

News from the Watershed

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A delicate balance: the Everglades Snail Kite and the Florida Apple Snail

The Everglades snail kite, a hawk that soars through our southern marshes, has a diet that consists mainly of the Florida apple snail. This medium sized hawk has a wing span of about 45 inches and a slender, hooked beak. Preferring an area that is a relatively open freshwater marsh, its diet requires adequate populations of apple snails. In addition, they require some brush and trees where they can perch and nest. The water level must be sufficiently stable to prevent loss of the food supply through drying out of the surface. Unfortunately, drainage of some of the marshes has destroyed many of the areas that the hawk and apple snails would normally dwell.

Another problem for the Everglades kite is that many of the marshes are covered with water hyacinth. The kites feed by sight and must be able to visually see the snails in the water. Therefore, when the water is covered by these invasive plants, the area is useless to the hawk that is so dependent on these snails for food.

The Florida apple snail is the largest freshwater snail in North America and gets its name from the large, rounded shell that houses it. These snails are unique in that they have both a gill and an air sac that functions as a lung. They lay their eggs in clusters on a solid object above the waterline usually in April or May. In order for the apple snail to reproduce, they require water depths of 4-8 inches. So if the water level is low, the reproduction process could be eliminated for the year.

Although, there are three species of apple snails in Florida, only one is native. The Florida apple snail is distinguished from the others by its low, rounded shell spike.

In contrast to the native snails, the invasive varieties feed on many types of aquatic and terrestrial plants. One of the favorite foods of channeled apple snails (the exotic kind) is rice and it is considered a serious problem in many areas. In addition, they can host the rat lung worm that can be problematic to humans. These species can survive out of water and can hibernate in the mud during the cold months.

As you can imagine, this is a problem for the Florida apple snail, since the invasive variety is in competition for food and space. The Everglades kite will not eat the channeled apple snail, and therefore, it is an even bigger problem, as the exotic snail has few if any natural enemies. In addition, the channeled apple snail will continually eat the native vegetation in an area, even until it is gone, leaving little for the native snail to feast on.

The Florida apple snail also contributes as a food source for other creatures such as turtles, fish, alligators and wading birds. The value of this snail is not only its uniqueness, but that it is the favorite food of the Everglades kite. Like everything else in nature, it is all a delicate balance. One species depends on another for its survival. Thus, just looking at the scenario of the Everglades snail kite and the Florida apple snail, we see that in order for both to survive, we

must conserve our marshes for their habitat, their food sources and their feeding grounds. Who would have thought that a snail the size of golf ball could be so important? For more information on environmental and agricultural issues, please visit our website at www.highlandsswcd.org or give us a call at (863) 402-6545.