

# Littoral Zones

THIS ARTICLE IS REPRODUCED WITH THE PERMISSION OF BEAUTIFUL PONDS

From time to time some people complain that their lake look weedy. Most of the time these weedy areas are littoral zones; shallow areas that support aquatic plants. Littoral has two meanings. The scientific meaning is any shallow area of a lake, pond, river or ocean. Siesta beach is a littoral zone, the mangrove areas are littoral zones and all shorelines are littoral zones.

These areas are particularly important to aquatic biology. They are usually the areas where immature animals live; the nursery of most aquatic life. It is the area where most fish feed and breed.

The second definition is legal. The county and state governments designate certain areas in our stormwater ponds as littoral zones. These areas are designed and excavated to be one to three feet deep.

The purpose of a littoral zone is to purify the water and maintain balanced aquatic Ecosystems. Plants in the littoral zone utilize some of the nutrients that wash into the ponds. They create quiet water so suspended material settles between their stems. Most communities have about 30% of their total lake area designated as littoral zones. All communities are required to maintain 100% plant coverage in these areas and submit a written report to the water district every four years. Littoral zones that are not fully covered, or contain 15% exotic / invasive plant species must be re-planted at the community's expense.

Many developers fail to tell their customers that some lakes have littoral zones. This often creates conflict when the developer plants the littoral zones during the final stage of construction and tall aquatic plants cover these areas. What was once open water is now a swampy looking mess.

## **Plants and environmental health**

Some people think that lakes with no plants are desirable. All scientific agencies dealing with lakes agree that healthy lakes in Florida are covered 30 – 50% with aquatic plants. Some of these plants can be underwater plants that are not easily seen. But many of these plants are shoreline type plants that rise up out of the water 1.5 to 10 feet.

## **Too tall plants**

While almost any native plant is beneficial environmentally, some plants are not particularly aesthetically pleasing. The most common complaint is plant height. Some communities have planted species that grow five to 10 feet tall. The plants meet the legal requirement and are valuable environmentally. However they may block a view. If you are interested in making your littoral zone more attractive consult an environmental specialist and the government agencies that regulate your littoral zone. The penalties for unauthorized work can be surprising costly.

Some of the more attractive flowering plants include the following:

Pickerelweed, Pontederia Cordata – bad name but a two foot tall plant with blue flowers and dark green leaves

Arrowhead, Sagittaria Lancifolia – a little taller than Pickerelweed, with white flowers

Fragrant water lily .

These plants meet the littoral zone requirements, but are low growing and flowering.