



Killer Whale Fin Matching Activity

Ocean Literacy

Principle: #6

The oceans and humans are inextricably interconnected. Everyone is responsible for caring for the ocean. Individuals and collective actions are needed to effectively manage ocean resources for all.

Questions to draw people to your table?

Have you ever seen the killer whales out here?
Would you like to learn some photo ID tips?

Space requirements:

Table for display board:

- 6-8 ft. long
- Pop-up banner

Outdoor tips:

- Secure banner with a string if windy
- Put rubber bands around brochures so they don't blow away
- Use tape to prevent brochure stands from falling over
- Bring towel to wipe off table, if raining

Target Audience: Outreach event, all ages

Purpose: Increase awareness of the endangered status of the Southern Resident killer whale population (J, K, and L pods) and highlight how scientists and NOAA managers use the annual census to monitor population trends, demography, and individual life histories. Photo identification is also used to quantify the status and social structures observed over the years in order to see fluctuations in social cohesion, interpod and intrapod affiliations as well. Providing the tools of how to distinguish the whales apart and highlighting when these animals can be seen will hopefully create an awareness that these animals live within our watershed. Ultimately sharing the threats that these animals face and inspiring our patrons to support recovery efforts is the goal. We hope that everyone who participates in this fin matching activity will realize that protecting these whales, really means protecting and restoring their habitat to ensure their survival.

Supplies Need:

- Table cloth with NOAA logo runner
- NOAA pop-up banner (string/rope to secure if windy)
- Display board on Killer Whale Recovery and Fin Matching content
- Fin Matching Folder (3 group shots, 13 saddle patch photos, and tent)
- Plastic stand (gender tips and how to distinguish individuals)
- Outreach brochures (be whale wise, killer whale tales, Seattle Aquarium killer whale brochure, The Whale Trail, etc.)
- Laminated ID guides
- Outreach SWAG (stickers, coloring sheet and/or trading cards)
- Outreach tub: Duct tape, blue painters tape, rubber bands, weights, string, business cards (stranding network), dry erase/vis-à-vis/regular
- Activity sheet

Highlight our partnerships and share ways to learn more:

- NOAA K-12 curricula (Killer whale recovery or Springer, A73)
- Killer Whale Tales (presentations and school visits)
- Seattle Aquarium, Whale Museum, Port Townsend Marine Science Center, etc.
- Be Whale Wise
- Promote Land based whale watching via The Whale Trail

Tips for younger kids:

- Model how you would use the fin and saddle patch with either J1 or J2
 - Then have them do the L72 photo on their own
- Narrow down the choices:
- Sort right and left saddles
 - Sort male vs. female
 - Sort by J or L pod
- Acknowledge when they get them right (high five or verbal accolade)

Set up at Event:

- First make sure to thank the event organizer for inviting NOAA to the event and to see where they would like you to set up.
- Table: Place table cloth and NOAA runner on table, put up display board, erect banner next to table, arrange brochures, & SWAG.
- Fin Matching Board: Lay the saddle patch cards out in front of the board with tent that says, test your skills. Find a place (like behind the board) to store the 3rd group photo.
- Banners can also be displayed close by. If space is limited; consider ways to draw people into the room or your table.

Fin Matching Activity:

1. Engage people who might be walking by or checking out your display by asking them a question.
 - a. Have you ever seen the killer whales out here? (Use your specific location, here in West Seattle?)
 - b. Do you have photos at home of these whales?
 - c. Would you like to learn some photo ID tips?
2. Grab the plastic stand that has the photo ID tips and share with them that saddle patches are different for every whale; even the left and right saddles of the same whale are different. Describe how fin condition and shape can also help distinguish individuals, perhaps pointing out nicks in the J1 or J2 group shot. You can also share how to quickly ID males vs. females by fin height and showing them the ventral coloration patterns as well.
3. Model with one of the group shots, how you look for saddle patch or fin unique characteristics. Pick up fins and hold it up the photo to see if they can see the differences. Next, show them how you place that card on the board; however before placing it on turn the card over and describe how they can use the matriline on the back to narrow down the choices of the other whales in the photo.
4. Encourage them to test their skills and then stand back and let them begin. Provide positive feedback when they successfully find a match and be ready to give more support if they don't pick it up right away. As they are working, I like to share facts about how old the whales are and who they're related to. This often sparks a conversation or prompts more questions from them.
5. Have them continue and when they finish the first two group photos, reflect who those individuals are and how they are related, ages, gender, etc. Continue probing them with questions about why it is important to track populations through photo ID work. Ask if they want to attempt a "harder" photo, this builds confidence in younger participants and allows you to continue sharing your message.
6. Thank them for stopping by and try to put something in their hands as they walk away, like a brochure or sticker sheet to help remind them who NOAA is and what we are doing to promote killer whale recovery, as well as Science, Service, and Stewardship.

Killer Whale Fin Matching Outreach Display



Materials:

Blue table cloth with white banner

Tri-fold board (tape to hold third panel)

NOAA pop-up banner

Fin Matching folder

3 group photos, 13 saddle photos

Plastic stand (tips and gender differences)

Fin Matching worksheets

Outreach brochures

Laminated field guides (2; 1 sheet and booklet)

Swag (stickers, coloring sheet, trading cards)

General: tape, rubber bands, weights, business cards, pens, etc.)