

Junior Boater Education Activity Guide

For additional information concerning this program, contact the Texas Parks and Wildlife Department.

(800) 792-1112

Texas Parks and Wildlife Department Junior Boater Education Activity Guide

Mission Statement: The Junior Boater Education Activity Guide will introduce concepts of boating, water safety and aquatic stewardship to elementary and middle school children. The program will engage participants in fun, hands-on boating, water safety and aquatic activities.

Goals:

- Teach safe boating practices.
- Introduce young people to boating.
- Introduce the notion of aquatic stewardship.
- Provide an easy-to-use program for youth service organizations and camps to duplicate.

Overview:

- Junior Boater is activity-based situation learning. "Activity-based" means a series of related activities, in this case boating, which can be easily re-created in almost any setting. Whether at an outdoor field trip, a large gymnasium or a local picnic, the activities can be used to introduce boating skills and safety to young people. "Situation learning" means taking the program to the young people. Many Texas communities have special programs and events that draw thousands of people. Boater Education programs can be delivered at these events by coordinating Junior Boater activities with event sponsors, using event volunteers. Teachers, boaters and youth organization leaders can tailor the program to fit the needs of the event. Junior Boater program materials will consist of a series of activities with learning objectives, performance standards and step-by-step instructions. The Junior Boater program manual is available through our Web site at www.tpwd.state.tx.us. Materials and equipment such as life jackets and other teaching aids are available for loan out on a first-come, first-served basis through the boater education section of Texas Parks and Wildlife.
- The activities should be set up where children can move around safely and participate in each one independently or as a group. When the participant(s) has finished all of the stations, they will receive a certificate.
- A "Junior Boater" should successfully complete a minimum of six activities to complete the program, and receive a Certificate of Achievement (certificates available for download in PDF format on the www.tpwd.state.tx.us/boat Web site.

Acknowledgements: Our thanks go out to the many boating safety professionals and educators around Texas who contributed to these activities and to field testing and refining them over years of boating safety events and classes. TPWD contributing staff included Timothy Spice, Jack Dyess, Selverio Pacleb, Warren "Phil" Steffen, Tami Moore, Brandi Bradford, and Steve Hall, among others.

Activity: Life Jacket (personal flotation device or PFD) Fitting (May be combined with Life Jacket Relay activity)

Objectives: At the conclusion of this activity, participant will:

- Put on a life jacket properly.
- Describe what a "properly fitting" life jacket should look like.

Required Materials:

- One life jacket of the appropriate size for each of the participants
- Tape for check line

Activity Outline:

- Instruct the participants to properly put on a life jacket and move to a designated line.
- Instructor checks participant for proper fit and explains to parent what constitutes a proper fit.

- Demonstrate a properly fitting life jacket before the activity. A properly fitting life jacket is one that is snug around the torso and when lifted by the shoulders the life jacket will not rise above the halfway point on the ear.
- Explain in detail to the parent(s) how to check the life jacket for fit and serviceability to include USGC approval and when it should be worn.

Activity: Boat Entry

(May be combined with Boat Sinking activity)

Objectives: At the conclusion of the activity, the participant should be able to:

- Negotiate accepted standards of personal safe entry of a small boat.
- Safely load equipment into a small boat.

Required Materials:

- Line, approximately 30 feet in length
- Four folding chairs or other type of portable seats
- Any number of items of equipment (minimum of two) (anchor, first-aid kit, drinking water, paddle, etc.)
- Optional. Canoe in lieu of line and seats listed above. Also requires three automobile inner tubes for use with canoe.

Activity Outline:

- Single participant activity:
 - Instruct participant to place all desired equipment into boat while standing outside amidships.
 - Instruct participant to approach and enter boat, stepping into the middle of boat, facing
 forward, keeping body weight low while grasping both port and starboard gunwales and
 sit down.
 - Evaluate participant's understanding by having each participant critique their problems in accomplishing the activity requirements.
- Group activity:
 - Instruct participants to place all desired equipment next to boat amidships.
 - Instruct participant #1 to approach and enter boat amidships, stepping into the middle of boat, facing forward, keeping body weight low while grasping both port and starboard gunwale, sliding aft to take a seat.
 - Instruct participant #2 to hand equipment into boat to participant #1.
 - Instruct participant #2 and any other participants to approach and enter boat amidships, stepping into the middle of boat, facing forward, keeping body weight low while grasping both port and starboard gunwale and sit down.
 - Evaluate participant's understanding by having each participant critique their problems in accomplishing the activity requirements.

