



Boat Handling around Marine Mammals

During our years of research on spinner dolphins and other marine mammals, we have come to recognize some unwritten rules for how to behave and handle a vessel while near the animals. We have also talked with many colleagues who study a wide range of Cetaceans and found that in most cases these “rules” are universal. We thus have a set of rules that we follow while around animals. Some of these are specific to spinner dolphins, but most apply to all marine mammals, be it bottlenose or spotted dolphins, or Pilot, False killer, Humpback, Minke, Fin or Gray whales. Remember that you are dealing with wild animals and that it is a privilege to see them up close.

The impact of the vessel will begin from over a mile away, often before you have even spotted the animals. Several studies, as well as our own observations, clearly indicate that the animals will be aware of motor boats over a mile away. During our research we frequently recorded the sounds of spinner dolphins with a hydrophone (underwater microphone) and found that vessels operating far away were clearly audible underwater. The noise from the engine(s) is quite obvious from several miles away, and from a distance of several hundred meters will, to the human ear drown out the sounds made by dolphins just a few tens of meters from the hydrophone.

Once you have found the animals and decided to get closer you need to plan your approach. As soon as you change the speed and begin to veer away from your initial heading, the animals will have picked up on your possible intentions. Thus as soon as you start your approach from several hundreds yards away, your boat handling technique will make a difference and will have an impact on the behavior of the animals. Always begin by assessing the situation from a distance.

Step 1. Begin by paralleling the animal(s) from several hundred yards away. **TAKE YOUR TIME AND DO NOT RUSH IN.** Give them 10 minutes or more to get used to your presence and to settle back down before initiating Step 2. During our research under Federal Research Permits we take up to 30 minutes to go from paralleling from 200-300 yards away to getting in with the animals. However, without a permit you should not plan on getting any closer than 100 yards, unless the dolphins approach you. With spinner dolphins you should always approach from offshore if they are within a mile of shore. This is counter-intuitive, but spinner dolphins are much more sensitive to an approach from the inshore side and will generally evade such an attempt. Be careful not to push them against the shoreline. If you approach too quickly you will push them and usually they will change direction. The best positioning of the vessel is parallel to the last subgroup, or rear part of the school. This will give you the best chance of steering the vessel on the same heading as the school without inadvertently closing in on them, since you can gauge the animals’ heading by looking at the front of the school. Spinner schools are generally composed of 2-3 subgroups following behind each other.

Step 2. As you begin to approach, inch in on, the animal(s), from 2-300 yards away, you need to pay close attention to their behavior and cease your approach, maintaining your position, as soon as you detect any subtle changes in behavior. In spinner dolphins 'High Surfacing', i.e. animals surfacing and exposing more of their back than normal, and increased aerial activity are such signs. Slowly approach to a distance of 100 yards and continue on a parallel course at this distance. You may find that the dolphins will maintain this distance. However, we have also found that after 10-15 minutes of paralleling the school at this distance, some animals will suddenly approach the boat and swim on the bow. These are often smaller, juvenile or subadult (teenagers) animals. While it may be tempting to pick up speed to get them to bow ride, don't do it. By increasing the speed you will indeed get a small group of energetic bow riders but you will also disturb the majority of the school. After a few minutes the bow riders will cut away and return to the rest of the school, and you will have disrupted the whole school. The rest of the school may follow, or may continue to keep its distance.

Step 3. If the dolphins approached the vessel, you need to continue to pay close attention and match the direction and speed of the school. If you make a wrong move the school can disassociate from the vessel and take off, or even disappear. It could happen after 5 minutes or 3 hours. Be especially careful when coming up on points of land, coral reefs or rocks that are farther offshore than the rest of the coastline. The school may need to move farther offshore when rounding these features and you will need to adjust your course accordingly not to squeeze the animals against them. The most sensitive part of a spinner dolphin school is the first subgroup, or the front of the school. Here any minor mistake can have major effects, so it is always best to stay away from the front and keep to the rear of the school. This may be why J-hooking or cutting in front of the school is so disturbing to them.

Step 4. When you decide to leave the school, it is important to do that just as carefully as during your initial approach. If you make a sudden drastic change in speed and/or heading, you will disrupt everything in the school. It may take an additional few minutes to dissociate carefully, but by reducing the disruption of the school when exiting, you will reduce your impact on the animals.

"Rules"

We have come up with the following 'Rules' for how to handle a vessel in the vicinity of marine mammal. They apply as soon as you decide to approach, from several hundred yards away.

- 1. Never approach head-on.** You are likely to turn the school around — not a good start of an encounter. We have observed boats turning around pods of sperm whales, pilot whales, Gray whales and several species of dolphins in this manner.
- 2. Do not cut an animal off.** It is important to not steer the boat across the path of an animal. If you are in the middle of a school and need to leave, work your way out by slowly sliding out and giving the animals a chance to move around you.
- 3. Change the RPM very gradually.** It should be almost imperceptible or the animals are likely to react negatively. This applies to both increasing and decreasing the speed. You

need to shift your grip to the stem of the control to do this properly and it takes some practice.

4. **Do not approach or follow from behind.** The animal will feel chased and be more affected by your presence. Drive on a parallel path as much as possible.
5. **Do not approach spinner dolphins from the inshore side** when they swim along the coast.
6. **Do not attempt to go into the water and swim with the animals.**