

Beach Driver Training - Reducing impacts to wildlife while driving on the beach

Provided by: Coastal Wildlife Conservation Initiative (CWCI) Northeast Working Group



Transcript:

Slide1

Thank you for taking the Coastal Wildlife Conservation Initiative's Beach Driving Training for Northeast Florida.

Slide2

Why do we need this training? Knowing the proper protocol for beach driving can keep beach users safer and reduce impacts to wildlife. Understanding wildlife, laws and regulations, and impacts can improve the survival of many species. Knowing what to do when encountering these species can also help reduce negative impacts. And being trained and knowledgeable makes you a valuable conservation and education resource!

Slide 3

Some of the protected species in our area include sea turtles. We have 3 species of sea turtles that nest on our beaches and 2 additional species that are found in area waters. All sea turtle species are either federally listed as Threatened or Endangered. All of these species are protected through both federal and state regulations. Sea turtle nesting season occurs from May 1 through October 31, but it is not uncommon for turtles to start nesting before these dates or for nests to hatch out later than these dates. Generally, nests are laid and hatch-outs occur after dark, but daytime emergences do occur and are not completely uncommon in the area.

Slide 4

The first species, and the most predominant species in our area, is the loggerhead sea turtle. This species is federally listed as threatened. Ninety percent of Loggerhead nesting that occurs in the United States takes place in Florida, meaning that this area is very important to the global population of Loggerhead turtles. Adults of this species are 2 ½ to 3 ½ feet long on average and on average weigh about 250 pounds. Loggerheads usually nest from April to September, but can start earlier and incubation can often last until November.

Slide 5

The next species is the green sea turtle. The Florida population is federally endangered. Adults of the green sea turtle are about 3 feet long and weigh up to 350 lbs. Often times you can tell the difference by their much more round-shaped shell and their smaller head from the Loggerhead. This species usually nests from June to September but can start nesting earlier, and incubation can last until November.

Slide 6

The third species that nests on our beach is the leatherback sea turtle. As you can see by the bottom right picture, leatherback sea turtles are extremely large. Adults are about 6.5 feet long and can weigh up to 2,000 pounds. This species is federally endangered, and they usually nest a little bit earlier – from April to June, but they can start nesting earlier than that. This year, in 2012, a leatherback sea turtle nested on March 24th, showing that these species can go outside of our typical range of nesting dates. This is the largest living reptile in the world, and Leatherbacks have been known more than other sea turtle species to nest during the day.

Slide 7

The nesting process for a female sea turtle is a long process. The female crawls up on the beach, past the high tide line, and often times may even go into the dune. At this point, if the female is disturbed while making her way up the beach, she will often abandon the nesting attempt and return to the sea. Sometimes an abandoned nesting attempt can result in her dropping her eggs onshore or at sea, meaning that that nest will never get laid. It is really important to try not to disturb females while they are first making their way up to the beach and during the entirety of their nesting attempt. If the female finds an acceptable place, an egg chamber is then dug with the back flippers and approximately 100 eggs are deposited. Using her front flippers, she then covers the nest with sand. This process oftentimes disguises her. The female will make a body pit where she will be laying low in the sand, and covering the nest with the sand will also cover the back of her body. This is the point where she is very vulnerable by being run over by vehicles, as she is extremely difficult to see.

Slide 8

Eggs are incubated within the nest for around 60 days, and during incubation, nests may be vulnerable to sand compaction and predation. Sand compaction can occur for a variety of reasons, including vehicular traffic. Hatchlings generally emerge at night (but can emerge during the day), and the majority of the hatchlings will come out all at once. However, over the course of the next two days, other hatchlings toward the bottom of the nest may continue to emerge. Daytime emergences can occur, especially during cloudy or stormy weather.

Slide 9

Once hatched, sea turtles crawl towards the ocean. Hatchling and adult turtles orient towards the brightest light. In nature this would be the reflection of the moon or the stars on the water. However headlights, house lights and other artificial sources of light can lead them in the wrong direction. Disorientation can often be seen in adult turtles by large circles made on the beach (wandering) and in hatchling turtles by tracks going towards the dune or other artificial light sources. Once in the water, hatchlings will swim for several days and settle in floating seaweed beds.

Slide 10

So, what to look for on the beach to see if a turtle is nesting: Sea turtle tracks look like a single tractor tire coming up and going back to the sea. They often times cross over each other. Females can be difficult to see during and after a nesting attempt as they get covered in sand and lay in a “pit” during

nesting. Hatchlings are about the size of a silver dollar and can easily fit into the palm of a hand, making them and their tracks extremely difficult to see.

