



Seahorse Superheroes

Marine Debris Mural Project

Making Art from Trash

The following activity has been created by Project Seahorse, and made possible by the generous support of the Herbert W. Hoover Foundation. Information below outlines the project as it will be delivered by Project Seahorse MSc student Emilie Stump during her *Seahorse: Magical Creatures in Our Backyard* outreach campaign in South Florida in April and May of 2017, but is intended to be adjustable and replicable by others.

Objective

Using the charismatic seahorse as a spokes-animal, build awareness of, and inspire actions to mitigate, marine debris in our oceans and on our shorelines.

Activity Description

After a discussion about seahorses and the impacts that marine debris and other pollutants have on their habitats, program participants will contribute to the creation of a large mural crafted out of marine debris attached to a mesh backing, creating a colorful seascape of a seahorse in a bed of seagrass. Participants will then be invited to take a pledge to do something positive for our oceans, and will be given a certificate naming them as a *Seahorse Superhero*.

Duration

30 minutes – 1 hour, depending on the format of the event the activity is part of.

Materials Required

Note that all materials below will be supplied by Project Seahorse when running this activity as part of our April and May 2017 outreach campaign. Should you choose to recreate this activity, you will need to acquire the following materials:

- Large panel (approximately 4' x 6') of flexible, small diameter plastic mesh
- Bungee cords or rope to attach the mesh to a wall or hang it from a ceiling; these can also be used to roll up the mesh panel for transport between events you will be running this activity at.
- Buckets to sort marine debris by color into
- Marine debris, cleaned and sorted by color, removing any sharp and/or hazardous items
- Yarn to outline a seascape on the mesh panel
- Garden wire to attach marine debris to the mural
- Pliers to cut garden wire into small pieces
- *Seahorse Superhero* certificates (included below)
- Seahorse pictures to color in (included below)
- Markers, colored pencils, and/or crayons.



Activity Preparation

If you would like to recreate this activity, you will need to prepare the following yourself. For the *Seahorse Superheroes* project being run by Project Seahorse in 2017, this will be prepared ahead of time.

Step 1: Find a person with sufficient artistic abilities to outline a very simple seascape using colored yarn. This seascape should include all (or at least most) primary colors, plus black and white, in order to make use of all marine debris. (Page 5 below is a sample of a drawing that you can recreate at a large scale. You will also want to print out copies of it for participants to color in while they are waiting their turn to attach debris to the mural.)

Step 2: Acquire marine debris. As the messaging delivered to activity participants focuses on the harm that plastics can do to marine organisms and environments, you should aim to have a majority of the debris be plastic, however other materials can also be used. One option would be to organize a beach cleanup (see *Resources* section below) prior to running this mural activity and use the garbage collected there for the activity. Alternatively you can collect items that would normally be sent to landfill or diverted for recycling or reuse and create the mural out of them. NOTE that this step may need to be repeated multiple times – it depends on how many participants help you create your mural, and how many events you run this activity at.

Step 3: Clean, dry, and sort marine debris by color. Make sure to remove sharp and/or hazardous items first. Then clean the debris of any algae or other ocean muck. Ideally this could be done by bringing it to a local beach and washing the marine muck back into the oceans, thereby reducing the use of fresh/clean water. Finally, sort the debris into buckets or bins by color (red, orange, yellow, green, blue, white, black). NOTE that this step may need to be repeated multiple times – it depends on how many participants help you create your mural, and how many events you run this activity at.

Step 4: Print *Seahorse Superhero* certificates (attached) and seahorse pictures for participants.

Step 5: Cut garden wire into short segments of varying length (from about 3” to about 8”), or be prepared to do this during the activity itself. Do not allow young participants to use your pliers.

Activity Setup

The activity can be run either indoors or outdoors. Depending on the nature and technical requirements of the conservation education messaging you are delivering along with the activity, you may need access to a projector and/or speakers – but that is up to you!

Step 1: Unroll your mesh panel and hang it from a wall or the ceiling. Remember that this panel may get heavy over time, so ensure that the structure it is being hung from can support the weight. Take care and have someone assist you if you need to stand on a chair or ladder to hang this.

Step 2: Arrange all buckets of cleaned and sorted debris on the floor in front of, or around, the mesh panel.



Activity

Step 1: Introduce the activity by discussing plastics and marine debris with participants. See the **Resources** section below for lesson plans and other ideas.

Step 2: Before allowing participants to help you create the mural, make sure to share with them actions that they take to help protect seahorses and the oceans they live in.

Step 3: Separate participants into groups of about five. One group at a time, have participants come to the mesh panel, choose a piece of marine debris from one of the buckets, and help them fasten their piece of debris inside of the appropriately colored sections described in step 1 of the activity preparation section above. (Use care when attaching debris to the mesh, as the garden wire can be sharp. Make sure that ends are tied on the back side of the mural). While one group is attaching debris, have the others color in the seahorse pictures you have printed.

Step 4: Once all participants have added to the mural, if time permits invite each group back up for another turn. Once you have about 5 or 10 minutes left, bring all participants back together and ask for volunteers to tell you what they will do to help protect seahorses and the oceans they live in.

Step 5: Tell the participants that since they have now learned about seahorses and their marine habitats, since they now know how they can help protect these animals and their homes, and since they have already helped them by taking trash that was polluting their habitat and making art with it, they are now eligible to become *Seahorse Superheroes*. Invite participants to take the *Seahorse Superhero* pledge by repeating after you (adjusting the below to suite the age group of the participants you are working with):

I PLEDGE – TO CARE FOR SEAHORSES – AND THE MARINE HABITATS THEY LIVE IN. – I WILL REMEMBER – THAT MY ACTIONS ON LAND – AND THE TRASH I CREATE - HAVE AN IMPACT ON THE OCEANS.

Resources

While we encourage you to tie this *Seahorse Superhero* activity to a lesson plan or curriculum of your own that is most appropriate to your particular audience, if you need inspiration, consider the following:

- Debris Free Oceans (<http://www.debrisfreeoceans.org/education/>) has developed education programs focusing on the issues of marine debris in South Florida waters. They also organize beach cleanups and other marine-debris focused programs in the region.
- NOAA has an excellent collection of educational materials (including curriculum guides) on their Marine Debris Program website (<https://marinedebris.noaa.gov/activities-and-curricula>).
- The Vancouver Aquarium (in Vancouver, Canada) has developed a suite of educational materials in conjunction with their Great Canadian Shoreline Cleanup program (<http://shorelinecleanup.ca/en/teachers>) that are easily adapted to this activity.
- The STEM Pre-Academy of the University of Hawaii has created some informative and easy to use presentations to deliver to teenage students that can be adapted for younger audiences (<http://stempreademy.hawaii.edu/c-more/marine-debris>)



In addition to the above, many science and social science textbooks and teaching aides now contain lessons and curricula on marine debris, conservation, and sustainability that may be appropriate for use with this activity.

Acknowledgement

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About the Herbert W. Hoover Foundation:

This campaign is made possible through the generous support of the Herbert W. Hoover Foundation. The Herbert W. Hoover Foundation takes a leadership role in funding unique opportunities that provide solutions to issues related to the community, education, and the environment.





Seahorses: Magical Creatures in Our Backyard

Seahorse Superhero

For taking part in Project Seahorse's *Making Art from Trash* project, and for committing to save seahorses and protect our oceans

is now a Seahorse Superhero

Presented by Prof. Amanda C.J. Vincent
Director, Project Seahorse

Date