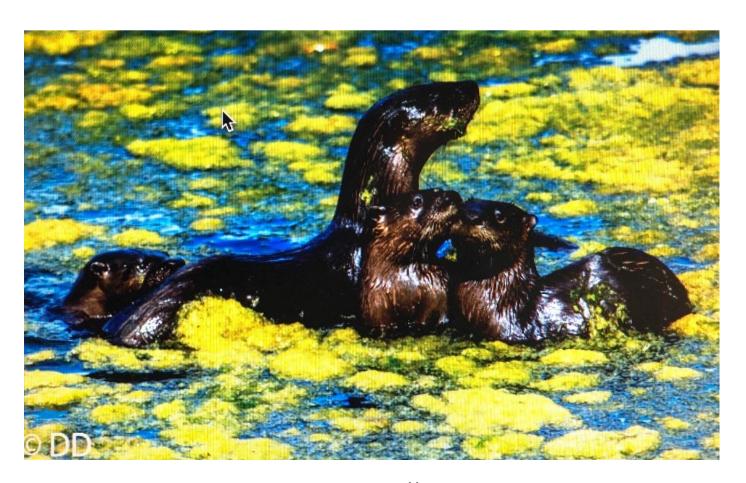
A Guide to the Do's and Don'ts Living with Otters in South Florida



Presented by:

River Otters of South Florida

ROSF



The Mission of the River Otters of South Florida website is:

To aid our understanding and interest in the biology, behavior, ecology, and the conservation issues impacting the river otter in Florida, in particular south Florida, and to help educate ourselves, our children, and others about otters worldwide.

www.riverotterssouthfl.com

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I. Introduction

The River Otter lives throughout Florida and should not be confused with the Sea Otter of the eastern and western coastal waters of the north Pacific Ocean. River otters are a common mammal resident of the inland freshwaters and in the coastal bays of south Florida and are frequently seen and encountered by people like yourself. If you have an



Sea Otter (Enhydra lustris)



North American River Otter (Lontra canadensis)

interest in wildlife and live in South Florida you may already know this. If you happen to live in a residential community, near a major river or stream or live in a community designed with a series of lakes and ponds, you are probably quite familiar with the otter's presence near where you live. You'll see them in the drainage ditches and canals. You'll see them while boating in a river or kayaking in a stream or in open water. You'll see them in the drainage ditches and canals along the roadside or you may even see them crossing a roadway. You'll see them in saltwater bays and estuaries protected by barrier islands such as Estero Island (Fort Myers Beach) and the Sanibel-Captiva and Cayo Costa island chain in southwest Florida, and many other aquatic environments throughout Florida. When river otters are present in your community or you encounter them in other places you visit there are certain things you should not do and some things you can do to have an enjoyable experience when in the presence river otters.

To provide you with a safe and enjoyable experience with river otters in south Florida this "Guide to the Do's and Don'ts of Living with Otters in South Florida" was created. What you will notice, right-a-way, in this "Guide" is the "Don'ts" are mentioned first. This is done intentionally. By following the "Don'ts" you will ensure you and your family, friends, and pets have an enjoyable and safe experience in the presence of the otters you encounter. And, then you can enjoy in engaging in the "Do's". It should be beneficial for you to know some natural history facts about the river otters sharing the same environment as you.

II. Some River Otter Life History Facts

A. River Otter Habitat: The typical environment inhabited by the North America river otter is the Riparian Zone. The Riparian Zone is where woodlands and the flowing waters of streams and rivers meet.











In addition to river otters inhabiting the riparian zones of south Florida they are also found in various other habitat types throughout south Florida. These habitats either contain impounded water or are located close to other habitats that are close to flowing waters, canals, or drainage ditches. These non-riparian habitats include rural areas of grasslands, woodlands, swamps, marshes, and bogs. The river otter of Florida may live within or routinely visit residential communities that are gated and fenced or unfenced. River otter sightings in gated communities that have been recorded by this author are extensive and suggest some biological and physical characteristics of design of the gated community must enhance otter presence in these communities. River otters spend time in streams and rivers and, in south Florida at least, in and around the ponds and lakes in your residential community and are frequently seen in or near the water hazards on golf courses and crossing fairways to get to another nearby water hazards. They are seen walking between homes or catching and eating a fish or turtle-sometimes right on the edge of the pond behind your residence.

