CHAPTER WATER SAFETY

WATER SAFETY
Lesson - 4 pages

SIMULATED WATER RESCUE
Hands-On-Activity - 2 pages

HEAVING JUG
Hands-On-Activity - 2 pages
WATER SAFETY

Learning Objectives
After completing this station, participants should be able to:
1. Understand the dangers associated with playing near bodies of water including agricultural ponds, lagoons, and irrigation ditches.
2. Describe the personal floatation devices (PFDs) that could save their lives in the water.
3. Understand “Reach, Throw, and Don’t Go” and how not to risk their own lives when helping a drowning victim.
4. Understand the use of and be able to assist with making a heaving jug and a safety post. (Optional)

Safety Requirements
1. All water activities will need to be simulated to avoid having participants or adults entering the water.
2. No in or on the water activity by participants or adults, this includes canoeing or swimming.
3. If the participants are allowed in a boat on a trailer as part of the safety station, make sure the boat is secured to the trailer.

Age-Appropriateness
This lesson is appropriate for participants ages seven through fourteen. Younger children should know that a person can drown in two inches of water, so if someone was wading in very shallow water, they could hit their head falling and drown.

The depth of content and the discussion needs to be tailored to the level of understanding of the group. Refer to the “Teaching Tips” and “Childhood Growth and Development” located in the Teaching Kids section of the manual.

Suggested Instructors
If you plan to teach boating or swimming safety, use an instructor from the groups listed below. Give them the material in this section and ask them to cover pertinent agriculture-related water hazards. Certified Red Cross swimming instructor, Department of Natural Resources education officer, Parks and Recreation Department staff, boating organization representative.

Activities/Demonstrations
Choose a Hands-On activity/demonstration listed below or create your own. Develop your discussion points around the Hands-On Activity/Demonstration you or your presenter has chosen. If time allows, you may choose more than one activity/demo as part of your safety presentation.

1. **Simulated Water Rescue** – During this activity, the participants will learn about the various types of Personal Floatation Devices. The participants will have the opportunity to practice using Personal Floatation Devices in a simulated rescue situation.

2. **Heaving Jug Activity** – During this activity, the participants will make their own personal floatation device and learn when it is appropriate to use the device.

Subject Outline
I. Introduction/Capture Their Attention
   A. Introduce yourself and tell your experiences with working with water safety.
   B. Start with a story or personal experience associated with the rescue of a drowning victim.
   C. Find out about your audience. Ask questions: How many of you know someone who has had a near drowning experience. Has anyone ever had to be rescued while swimming or playing near a body of water? What happened to them?
D. Show newspaper or magazine article that describes this type of water rescue event. (Use a local story if possible)

E. Describe the Heaving Jug as a homemade emergency-throwing device made with a one-gallon (4 L) water or milk jug. It is easy to make and carry with you when you are near bodies of water.

II. Discussion Points

A. General drowning facts

1. In the U.S. from 1993 to 1996, drowning was the second leading cause of unintentional injury related death to children under 15.
2. Drowning rates are three times higher in rural areas than urban.
3. Childhood drowning in rural areas often occur in non-pool settings such as natural bodies of water like farm ponds and constructed bodies of water like irrigation canals.

B. Personal Floatation Devices (PFDs) Note: All water safety sessions should include information on Personal Floatation Devices (PFDs).

1. You should wear or have one available when you are in or near water. There are different types of personal floatation devices.
   - Life preserver – is designed to turn an unconscious victim from face down in water to vertically or slightly tipped in water.
   - Buoyant vest – like a life preserver except these offer less buoyancy than the life preserver.
   - Buoyant cushion or ring buoy – designed to be thrown to a victim in an emergency, but not to be worn. The buoyant cushion can be used as a seat cushion.
   - Restricted-use PFD – a special purpose device approved for special activities, such as white water rafting, where a life preserver device would interfere or when more protection is needed.
2. When selecting a PFD you must make sure it is approved by the Coast Guard and fits you properly.
3. You should practice putting the PFD on and have a knowledgeable person check and adjust the fit.

C. Ponds, Lakes, and Rivers

1. Risk of drowning increases in muddy water of lakes, ponds, and rivers.
2. Children under the age of four have the highest risk of drowning in farm ponds.
3. Farm ponds are usually used for watering livestock, but they can also be an area for recreation and relaxation like fishing and swimming. Both swimming and fishing must be done only when supervised by an adult.
4. Farm ponds can look inviting but many times they are deep with sudden drop off, which can create a dangerous situation with in seconds. You can go from knee deep water to water that is 50 or 60 feet (15 or 18 m) deep in one step.
5. Ponds often have weeds growing from the bottom which could entangle you while under water and make it difficult to return to the surface.
6. Do not go near a pond that has been fenced off or one that you have been told to stay away from.

D. Lagoons and Manure Storage Facilities

1. Lagoons and manure storage facilities can look like a farm pond.
2. The dangers of a lagoon and manure storage facilities have some of the same dangers as a farm pond.
3. In the hot summer or cold winter, a crust can form on manure holding ponds.
crust may look hard, like ice on a pond in the winter, but it will not be solid in the center.
4. You should never walk on a manure crust, because the weight of your body could break the crust and you could fall through and drown.
5. Some manure storage facilities are underground in a pit.
6. A hazard of underground manure storage is the very poisonous gases.
7. These gases are hydrogen sulfide, ammonia, and methane. A person who breathes in hydrogen sulfide can die with in seconds.
8. Manure pits that are nearly empty can have toxic gases, so you should never enter a manure pit.
9. If someone you know becomes trapped or goes under the surface in a lagoon or manure storage facility do not attempt to rescue them. The only safe option for you and that person is to get professional help fast.