Activity Coordinator Instructions: In advance of the activity:

- Using a piece of line approximately 30 feet in length, lay out on the ground or floor the outline of the deck of a small boat approximately 12 feet long and 6 feet wide.
- Place four portable seats inside the boat outline.
- If a canoe is available, it may be used in lieu of #1 and #2 above.
- Scatter other items of equipment throughout the area.

Activity: Type IV Personal Flotation Device (PFD) Toss

Objectives: At the conclusion of this activity, participant will:

- Identify a type IV throwable floatation aid.
- State that "one Type IV PFD (throwable floatation aid) is required on most power boats."
- Demonstrate how to throw a Type IV PFD at a target up to 10 feet away.

Required Materials:

- One Type IV PFD for each throwing station (seat cushion or ring styles preferred)
- One target for each station (a hula hoop works well)
- Tape to mark a throwing line for participants to stand behind

Activity Outline:

- Show all participants a Type IV PFD and explain that motorboats under 26 feet in length are required by law to have one aboard the boat.
- Have the participants line up single file behind the throwing line.
- Each participant takes a turn throwing a Type IV PFD at the target.
- After a participant takes his or her turn throwing the PFD at the target, they move forward, retrieve the PFD, and take it back to the next person in line.
- Each participant should practice the activity until he or she can throw the PFD within arms' reach of the target.

- Place the tape in a straight line. There should be approximately two feet of line for each throwing station.
- Place the target(s) approximately two feet apart from each other and 10 feet away from the throwing line, opposite of the participants.
- Assist the participants as they toss the PFD. There is not an incorrect way to throw (toss) the PFD; however, the participant should maintain balance as they throw the PFD. Note: For some small children this may be awkward.

Activity: Life Jacket Relay

Objectives: At the conclusion of this activity, participant will;

- Put on a life jacket properly.
- Describe what a "properly fitting" life jacket should look like.

Required Materials:

- One life jacket of the appropriate size for each of the participants
- Tape for start and finish lines

Activity Outline:

- Form the participants into even teams in single-file lines.
- Instruct the participants to properly put on a life jacket and move to a designated line in front of them and return to their team.
- The next team member in line puts on a properly fitting life jacket and moves to the designated line, and so on.
- The team with all persons completing the task first is the winner.
- With a single-person activity the coordinator may time each participant and extend the distance of the designated line.

- Demonstrate a properly fitting life jacket before the relay. A properly fitting life jacket is one that is snug around the torso and when lifted by the shoulders the life jacket will not rise above the halfway point on the ear.
- The distance between the start and finish lines depends on available space and the age and abilities of the participants.

Activity: Required Safety Equipment - Level I

Objectives: At the conclusion of the activity, the participant should be able to

- List two or more items required by the State Water Safety Act.
- List two or more recommended safety items.

Required Materials:

- Line, approximately 30 feet in length
- Four folding chairs or other type of portable seats
- Four life jackets of the appropriate size for participants
- As many items of required equipment as is available (fire extinguisher, backfire flame arrester, sound device, navigation lights, visual distress signals, proper registration, capacity plate, throwable Type IV PFD, etc.)
- As many items of recommended equipment as is available (anchor, first-aid kit, sun-screen, drinking water, hat, warm clothes, paddle, etc.)
- Optional. Canoe in lieu of line and seats listed above.

Activity Outline:

- Have participants gather all available equipment required by the Water Safety Act and place it in the canoe or boat outline.
- After all equipment has been placed in the boat, have participants remove any equipment that is NOT required by law.
- Have participants gather all items that are recommended and place outside the boat.
- Evaluate each participant's understanding by having each participant hold up one piece of equipment and state if it is required or recommended.