B. The River Otter Diet: The North American river otter's diet varies with the seasons and availability of prey. Fish are the most prevalent prey of the river otter followed by crayfish. Slow moving, bottom-dwelling fish species are the most prevalent types of fish eaten by the river otter. These include the suckers, carp, and bullheads and catfish. Sunfishes are common fish species eaten in various regions while gamefish, such as largemouth bass, seldom appear in the diet of the North American river otter.









Golden Redhorse Sucker

Grass Carp

Brown Bullhead

White Catfish

The river otter also eats a wide variety of other vertebrate prey species and some invertebrate species. These include amphibians, reptiles, birds, insects, snails and clams and even some mammal species.

C. The River Otter Family and Social Groups: The first social group is composed of the female and her pups and is the predominant social group. The male is not an integral part of the family unit and is only with the female when she is reproductively receptive. A second social group that occurs is the female and a "helper" and the pups and possibly a "helper" alone with one or more pups. The helper may be one of the female's immature male or female offspring from the previous litter or the litter before that. A third social group would contain the adult female and her pups and an adult male. In this latter group a helper may also be present. A fourth social group would be the bachelor group. Bachelor groups have been observed in coastal marine otter populations of western and northwestern North America as well as freshwater of North America.

D. River Otter Reproduction:

- 1. Sexual Maturity: Both the female and the male North American river otter are sexually mature at approximately 2 years of age. Females may not breed when they are first mature and may not breed every year. It has been noted that even though a male is sexually mature at two years of age they may not successfully breed until they are five to seven years of age.
- 2. Breeding Period and Activity: The North American river otter is polygamous which means they will mate with several other partners. Females are in "heat" for 42-46 days. Unless the female has been bred they will be receptive every six to seven days during the heat period. In southern Florida, this author suspects otters breed in late fall shortly after the end of the rainy season. The National Weather Service in Miami has designated May 15th to October 15th as the rainy season for south Florida. It is being suggested that breeding occurs from mid or late November through December. This suggestion requires confirmation from several observers rather than a single individual having observed otters breeding in late November through early December. Breeding has been observed to occur in the water as well as on land. The male grasps the back of the female's neck when breeding and loud vocalizations have been heard by some observers. Copulation may last from 15 or so minutes to near 75 minutes and may be interrupted by periods rest. The female may caterwaul during or shortly after copulation.

III. Otter Roadway Mortalities

Roadway mortality from motorized vehicles is probably the most prevalent factor in reducing otter populations in southern Florida. South Florida has extensive urban residential development. Along with high human population densities high densities of





motorized vehicles occur on roadways. During the time of the year when the mother otter is rearing her pups the otter family is frequently exposed to vehicular traffic mortality. It would not be uncommon for the mother and one or more of her pups to be struck by a motorized vehicle as they cross a roadway single file and in close contact with one another (personal observation).



Probably the most significant impact on otter populations by motorized vehicles are the roadway mortalities of adult males during the south Florida November and December breeding season. This is the time of the year when seasonal residents and their motorized vehicles are present in large numbers. During the breeding season the male travels through the territories of several females and breeds with these females. Otters are induced ovulators, i.e. they must breed several times during the breeding cycle before the female can ovulate. Should the male become a roadway mortality, as he travels through the females' territories, those females will not be bred and no offspring will be born the coming year. This scenario has a very significant impact on the future of an otter population in any given region in south Florida.

IV. River Otter Attacks on People

A. Otter attacks on people in Florida (1875-2019):

1. <u>Known Historical Attacks from 1875-December 2010</u> (Belanger, M. et al, 2010): In 1980-1989 two out of the three (66%) river otter attacks on people that occurred in North America (NA) occurred in Florida, of the 13 river otter attacks in 1990-1999 six

occurred in Florida (46%), in 2000-2009 five (29.4 %) of the 17 attacks occurred in Florida, and in 2010 only two (100%) known river otter attacks occurred in NA and they both occurred in Florida.