E. Irrigation Canals
1. The hazards of an irrigation canal are the same as the hazards of any moving body of water such as a river or stream.
2. Water in a irrigation canal can be moving very fast and can create an undercurrent.
3. The sides of some irrigation canals are made from earth and could be slick or collapse with the weight of a person.
SIMULATED WATER RESCUE

Learning Objectives
After completing this activity, participants should be able to:
1. Describe the personal floatation devices (PFD) that could save their lives.
2. Understand “Reach, Throw, and Don’t Go” and how not to risk their own lives when helping a drowning victim.

Safety Requirements
1. All water activities will need to be simulated to avoid having participants or adults entering the water.
2. No in or on the water activity by participants or adults, this includes canoeing or swimming.
3. If the participants are allowed in a boat on a trailer as part of the safety station, make sure the boat is secured to the trailer.

Age-Appropriateness
This activity is appropriate for participants of all ages. Younger children should know that a person can drown in 2 inches (5 cm) of water, so if someone was wading in very shallow water, they could hit their head falling and drown. The meaning of reach, throw, and don’t go need to be clarified for participants’ understanding.

The depth of content and the discussion needs to be tailored to the level of understanding of the group. Refer to the “Teaching Tips” and “Childhood Growth and Development” located in the Teaching Kids section of the manual.

Equipment/Supplies Needed
1. Mat or rubber raft
2. Rope
3. Orange cone, or chair (any device simulating a drowning victim)

Subject Outline
I. Introduction/Capture Their Attention
   A. Introduce yourself and tell your experiences with working with a water rescue situation.
   B. Start with a story or personal experience associated with a drowning or near drowning event. Use local newspaper clipping or magazine article to facilitate this discussion. If possible introduce a near drowning victim and have them tell their story.
   C. Find out about your audience. Ask questions: How many of you have witnessed a near drowning or been in a situation where someone had to assist you to safety? What happened, how did it feel, what rescue methods were used?

II. Activity/Demonstration
   A. Simulate the body of water with a large mat on the floor or a designated area.
   B. Mark or rope it off with yellow or red tape.
   C. Have a participant sit in the middle of the area (in a large rubber raft, if desired.
   D. Show different types and styles of personal floatation devices.
   E. Have one or more participants try on a floatation device.
   F. Have participants practice throwing a Personal Floatation Device to the “drowning victim”. Teaches the Reach, Throw and Don’t Go Technique. The drowning victim could also be an orange safety cone, chair, etc. If you are having a participant or volunteer pretend to be the victim keep in mind that many children wear glasses, contacts or orthodontic gear.
G. Also have the participants try using a reaching pole (10 - 12 feet [3 - 3.6 m] long) to assist the “drowning victim”.

III. Discussion Points

A. Stress the importance of staying out of situations that might necessitate rescue. Describe some of these situations (listed in the Water Safety Lesson) Make certain you include situations that may occur on the farm such as farm ponds, lagoons, and irrigation ditches.

B. You should wear or have a personal floatation device available when you are in or near water.

C. While the participants are trying on the floatation devices explain the differences in the devices (Life preserver, Buoyant vest, Buoyant cushion or ring buoy, Restricted-use PFD see Water Safety Lesson).

D. Discuss the importance of knowing how to use these devices appropriately.

E. Discuss importance of not becoming a victim while trying to rescue someone else.
HEAVING JUG

Learning Objectives
After completing this activity, participants should be able to:
1. Understand the use of and be able to assist with making a heaving jug.
2. Describe the use of the heaving jug as a device that can be used to assist a drowning victim.

Safety Requirements
No safety requirements beyond the safety day requirements are needed.

Age-Appropriateness
This activity is appropriate for participants of all ages. Younger children will especially enjoy personalizing the jug and will be more likely to use it.
The depth of content and the discussion needs to be tailored to the level of understanding of the group. Refer to the “Teaching Tips” and “Childhood Growth and Development” located in the Teaching Kids section of the manual.

Equipment/Supplies Needed
1. One-gallon (4 L) plastic jug with screw-on top one per participant.
2. Lightweight rope (40 to 50 feet [12 to 15 m]) one per participant.
3. Water (enough to put one-half inch of water in each participant’s plastic jug).

Subject Outline
I. Introduction/Capture Their Attention
   A. Introduce yourself and tell your experiences with working with water safety.
   B. Start with a story or personal experience associated with the rescue of a drowning victim.
   C. Find out about your audience. Ask questions: How many of you know someone who has had a near drowning experience. Has anyone ever had to be rescued while swimming or playing near a body of water? What happened to them?
   D. Show newspaper or magazine article that describes this type of water rescue event. (Use a local story if possible)
   E. Describe the Heaving Jug as a homemade emergency-throwing device made with a one-gallon water or milk jug. It is easy to make and carry with you when you are near bodies of water.

II. Activity/Demonstration
   A. Put one-half inch (13 mm) of water in the plastic jug and screw the top on tightly. (If the jug has a snap-on top, the instructor may want to secure it with strong glue.)
   B. Tie the rope to the handle of the jug.
   C. Have the participants personalize the heaving jug with waterproof markers or enamel paint.
   D. Demonstrate to participants how to use the heaving jug so they are prepared to use it if necessary.

III. Discussion Points
   A. Remember that many people who get into trouble in the water weren’t even planning to get in the water.
   B. Stress that this device is not a substitute for a Coast Guard approved Personal Floatation Device.
   C. Discuss the importance of having the floatation device near a pond or lagoon. One suggestion is to install a safety post securely in the ground near the water. Tie the loose end
of the floatation device or heaving jug to the post.
D. A poster with safety tips should be attached to the top of the post.