- Using a piece of line approximately 30 feet in length, lay out on the ground or floor the outline of the deck of a small boat approximately 12 feet long and 6 feet wide.
- Place four portable seats inside the boat outline.
- If a canoe is available, it may used in lieu of #1 and #2 above.
- Scatter as many items of equipment as is available (both required and recommended) throughout the area.

Activity: Small-Boat Sinking Exercise

Objectives: At the conclusion of the activity, the participant should be able to describe the problems associated with finding and using emergency equipment in a stressful situation.

Required Materials:

- Line, approximately 30 feet in length
- Four life jackets of the appropriate size for participants
- Four strips of cloth for blindfolds
- Four folding chairs or other type of portable seats
- Other items such as portable horn, paddles, cooler, fishing gear, fire extinguisher, etc., normally found or required on small boats
- Optional. Canoe and two partially inflated automobile tire inner tubes or similar air cushions in lieu of line and seats listed above.

Activity Outline:

- Seat participants in canoe or on portable seats inside the boat outline. DO NOT HAVE THEM WEAR LIFE JACKETS.
- Place blindfolds on each participant.
- Describe the following scenario: "You are boating at night when you are caught in a storm. Waves are rocking the boat, the lights go off and the boat catches on fire. Put on your life jacket and find the fire extinguisher to put out the fire."
- While the blindfolded participants are attempting to don their life jackets and find the fire extinguisher, activity coordinators should make noise and attempt to distract the participants as much as possible.
- Optional if a canoe is used. While participants are locating and donning their life jackets, activity coordinators will rock the canoe as violently as possible while staying within logical safety limits.
- Evaluate each participant's understanding by having each participant critique their problems in accomplishing the activity requirements.

- Using a piece of line approximately 30 feet in length, layout on the ground or floor the outline of the deck of a small boat approximately 12 feet long and 6 feet wide.
- Place four portable seats inside the boat outline.
- If a canoe is available, in lieu of #1 and #2 above, place canoe on the air cushions.
- Place life jackets under seats and scatter other equipment and boating/fishing items in the canoe or boat outline.

Activity: Small-Boat Navigation Lights

Objectives: At the conclusion of the activity, the participant should be able to designate the correct locations of navigation lights on a small power-driven vessel.

Required Materials:

- Line, approximately 30 feet in length
- Index cards (3 each), 5" X 8", marked "E", "F" and "G," respectively
- 3 soft drink cans painted red, green and white, respectively

Activity Outline:

- Single participant activity:
 - Instruct participant to place the colored cans on the boat outline to represent the side lights and all-around light on a small power driven vessel.
 - Evaluate participant's understanding by having the participant match the correct lettered index card to the corresponding light position.
- Group activity:
 - Instruct participant #1 to place the green can where the green light should be located.
 - Instruct participant #2 to place the red can where the red light should be located.
 - Instruct participant #3 to place the white can where the white light should be located.
 - Evaluate each participant's understanding by having each participant match the correct lettered index card to the corresponding light position.

- Using a piece of line approximately 30 feet in length, layout on the ground or floor the outline of the deck of a small boat approximately 12 feet long and 6 feet wide.
- Place an index card marked "E" outside the boat outline on the left side near the front.
- Place an index card marked "F" outside the boat outline on the right side near the front.
- Place an index card marked "G" outside the boat outline at the center of the stern..

Activity: Leave It Better Than You Found It

Objectives: At the conclusion of the activity, participant will:

- Leave the activity are better than he/she found it.
- Identify common boating and water pollutants.

Required Materials:

- Receptacles for collected litter
- Disposable plastic gloves

Activity Outline:

- Discuss with participants the importance of leaving an area better than when they arrived.
- Give participants a safety briefing about local wildlife, including snakes and insects.
- Tell participants to be careful while picking up litter such as glass and sharp objects.

- Designate a place to bring litter.
- Have special containers for recyclable materials.
- Make sure there is adult supervision while participants pick up litter.
- Depending on size of the area, the coordinator may need to establish cleaning zones and direct participants to specific locations.

Activity: Boat Directions

Objectives: At the conclusion of the activity, the participant should be able to:

- Identify the BOW and STERN of a boat.
- Designate the PORT and STARBOARD sides of a boat.

