

City of Winter Park
Lakes (~~General~~)
Pollution

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Lakefronts go native

'Lakes, mud holes or lawns?' Proper plants are the key

By Tom MacCubbin

SPECIAL TO THE SENTINEL

It's out with the old weeds and in with the new as Orlando lakefronts of white sand and rampant vegetation are replanted with native plants designed to help fight pollution from the shoreline.

City workers stepped in eight years ago in an effort to undo the damage done by cat-tails, torpedo-grass and water primrose, which were filling the lakes, and algae blooms, which rob oxygen from the water, killing fish.

Eighty-four Orlando lakes are focal features for parks, homes and offices. They help create the

"city beautiful," breaking up solid land masses and offering a home for wildlife. The city owns 47 of the lakes and has replanted 37 of them. Retention ponds also are being given the green-up treatment, creating miniature wetlands to control pollution and support wildlife. "When they get low you will see more than mud," said Jack Sellers, bureau chief for the city's streets and drainage department.

Lake decline, Sellers said, is a natural process. Soil and organic residues drain from surrounding properties into the water. Gradually becoming shallow and rich with nutrients, lakes fill with vegetation, creating bog lands. "With proper water management we are

slowing up the dying process," Sellers said.

Water management includes catching refuse from street drains, aeration, reducing chemical pollutants and adding plants.

Carefully selected native plants — called weeds by many — will utilize nutrients flowing into the lakes without rapidly producing bog conditions. Their growth also is manageable and encourages wetland wildlife.

Lake beautification was the concern of some of Orlando's earliest residents. Orlando mayor Mathew R. Marks proposed in the late 1800s to beautify urban lakes left in a "weed-infested, snake-ridden state." Regrettably, the answer to lake problems often has been to strip the lake-shores of protective greenery.

People want to be good lakefront property owners but don't know what to do, said Frankee Helinger, an Orlando city commissioner and a lake-side resident.

Originally, lakefronts had plants to buffer the runoff and absorb nutrients from surrounding lawns. "We have to redo what was there. It's time

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lawns. "We have to redo what was there. It's time to decide whether we want lakes, mud holes or lawns," Hellinger said. She encouraged Leu Botanical Gardens — with help from the street and drainage department — to develop a model lakefront planting where residents can realize the beauty and basics of pollution prevention.

Lakefront vegetation consists of good and bad weeds, said Roger Cox supervisor of stormwater management. Working as a team with assistant bureau chief Hollis Hair, the first step in shoreline rejuvenation is to take out the undesirables.

Plants — native or exotic — that have grown out of control are replaced with less aggressive species. Beneficial favorites to plant are bulrushes that harbor birds, knotgrass, which is a breeding area for fish, and pickerelweed with its spikes of blue flowers.

Loblolly bay trees are planted near the water and cypress trees are established in the lakes. The trees absorb nutrients and cypress produces tannic acid, a light inhibitor that appears to reduce algae growth in the water.

Leu Gardens, which borders the southeastern shore of Lake Rowena, is getting a deluxe planting to demonstrate the great variety of aquatics available. Twenty species including lizard's-tail, Southern jointed spike rush and *Fuirena* varieties will be added to the water and banks along the shoreline. Varying the plantings adds interesting heights and densities, Cox said. The plants will be marked with labels legible from near the lake.

Planting in water is easier than in dry ground and the survival rate is almost 100 percent. All you have to do is open a hole and pop in the plants, Cox said. No fertilizer is added and water is already provided. Most aquatics are planted on 1-foot centers. Plants that like the water also should be positioned at their original growing depths.

Fed by nutrient-rich shoreline and street runoff, the vegetation grows rapidly, necessitating yearly pruning and thinning. During the winter, city crews remove dead stalks and reduce the size of the stands around the lakes. The process is repeated often during the summer when growth has been excessive. As the plants are pruned, undesirable aquatics also are removed.

Help with lakeside planting is available through the Florida Department of Natural Resources. Aquatic botanists will visit the lake site and make recommendations to help with enjoyment and pollution prevention, said Dean Barber, biological scientist for the department's office in Orlando. Residents may call (407) 423-6037 for assistance or referral to other state offices.

Florida law restricts the amount of vegetation that can be removed from lakes that are larger than 10 acres. Residents can clear a 25-foot-wide access by hand or with mechanical devices. A permit is needed to remove additional vegetation or to use herbicides. Barber said the aquatic botanist usually can work out a compromise that gives the extra sandy beach many people want by encouraging native vegetation and removing exotics.

Where additional plants will be needed Barber suggests they be obtained by thinning existing stands. This prevents the introduction of undesirable lake vegetation. Plants also can be purchased from aquatic gardens or taken from marshy roadside stands with permission from the Florida Department of Transportation. Transplanting also can be done with permission of the Game and Fresh Water Fish Commission.



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James Rump adds aquatic vegetation to the Lake Rowena shoreline.

DENNIS WALL/SENTINEL