Slide 11

Some of the dangers for turtles include tire ruts left by cars and ATVs. These pose a barrier to hatchlings which can get stuck in the ruts and exhausted while trying to get out. Adults and hatchlings can be very difficult to see, especially at night, and may get directly run over by a car or ATV. Compaction of sand on turtle nests may reduce survival or collapse egg chambers. Artificial lighting may confuse turtles and lure them in the wrong direction or towards danger. Seaweed washed ashore during storms may contain hatchlings who are vulnerable to the same dangers. Activity, lights, and sound can cause females to abandon nesting attempts.

Slide 12

To reduce impacts on sea turtles, we have some beach driving recommendations. Routine patrols should not be done at night during nesting season. Do not drive at night unless it is absolutely necessary. If you do have to patrol the beach at night for an emergency situation, please notify others when the beach has been patrolled to avoid multiple cars on the same area. Driving at night during nesting season could make you liable for take. Take is indicated by the FWC to be death or injury to a state or federally protected species. This can include sea turtles and migratory birds. In emergency situations when driving at night is necessary, headlights should be kept on the lowest setting, or when possible a spotlight with red film cover should be used. Red Saran Wrap works great for this purpose. When entering the beach, please use only designated beach access points. These points are generally cleared of sea turtle nests, if they are regular drive-on ramps.

Slide 13

Tire pressure is important to reducing the compaction of sand. Tire pressure should be reduced to 10 psi for ATV and to 15 psi for cars to reduce tire ruts and sand compaction. Please remember to increase your psi once you leave the beach to a safe driving pressure for roads. Tire ruts should be removed by raking where nests are present prior to nightfall. If these tire ruts are removed and a sea turtle nest hatches out, this will prevent hatchlings from getting stuck while moving toward the ocean. Your speed should not exceed 10 miles per hour on the beach, particularly while driving at night. Stop occasionally and scan the beach up ahead to see if you can see any activity. Always drive below the high tide line. Above the high tide line where the sand is softer is where these animals may be more vulnerable to your driving activities. Driving below the high tide line allows things like tire ruts to be washed away during the next high tide. Do not drive through the "wrack" line. The wrack line is a seaweed bed that has washed ashore. This is not only a place for sea turtle hatchlings, but it is also a place where shorebirds and shorebird hatchlings may feed. Do not drive up to, park near, or drive over a nest. Sand compaction in or around nests can collapse egg chambers and make it difficult for hatchlings to get out. Do not drive through or over turtle tracks. These tracks are really important for the patrols, which they use to identify which species has nested and what occurred during that nesting attempt. Never drive near or in the dune vegetation. This vegetation can often be where adult sea turtles or birds are hiding or having their nests made.

Slide 14

So what should you do if you come across a turtle? If you see a female turtle coming ashore, please turn off all your lights and remain still until egg laying begins. This can take some time, but if the female is disturbed during this time she will return to the ocean. If you need to exit the beach, do it slowly, quietly and carefully, returning to the nearest exit without crossing the turtle's path. This means backing away the car, and it should wait until after the nesting begins. If a daytime turtle event happens, maintain a perimeter around the turtle and keep beachgoers at least 20 feet away. Stand off to the side and never get in front of a turtle. Call your local turtle patrol if you have that number or call the FWC hotline at 1-888-404-FWCC, and they will contact somebody in your area. Washbacks or hatchlings that have been washed ashore do not need to be put back into the water. These hatchlings can often be exhausted or sick. By returning hatchlings to the ocean, you are not increasing their chances for survival. Please call FWC immediately for instructions on washback protocol if you should find hatchling turtles ashore.

Slide 15

If you find a stranded sea turtle (dead or alive, sick or injured), please call the same number at 1-888-404-FWCC. When you call this number, please be prepared to answer the following questions: What is the exact location of the animal? Is the turtle alive or dead? What is the approximate size of the turtle? Is the turtle marked with spray paint? (This spray painted "x" on a turtle indicates that it is deceased, and that it has previously been documented by FWC.) What is the location of the closest access point to the turtle? (This is extremely important if the turtle is sick or injured, so that FWC can access it as quickly as possible. If the turtle is alive, please be prepared to stay with it until help arrives.

Part 2: Shorebirds

Slide 16

Other protected species in our area include shorebirds and seabirds, which use our beaches to nest. The least tern is threatened on the state level. It can be identified by a gray upper body, a white under body, a yellow bill, and a black cap. These birds nest in colonies on open beaches. Chicks and eggs are camouflaged, and flightless chicks may begin to leave the nest a few days after hatching. Chicks move between colony and the water's edge, often by themselves. These birds are extremely sensitive to disturbance. They nest from April to August.

Slide 17

The black skimmer also uses our beaches to nest. This is a species of special concern for the state of Florida. Its black body with white neck and face are easily distinguished by the orange and black bill, the lower half of this bill being longer than the top half. These birds also nest in colonies on open beach, and flightless chicks of this species also begin to leave nest a few days after hatching. Chicks and eggs, like all shorebird species, are very well camouflaged in the sand and easily missed. This species nests generally from May until August.