Required Materials:

- Line, approximately 30 feet in length
- Index cards (4 each), 5" X 8", marked "A", "B", "C" and "D," respectively

Activity Outline:

- Single participant activity:
 - Instruct participant to get in the boat and stand in the bow (stern, port side, starboard side).
 - Instruct participant to move to each of the remaining three positions.
 - Evaluate participant's understanding by having the participant match the correct lettered index card to the corresponding position.
- Group activity:
 - Instruct participant #1 to stand in the bow of the boat.
 - Instruct participant #2 to stand in the stern of the boat.
 - Instruct participant #3 to stand on the port side of the boat.
 - Instruct participant #4 to stand on the starboard side of the boat.
 - Evaluate each participant's understanding by having each participant the correct lettered index card to the corresponding position.

- Using a piece of line approximately 30 feet in length, layout on the ground or floor the outline of the deck of a small boat approximately 12 feet long and 6 feet wide.
- Place an index card marked "A" in the front end of the boat outline.
- Place an index card marked "B" in the rear end of the boat outline.
- Place an index card marked "C" inside the boat outline along the right side.
- Place an index card marked "D" inside the boat outline along the left side.

Activity: Knot-Tying Relay

Objectives: At the conclusion of the activity, the participant should be able to:

• Tie a minimum of four of the six program knots.

Required Materials:

- Line-tying station
- Utility table or two "saw horse" devices
- A number (minimum of 20) of 6-foot lengths of twisted or braided nylon lines for participant practicing
- Stopwatch or relay action watch
- Six 3" X 5" cards marked with program knot names

Activity Outline:

- Single participant activity:
 - Instruct participants to tie the square and bowline knot; figure eight and anchor bends; and cleating and clove hitches.
 - When participant is prepared, begin relay by exposing the first knot name card to participant, and start timing device. Participant ties the knot noted on card at the Line-tying station, advises evaluator of next knot to attempt, and continues successively until all knots are completed or attempted.
 - Participant is told his or her lapsed time.
 - Evaluate participant's understanding by checking each knot for accuracy.
- Optional Group activity:
 - Same as above.
 - When participants are prepared, begin relay by exposing the first knot name card to #1 participant and start timing device. Participant ties the knot noted on card at the line-tying station and advises evaluator at completion. Participant #2 is given the next card and attempts that knot. Relay continues successively until all knots are completed by successive participants, at which point timing device is halted.
 - Participants are told combined lapsed time.
 - Evaluate participant's understanding by checking each knot for accuracy.

Activity Coordinator Instructions: In advance of the activity:

• Line-tying station must be constructed per specifications.

Activity: Taking Care of Aquatic Environments and Wildlife

Objectives: At the conclusion of the activity, participant will be able to identify everyday items that are safe or hazardous to wildlife.

Required Materials:

- Small rubber bands
- 4 feet lengths of small rope or cord. (One for each participant)

Activity Outline:

- Place a rubber band around the little finger and thumb, resting across the back of the hand.
- Instruct participants to remove the rubber band without using their free hand or by rubbing it against their body or any other objects. (This simulates the difficulty a bird or other animal would have removing a plastic six-pack ring or other object from around its neck.
- Have each participant sit on the ground and place a rope or cord around their ankles in a figure-eight style and tie a square knot.
- Instruct each participant to try to remove the rope or cord without using his or her hands. This is to simulate a bird or other animal getting tangled in discarded fishing line, cord or rope.

- Be sure to have several rubber bands on hand in case of breakage.
- Pick a level area that is free of unsafe objects.

Activity: Skipper Says (like "Simon Says")

Objectives: At the conclusion of this activity, the participant should be able to:

- Identify maneuvering sound signals for port and starboard.
- Identify the sound signal for an emergency and demonstrate an emergency visual distress signal.

Required Materials: Whistle and index cards with sound signals listed on them

Activity Outline:

- The activity coordinator will organize the students in rows or files, facing the instructor.
- Each participant is given a card with the sound signals and meaning of each signal.
- When the instructor makes a signal, each participant makes the appropriate movement.
- If the participant makes an incorrect movement, he or she may sit down or leave the activity area.