- 2. <u>Recent Attacks in Florida from 2011-mid 2019</u>: An internet search for river otter attacks on people in Florida, by this author and based on news media reports, revealed two attacks occurred in 2011, three occurred in 2018, and three occurred in Florida as of mid 2011.
- 3. <u>Literature Cited</u>: Belanger, M., N. Clough, N. Askin, L. Tan, and C. Wittnich. (2011). A review of violent and fatal otter attacks. *IUCN Otter Specialist Group Bulletin*, 28(10): 11-16.
- **B. Some Thoughts on Why Otters May Attack**: No direct evidence exists to specifically state why river otters attack humans. The mostly likely reason, particularly in south Florida, is the potential for human-otter contact where otters are frequently present in areas of highly concentrated human populations. The human population in Florida has significantly increased over the past half century (no population statistics were examined). In southwest Florida one need only consult aerial photographs, of residential community development, to realize how much area has actually been created for human habitation. This author has been recording river otter presence in southwest Florida since early 2011. The majority of the sightings reported have been within residential communities-particularly communities designed to include artificial lake and ponds.

Other potential reasons for otters attack on humans could include human encroachment into river otter territories. Territorial defense by the North American river otter, against other otters, has been suggested not to exist. The thought is, the otters' scent marking behavior of specific areas "signals" unrelated otters that the area they have entered is that of another otter, more specifically a female, and "they" are not welcome. Consequently, no "strange" otter entry, no necessity for physical conflict. However, what about humans entering the females' territories? When the female is reproductively receptive, i.e. "in heat" a male is invariably present or nearby. He's going to defend his access to this female. When the female is with her pups and a human gets too close she may choose to move away from the presence of humans. This is probably the most likely choice of the mother otter. However, if the human presence occurs suddenly, which could occur with boaters or kayakers, the female would probably defend her pups immediately. In summary, high human density and activity, in man-made or natural environments + extensive otter distribution in these environments = river otter attacks on humans as well as pets.

C. Photos of Injuries Sustained by Victims of Otter Attacks: Humans attacked by otters can receive minor injuries or severe, life-threatening injuries. Otters have been documented as attacking humans on land but, attacks in the water are far more prevalent.







D. What You Need to Do and Know to Insure Your Health Is Not Compromised Should You be Attacked by a River Otter and Sustain Injuries: Whenever a person sustains a bite wound from any animal they should see a doctor as quickly as possible. This would normally require the victim go to the emergency room of the nearest hospital. It is extremely important that the victim advise the attending physician if they have an allergy to antibiotics, such as penicillin. It is also important for the victim to know that rabies has been diagnosed in some river otters in North America.

The information, stated below, is quoted directly from the following publication: Cheng, M.P., L.O. Parkes, K. Paquette, and C.P. Yansouni. (2016). River otter bite in a 52-year-old woman: managing animal bites. *Canadian Medical Association Journal*, 188: 17-8.

"Antibiotic prophylaxis after an animal bite is indicated for clinically significant wounds and for patients who are immunocompromised. Primary wound closure is routinely indicated only for facial wounds.

Tetanus prophylaxis should be administered for any bite wound that breaks the skin if the patient has not received previous doses of the tetanus toxoid, if the vaccination history is unknown, if the most recent dose was administered more than 10 years ago, or if the most recent dose was administered more than 5 years ago and the wound is severe.

Rabies prophylaxis must be considered for all patients with mammal bites, particularly if there was unusually aggressive behaviour. If rabies immune globulin is given, it should be instilled around the bite wounds (if anatomically possible), with the vaccine being administered at a remote sight."

E. Reporting an Attack on a Person or a Pet to the River Otters of South Florida website (ROSF): To report an otter attack on a human or pet you will need to visit the River Otters of South Florida(ROSF) website at www.riverotterssouthfl.com. On the Home Page click the tab entitled Otters and People and scroll down the page. You will see two yellow tabs in the lower left corner. Choose which "Report" you wish to use and click on that tab. A form will then appear. Just add the information to the white boxes and, when completed, click the "Submit" button at the bottom of the form.

V. The Do's and Don'ts

A. The DON'TS

The "Don'ts" are mentioned first. This is done intentionally. By following the "Don'ts" you will ensure you and your family, friends, and pets have an enjoyable and safe experience in the presence of the otters you encounter.