Slide 18

Wilson's plover is a monitored species, although it is not currently. This bird is protected by US Migratory Bird Treaty Act and state Wildlife Code, which means even though it is not federally or state listed, you can still be liable for take of this species. Nesting occurs from April to July. A dark neck ring around the neck, grayish-brown upper parts, and white underside, coupled with flesh-colored legs and a breast band that is brown or black, distinguish this species. The Wilson's plover nests in isolated pairs or loose colonies. This means that the number of birds nesting on the beach may not be as easily visible as some of the colonial nesting birds. Flightless chicks are mobile hours after hatching. These chicks may roam up to a mile from their nest site by themselves.

Slide 19

Royal terns are monitored but not listed, also a bird that is protected under the US Migratory Bird Treaty Act and state wildlife code. This bird nests from April to August in colonies. It has gray upper parts, a white underside, an orange and red bill, and a crested cap that is black during breeding season. It is often found in association with gulls, skimmers, and other terns. Chicks will travel out of colony and down to water's edge, oftentimes by themselves.

Slide 20

The laughing gulls are also not listed, but federally protected under the US Migratory Bird Treaty Act. They nest from April to August in colonies. They have medium gray upper parts, a white underside, a red bill, and a cap that is black during breeding season. They build nests of vegetation on the ground, unlike the other birds who nest in scrapes of sand. Chicks regularly move between the dunes and the water's edge.

Slide 21

What to look for on the beach for shore- and seabird nesting. Birds in pairs or in colonies on the beach indicate that there is probably a nesting population during this season. Birds sitting stationary on the beach are oftentimes sitting on their nest. Courtship displays such as a bird bringing a fish to a nest or another bird can indicate that nesting might begin. Groups of birds congregated in a specific area. Small chicks, which are difficult to see. And, adult birds pretending to be injured or "dive bombing" beachgoers are a good indication that nests are near.

Slide 22

Birds, nests, and chicks are often difficult to see and can be easily run over by vehicles. Chicks and nests are very well camouflaged, putting them at an increased risk. Chicks can be mobile hours or days after hatching, but still cannot fly. Chicks often wander by themselves and go down to the water to feed, putting them directly in driving paths. When scared, chicks flatten down and freeze making them even more difficult to see.

Slide 23

Chicks may seek shade in tire ruts, vegetation, or debris. If adult birds are forced to fly or leave nests, eggs and chicks may be left vulnerable to predators or weather conditions. Exposure can cause

overheating. Well camouflaged nests and chicks may get trampled by beachgoers on foot, bikes, or in cars. Unleashed pets pose a serious risk to birds. An unleashed dog can destroy a whole colony or cause it to be abandoned in minutes! Birds see dogs as predators and will be disturbed at a much further distance than people. Dogs should be kept very far away from nesting birds.

Slide 24

Avoid driving on beaches where nesting birds or chicks are present. Use ATVs instead of trucks during nesting season when possible. Do not drive near or through posted or suspected beach-nesting birds. Maintain a minimum of a 300 foot distance. This is around the length of a football field. When passing through a known nesting area, use binoculars to scan the beach ahead before proceeding. If birds are present, park the car and go on foot carefully watching where you walk. Drive below the high tide line but watch carefully for birds feeding at the water's edge.

Slide 25

Be aware that chicks may not be flight capable and cannot avoid your vehicle. Stop and wait for all birds to move to the upper beach carefully checking around and under your vehicle before proceeding. Avoid the "wrack line," the seaweed and vegetation where chicks may be hiding and foraging. Remember: every time a bird flies up, it expends precious energy no matter what time of year it is. Avoid driving through flock of birds and encourage others to walk around the birds resting or feeding.

Slide 26

Keep your distance – if a bird takes flight, appears agitated, "dive bombs," or pretends to be injured you are too close! You have the knowledge; if you see others disturbing nests, please educate them. If disturbance continues, please report activities to FWC's Wildlife Alert Hotline at 1-888-404-FWCC (3922). If you find a colony or a solitary nest with no posted signs, contact Audubon of Florida at 904-813-5115 or call the FWC Wildlife Alert Hotline above to ensure monitoring of that population.

Slide 27

This training has been provided by the Coastal Wildlife Conservation Initiative Northeast Florida Working Group. Spearheaded by FWC, the Coastal Wildlife Conservation Initiative (or CWCI) is a multi-agency strategy to address coastal issues that affect wildlife and their habitats while considering human needs. It has the goal of ensuring the long-term conservation of native wildlife in coastal ecosystems throughout Florida in balance with human activities. Below is the contact information for Blair Hayman. Please contact her to schedule a training for your organization.

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