**Identifying Individual North Atlantic Right Whales**

**Background**

North Atlantic right whales can be individually identified by the unique callosity patterns on their head as well as scars and other distinguishing features.

What are callosities? **Callosities** are raised patches of tissue on a right whale’s body. These patches are found in similar places to where humans have hair on their faces and appear white even though the actual callosities are dark in color. Light-colored marine crustaceans called cyamids, or “whale lice”, attach to these callosities and give them a white appearance. The callosities of a right whale are completely unique; no two whales have the same pattern, just like no two humans have the same fingerprint! Callosities begin to develop soon after birth, but do not mature until the whale is 7 to 10 months old.

Here is an example of the unique patterns of a North Atlantic right whale:

![Image of a North Atlantic right whale with callosities highlighted.](credit: New England Aquarium)

Each year new photos are taken by scientists studying North Atlantic right whales. Some are taken from boats while others are taken from airplanes or drones. The photos are then matched to a catalog maintained by the New England Aquarium. Each whale is given a catalog number and sometimes a name. By matching their photos, scientists can learn more about individual whales and gain a better understanding about the North Atlantic right whale population, including where they are traveling and what habitats might be important for them.

North Atlantic Right whale Consortium Education Committee.

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For more information or to view the actual North Atlantic Right Whale Catalog maintained by the New England Aquarium, visit rwcatalog.neaq.org

You may also visit:

**The North Atlantic Right Whale Consortium website**

**The New England Aquarium: Anderson Cabot Center for Ocean Life**

**Activity Objective**

Become a right whale scientist! Learn how scientists identify individual North Atlantic right whales and practice this process yourself.

**Materials**

- Printed right whale images on the following pages
- Printed right whale matching book, folded in half
- Pencil or pen

**Activity**

Lay the printed right whale images out on a table or hang them on a wall. Observe the features of each whale and what makes them unique.

Using the images and written clues, match each whale in the book to the correct whale images. Write the whale's name above their picture. Can you tell the differences among all 6 right whales based on their callosity patterns? You can use the answer sheet to check your work when you are done.

**Wrap Up**

What are the key features you noticed on the whales?

What makes it easy or difficult to match the whales in the book to the images?

Would this be harder to do at sea or from a plane? Why?
NUMBER: 1121
NAME: FIDDLE
YEAR OF BIRTH: UNKNOWN
SEX: MALE
<table>
<thead>
<tr>
<th>NUMBER:</th>
<th>1133</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME:</td>
<td>PORTER</td>
</tr>
<tr>
<td>YEAR OF BIRTH:</td>
<td>UNKNOWN</td>
</tr>
<tr>
<td>SEX:</td>
<td>MALE</td>
</tr>
</tbody>
</table>

**COMMENTS:** EASILY RECOGNIZED BY THE UNUSUAL SCAR ON HIS BACK. HE MADE ONE OF THE LONGEST DOCUMENTED JOURNEYS OF A RIGHT WHALE: OVER 7,000 MILES! HE WAS LAST SEEN IN 2011.
NUMBER: 2223
NAME: CALVIN
YEAR OF BIRTH: 1992
SEX: FEMALE
COMMENTS: ORPHANED AS A CALF AFTER HER MOTHER WAS STRUCK AND KILLED BY A SHIP. NO ONE THOUGHT THIS WHALE WOULD SURVIVE. CALVIN IS IDENTIFIED BY THE SCARS ON THE TOP OF HER HEAD, FLUKE AND BACK.
NUMBER: 3845
NAME: MOGUL
YEAR OF BIRTH: 2008
SEX: MALE
COMMENTS: SOME SCARRING ALONG BASE OF FLUKE. THIS WHALE IS NAMED FOR CALLOSITIES ON HIS HEAD WHICH LOOK LIKE MOGULS ON A SKI SLOPE.
NUMBER: 3530
NAME: RUFFIAN
YEAR OF BIRTH: 2004
SEX: MALE
COMMENTS: THIS WHALE IS EASILY IDENTIFIED BY THE LARGE WHITE ENTANGLEMENT SCAR ON HIS BACK AND SMALLER SCARS ON HIS HEAD AND FLUKES. RUFFIAN WAS LAST SPOTTED IN 2019.
NUMBER: 1102
NAME: CHURCHILL
YEAR OF BIRTH: UNKNOWN
SEX: MALE
COMMENTS: CHURCHILL HAS SEVERAL SCARS FROM ENTANGLEMENT IN FISHING GEAR INCLUDING ON HIS BACK, CHIN AND FLUKES. HIS FIRST RECORDED SIGHTING WAS IN 1980.