1. READ AND TAKE SERIOUS THE "DON'TS" OF LIVING WITH OTTERS IN SOUTH FLORIDA

- 2. Don't ignore warnings from others that otters can be dangerous
- 3. Don't ever think otters are harmless or friendly
- 4. Don't approach an otter on foot or in a boat, canoe, or kayak
- 5. Don't approach an otter or try to get a "better look" at an otter that has pups or may appear to you as injured or acting "strangely"
- 6. Don't try to get close to an otter to take its picture-use a telephoto lens!
- 7. Don't allow a child or a pet to approach an otter
- 8. Don't try to attract otters to yourself or anyone else at any time
- 9. Don't have a child or a pet with you if you decide to try an attract an otter
- 10. Don't feed otters
- 11. Don't allow a child or pet outside if you see an otter nearby
- 12. Don't take children or pets to areas where you know otters have been seen in the past-unless you are in the protection of an enclosed vehicle
- 13. Don't walk your pet close to the water's edge if you see an otter in the water-take your pet somewhere safe before you return to look for the otter
- 14. Don't allow your pet off a leash should you see an otter
- 15. Don't ignore going to the doctor if your or someone else was attacked and injured during an otter attack
- 16. Don't ignore taking your pet to the veterinarian if it was attacked by an ottereven if you see no visible injuries

B. The DO'S

- 1. Otters can be dangerous: Realize otters can be dangerous and may attack people and pets
- 2. Contact your local health department and report any river otter or any other animal attack that may happen to you or anyone else, especially children!
- 3. As stated previously, go to the doctor-preferably the Emergency Room
 - a. You and/or your child, if attacked, are to seek medical attention as quickly as possible for an examination and treatment of any injuries sustained in an attack by any wild animal
 - b. Ask questions of your doctor about your treatment

- 1) It is important to ask the doctor if you are going to be treated for rabies
- 2) Ask the doctor which medications you need to take because of this attack. Tell the doctor if you have any allergies to antibiotics, such as penicillin
- 3) Ask the doctor to whom this attack will be reported
- 4. Support continued fish stocking in your community: Convince your community leaders and other residents to absorb the cost of fish stocking and otters eating the fish. This would require you and your other community residents to possibly pay more for fish being stocked.
- 5. Support habitat enhancement to encourage otter presence in your community
- 6. Learn more about otters by visiting this website: www.riverotterssouthfl.com
- 7. Encourage the presence of otter scientists in your community: Support granting access to your community for otter scientists and their volunteer assistants to conduct scientific investigations on the river otters in your community
- 8. Volunteer with the River Otters of South Florida (ROSF) to help others learn more about river otters in south Florida
 - a. Become an Otter Spotter (otter scientist volunteer): An Otter Spotter collects information on otter presence and activities in residential communities and all other areas of south Florida. Knowing about the presence and activities of otters in various types of residential and non-residential areas will help people to better understand otter behavior and help us learn how otters and people can live in harmony
 - b. Become an Otter Information Surveyor in your community:
 - c. Become an Otter Information Distributor in your community:
 - d. Encourage the youth in your residential community and local middle schools to become a Junior Otter and encourage senior high school students to also become an Otter Spotter
- 9. Participate in periodical surveys about otter presence and activities in your community
- 10. Enjoy the times you see river otters and other wildlife in and away from your Community
- 11. Invite a river otter scientist to be a speaker (see NOTE below): Invite a river otter scientist to speak to your community residents, special clubs or groups, and special or routine meetings held for your employees. The author listed below, is the primary otter scientist providing lectures on otters for the River Otters of South Florida (ROSF) website. If you are interested in having this individual speak to your organization visit the ROSF website at riverotterssouthfl.com. On the Home Page, you will need to click the tab entitled Education Programming. When Education Programming opens scroll down to the orange tab entitled Lecture About River Otters. Below this tab are two yellow tabs. If you would like to know the subject

matter in the otter lecture click the yellow tab on the left entitled Lecture Content. If you would like to schedule a lecture, close the Lecture Content tab. Now, click the yellow tab on the right entitled Form to Request Lecture. Complete the form and then click the "Submit" button.

NOTE: Otter lectures are only presented in the following southwest Florida cities: Ft. Myers, Ft. Myers Beach, San Carlos Park, Estero, Bonita Springs, and Naples

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