

Safety Diver Intro

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South Carolina Aquarium

Dive Operations

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- Please address any questions regarding Safety Diver Training directly to the DSO/ADSO.

It is the mission of the South Carolina Aquarium (SCA) Dive Team to provide excellence in animal care and husbandry, to actively support both the educational and conservation endeavors of the SCA, and to provide a memorable, positive guest experience to all those who visit our facility.

Safety Diver Training

- The GOT is an every changing environment based on numerous factors
 - > **Food Intake**
 - > **Animal Additions/Subtractions**
 - > **Diver activity & numbers**
 - > **Tank Climate**
- Because of this Safety Diver Training is always On-Going. We cannot train you on, or inform you of all situations you might encounter.

Goal of Safety Diver Training

To give Divers the knowledge and tools necessary to
Continually Evaluate the Safety of the Dive Team in the
GOT's changing environment.

Training Requirements

PowerPoint Presentation & Quiz

Safety Diver Evaluations

- *At least 2 Evaluations*

Emergency Response Training

Safety Divers

- Goal of the Safety Diver is to:
 - 1. Note and Prevent** problems from becoming Emergencies
 - 2. Respond** to any Emergencies appropriately
 - 3. Monitor** Tank Interactions

Safety Divers

- To Achieve this, the Safety Diver has to be aware of:
 - 1. Animal Behavioral Changes that effect Diver Safety**
 - 2. Diver Interactions that effect Diver Safety**
 - *This is also each divers own individual responsibility*
 - 3. Their own Position & Safety**

Safety Diver Procedures

General Procedures

- First in water
- Does not Trade Tasks during dive
- Last out of water
- Initial Position: High & Back-Center of exhibit
- Is mobile to maintain good vantage points
- Needs “wrench” as signaling device
- Watches divers **and** animals only
 - > No scrubbing/cleaning
 - > No guest interaction

Safety Diver Procedures

Initial Entry Procedures

- Note initial positions of Divers on Task
- Note initial position of key “Interaction” Animals
 - > **Caretta, Nurses, Blacktip, others in the future?**
- Scan between Divers and Key Animals or Other animals
 - > **Take a couple minutes to observe a group of animals or a key animal, quickly check back on divers during your observations**
 - > **Vice versa observe divers and quickly check back on animals**
 - > **Mix it up so you are not focusing solely on divers or animals**
- **Try to have a mental image of Diver and Key Animal positions at all times**

Safety Diver Monitors

- Tank Interactions *(in order of priority)*

- > Diver to Tasks

- > Animal to Diver

(Report these to Dive Office)

- > Animal to Animal

(Report these to Dive Office)



Safety Diver Monitors_(cont.)

- **Diver to Tasks**

- > Breathing

- Too heavy or too shallow
-> CO2 toxicity

- > Movement

- Why has my buddy not moved in the last 30mins?
 - Flailing, hand paddling, distress



Safety Diver Monitors_(cont.)

- **Diver to Tasks**_(cont.)
 - > Exhibit
 - Diver hitting Tank/Gear to Acrylic
 - > Other issues
 - Broken mask/fin strap
 - Tank strap comes undone
 - ***Gear is bubbling***
- **Report all issues to Dive Office**

Safety Diver Monitors_(cont.)

• Animal to Diver

examples not all encompassing

- > Aggressive/Erratic Swim patterns
 - Shark making tight turns around diver/platform
 - Pectoral fins down, arched back
- > Territorial Behavior
 - Caretta's Shallow ledge during April-June
- > Curiosity
 - Trigger Fish nipping Diver
 - Chubs, Spadefish, or Permit pulling hair

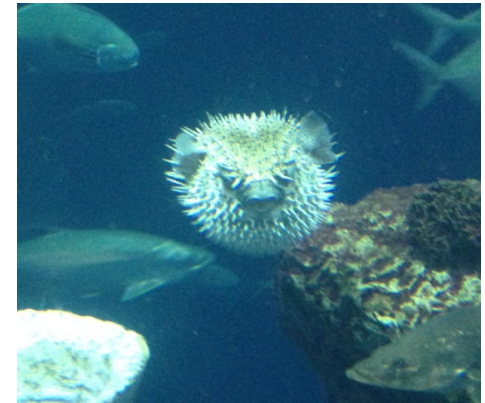


Safety Diver Monitors_(cont.)

- **Animal to Animal**

- > **Animal interactions that effect Diver safety**

- Predation -> Feeding frenzy / Fish bolting
 - Chasing/Bolting -> large animal running into diver
 - Blunt force trauma
 - Defensive bite
 - Irritation -> “unprovoked” bite of diver

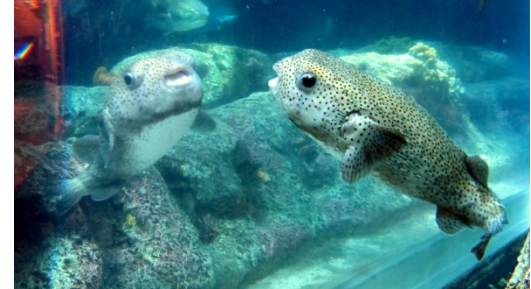


- > **Animal interactions that effect Animal safety**

- New or previous injuries -> getting better or worse?
 - Animal eating exhibit -> gut impaction / animal death
 - Animal profile -> do they look starved?