- Practice the sound signals with the participants.
- Take time to explain what movement is required for each sound.
- Here is a list of the basic sound signals:
 - One short blast Turn to Starboard (right)
 - Two short blasts Turn to port (left)
 - Three short blasts Take one step backwards
 - Five or more blast Show an emergency distress signal (waving your arms up and down

Activity: Steer a True Course: Follow the Range Markers

Objectives: At the conclusion of this activity, each participant should be able to:

- Identify range markers that mark channels in coastal waters
- Identify the sound signal for an emergency

Required Materials:

- 2 each 11" X 17" white poster paper
- Sticks (2 each), 1"-2" width strips, one 6 feet long and the other 5 feet long
- 1 stapler and staples
- Red paint or red permanent marker
- Any objects that can be used as an obstruction for example: hula-hoops; small coolers; cardboard boxes; books; etc.
- 1 packet of 3x5 index cards
- 1 whistle
- 1 set of black permanent markers

Activity Outline:

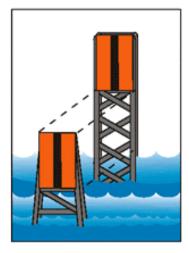
- The activity coordinator will organize the students in a single file line in front of them, facing the teacher, who has his or her back to the "channel" and range markers.
- Each participant is given a 3 X 5 index card with the sound signals and meaning of each signal.
- When the instructor makes a signal, each participant walks one at a time toward the range markers, directly down the middle of the "channel". When they return, moving backwards, and keeping the range markers in a straight line, they should be able to go backwards through the "channel" without hitting any obstructions.
- If the participant collides with an obstruction, he or she may sit down or leave the activity, depending on the variation of the game that they are playing.

Activity Coordinator Instructions:

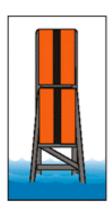
- Evenly divide and mark three panels, which represent coastal navigation range markers, onto the 11" X 17" poster paper; color the appropriate panel red (see illustration below, leaving the black colored stripe white if you prefer).
- Staple "range marker" with two red stripes on to longest stick, at the very top of the stick (so you can see it, above the other "day marker" when they are set up in a straight line).
- Staple "range marker" with single center red stripe on to the shorter stick, near the top of the stick (so you'll be able to see it below the other "day marker").
- Arrange the area to be approximately 30 feet deep X 20 feet wide.
- Post the two sticks with panels at the end of the channel and align the sticks approximately 5 feet in front of the other (taller stick in back). This should make them line up and appear from a distance to be a single "day marker", as the "boat" or student approaches them. This is the center line of the channel that the "boat" should follow, to avoid hitting any known obstructions.
- Construct a series of obstructions or hazards, leaving the "channel" that the markers represent in between them. Hazards may be books, students, boxes, hoops, or any other items you choose to use. The student "boat" should be able, if they keep the "day markers" in sight and they still appear as a single in line picture, to navigate backwards through the "channel" without hitting any of those hazards.

(continued)

- Explain how to align oneself with the panels.
- Demonstrate the basic sound signals:
 - One short blast Turn to Starboard (right)
 - Two short blasts Turn to port (left)
 - Three short blasts Take one step backwards
 - Five or more blast Show an emergency distress signal (waving your arms up and down)
- Instruct participants: "Without looking down or at your feet, keep the markers or leading lights aligned in your sight, walk carefully and quickly toward the markers through the center of the "channel" and then walk backwards through the channel avoiding channel hazards again." If the student is using the range markers just like a real boat captain would, by keeping those range markers in a straight line of vision, they will be able to "navigate" backward without hitting any of the hazards, just like in a real boat channel.
- Variations:
 - Have any student who runs into a hazard, sit down by that hazard. They become "ship-wrecks" along the channel, and another thing that future boat captains have to be aware of when navigating this channel.
 - Have 2 or 3 students link arm-in-arm and walk through the channel together, representing a larger ship going through the channel. Have other students attempt to navigate around them, or decide the best course of action while in the channel, to show how bigger, less maneuverable boats have the right-of-way in ship channels, and how difficult it can be if you don't know the navigation rules to avoid collisions and dangers on the water.



View of range markers not yet properly aligned, indicating vessel is not steering through center of channel



Range markers lined up vertically, indicating vessel is steering through center of channel