

Excluding non-native walking catfish (*Clarias batrachus*) from fishponds

This species was introduced into the United States in the early 1960's from two points in southern Florida. Finding the many hundreds of miles of interconnected canals in south Florida to be a veritable highway for dispersal, the species has effectively invaded the entire southern peninsula of Florida, including portions of Lake Okeechobee.

These catfishes live in ponds or temporary pools, some of which may disappear in prolonged dry spells. When this happens the walking catfish buries itself in mud at the bottom of the pond and remain dormant throughout the dry season until the rains return.



Walking Catfish – courtesy U.S. Geological Survey

The walking catfish is able to move on land by the use of its pectoral fins in shuffling snake-like movements. It is able to breathe air with the use of specialized breathing organs opening off the gill arches. These are sac-like structures containing many-branched extensions, well supplied with blood vessels for respiration. The walking catfish has scaleless skin liberally supplied with mucus, which protects the fish when it is out of water. It has been noted that areas along the Tamiami Trail in Southwest Florida become very slick from crushed walking catfish killed by traffic while crossing the highway.

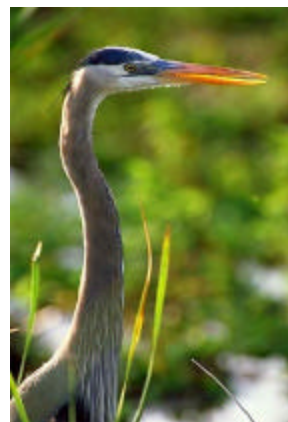
Walking catfish consume a wide variety of prey including insects, eggs or larvae of other fishes,

small invertebrates and fish. They are voracious and indiscriminate in their choice of prey items. Their indiscriminate appetite is the major reason that exclusion from fishponds is desirable.

A strong correlation between spawning and the wet season appears to be true for the non-native populations of walking catfishes in South Florida. This is when they become most active and are observed by humans.

Exclusionary methods

The Blue Heron (*Ardea herodias*) is a natural predator of the walking catfish and may help to keep the species in check. While it may be desirable to lure the Blue Heron into areas where walking catfish is a potential problem, it is unwise to feed wildlife birds by hand.



The Blue Heron, -SFWMD

To physically exclude walking catfish from a pond, a fence should be constructed. A fence height of 2 feet will also keep out other undesirable species such as toads.

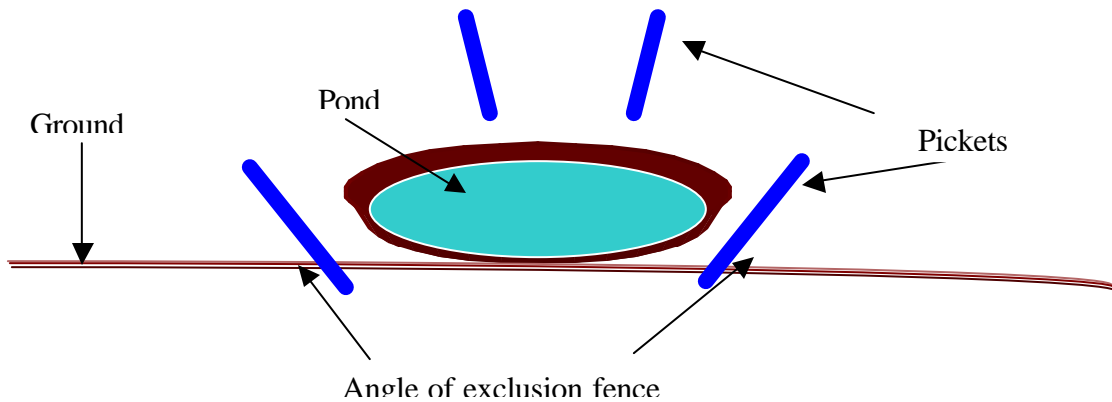
Materials required:

- Several 3 ft. wood or metal pickets
- Staples or tying wire
- Shade-cloth or fly-screen material

The fence should be installed as follows:

1. Mark the path of the fence by sprinkling a line of powder or sand around the pond.
2. Dig a trench 8 inches deep under the entire fence line.

3. Hammer the pickets (1 ft. deep) into the bottom of the trench at 6 feet apart. Ensure that the pickets are driven at a slant so that the fence forms an acute angle on approach to the pond.
4. Attach the shade cloth to each picket starting from the last picket and moving to the next in order, ensuring that the shade cloth is pulled taut between each picket. The bottom of the cloth should drape neatly down into the bottom of the trench.
5. Overlap the shade cloth at least six inches where it meets at the end of the circular fence, sewing the two pieces of cloth together with fishing line or yarn.
6. Fill back the soil on both sides of the shade cloth so that the trench is filled and even with the soil level.



References:

- *Robert H. Robins - WALKING CATFISH*
([/www.flmnh.ufl.edu/fish/Gallery/Descript/WalkingCatfish/WalkingCatfish.html](http://www.flmnh.ufl.edu/fish/Gallery/Descript/WalkingCatfish/WalkingCatfish.html))

- *Rather not kill toads? Keep them out:*
<http://www.fdrproject.org/pages/TDexclude.htm>

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