measure the longest length, water's edge. At a right angle, measure the widest width. The formula below is meant for more-or-less level ground. One must adjust the formula for hillside ponds and waterfalls.

$$\text{POND LENGTH} + (2 \times \text{DEPTH}) + 2' = \text{LINER LENGTH}$$

$$\text{POND WIDTH} + (2 \times \text{DEPTH}) + 2' = \text{LINER WIDTH}$$

Line It. Carefully set the liner in the hole, giving it lots of slack. Be sure it laps evenly over the rock shelf all around. Slowly begin filling the pond. As the water rises, make folds necessary to conform to the shape of your pond. Fold away the primary view points. Several large folds are less obvious than many small ones.

Remember. Your liner serves 2 functions: 1. It keeps the water in. 2. It keeps the rest of the world out. As you lay your stone borders, **always bring the liner slightly above the surrounding grade.** This prevents soil and chemical run-off into your pond.



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