Safety Diver Monitors_(cont.)

- Any **Animal to Diver** or **Animal to Animal Interactions** should be reported to the Dive Office & Recorded on Feed Log.
- Repetitive Animal Interactions allows us to establish a pattern and act accordingly to prevent or fix any issues
 - > If every Team sees a problem, but only one reports it, Dive Ops will not be able to fully understand the behaviors.
 - > Dive Ops also loves to hear cute and funny stories too!



Animal Handling

- Avoidance and Prevention is key
- Going Hands-On with an animal should be your last option or an Emergency
- Hands-On interaction should be swift and to the point
 - > You should not have to struggle with an animal
 - > You should not need to hold or grasp any Animal
(exception when redirecting Caretta)
 - > You are redirecting and guiding an animal elsewhere; not moving.

Caretta

- Generally when Caretta is going to bite, she will begin to open her mouth when 2ft away from the diver
- Divers should be signaled anytime Caretta is on a Direct Line of Approach
- Caretta should be redirected regardless of bite or play
 - > Do not encourage positive reinforcement of interactions between Turtle & Diver
 - > Sometimes relocating yourself fixes the problem She may just want to nap where you are



Handling Caretta

- Position yourself directly in her path
- Put your hands on her Front Flippers or Shell to stop her momentum
 - > **Regardless of her initial intentions she will now try to bite you.**
- To redirect Caretta: grab behind her Front Flippers
- Spin her 180°; moving hands along edge of shell
- Position her head directly away from you
- Push her away ***gently***

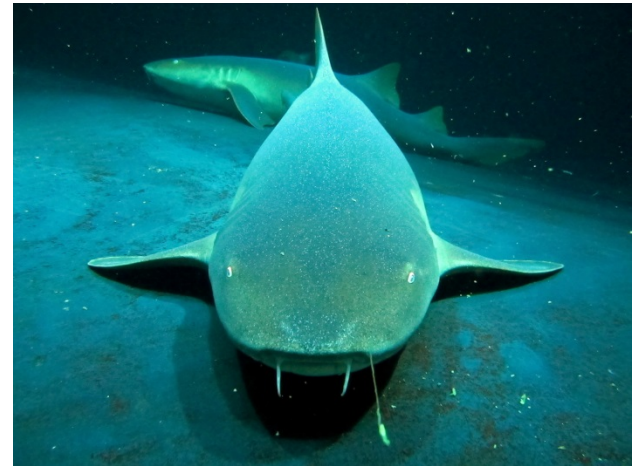
Handling Caretta_(cont.)

- Finning & pushing, swimming her, pushing her sideways, pushing her forcefully, **Becomes a Game to her**
 - > She will keep coming back for more
 - > To the Guests it can look like harassment
 - > You do not need to swim, to spin her
- Always signal the targeted diver as you make your approach
 - > You may then only have to approach Caretta's side
 - > Spin her 90°
 - > Push her away



Handling Other Animals

- Nudge or Push animals away using the Back of a Closed Fist
- Signal Divers ahead of time to avoid path of Sharks
 - > ie. When Nurse sharks appear agitated by Vacuum Diver

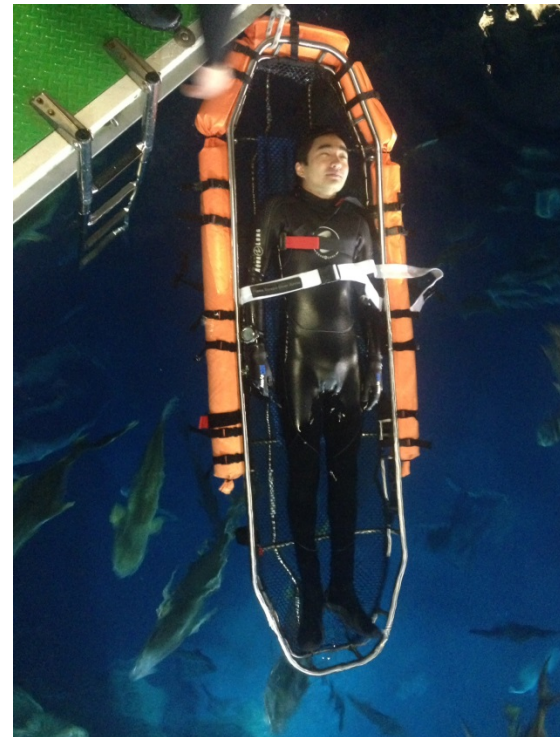


Handling Other Animals

- While we strive to project a good appearance to our guests at all times, there will be times to break from that to protect Diver Safety
- Use your best judgment and we can always debrief after

Emergency Response Training

- Schedule: March & September
- Covers Rescue for GOT Exhibit only
- Open Water Topics Not Covered:
 - > Search & Salvage
 - > Panic diver
 - > Beach or Boat Extraction



In an Emergency

In a Situation of an Emergency or Danger to the Dive Team:

1. Safety Diver should Signal all divers to Surface or Take Cover
 - > in the Cave Mouth or by putting their Back to Wall/Rockword.
2. All Divers acknowledge the Safety Diver then ensure those next to them understand the Safety Diver's Signal.
3. All Divers Exit the tank appropriately when safe
 - > Safety Stops at Team's discretion

