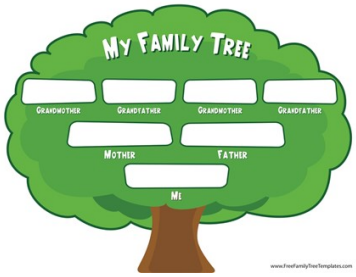
Right Whale Family Trees

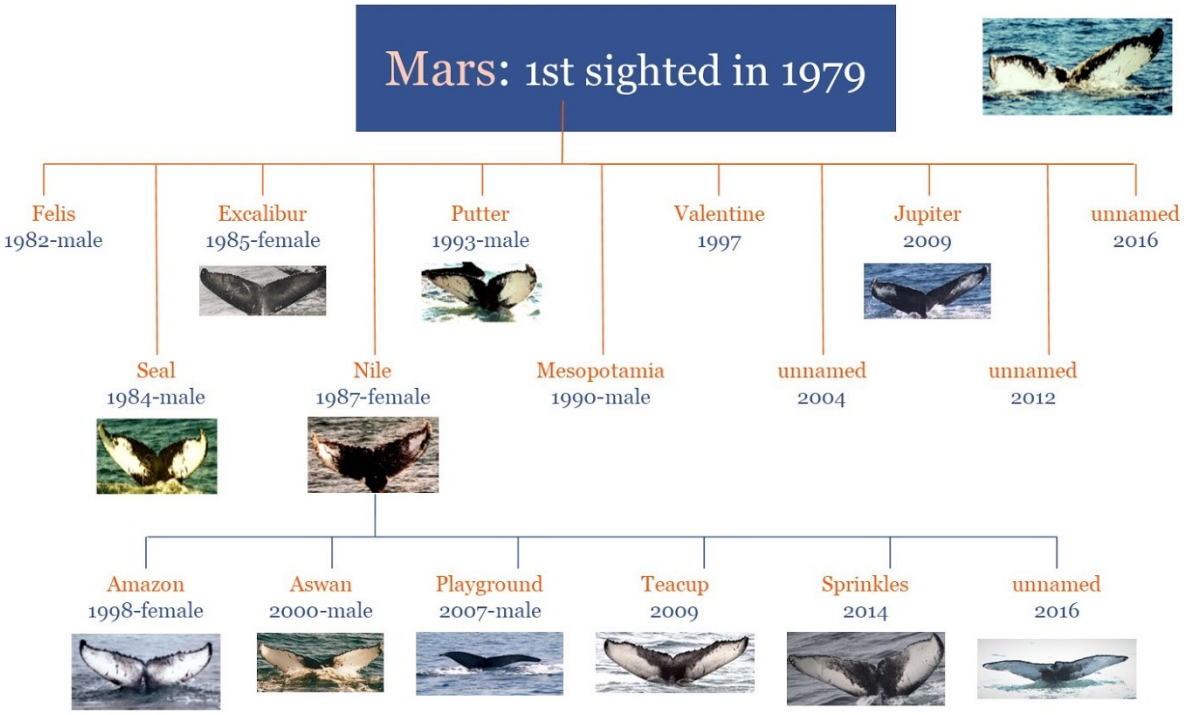
Have you ever made a family tree? It's where you fill in your name and birthday, your siblings, your parents, grandparents and keep going as far back in your family history as you can! It might be a fun thing to do if you haven't done it. Some people know of their 8th great grandparents!



www. freefamilytreetemplates.com has this to print for free!

Do you think scientists can make family trees for whales? They can, but a whale's family tree is much shorter because research on individual whales has only happened for the past 50 years. Many large species of whales live to be a similar age as humans (80-100 years). With the humpback whales off the coast of New England, scientists know up to 4 generations of some whales. As time passes and research continues, this will increase.

It's relatively easy to make a maternal family tree for whales. A maternal family tree includes a mother and all of her offspring. Depending on the species, most baleen whale calves spend the first year of life with their moms. So throughout that first year, identification photos can be taken of the mom and calf, and those calves can then be followed throughout their life.



This is an example of a family tree of a humpback whale named Mars. She is on top. The orange lines are connecting her calves. The blue lines at the bottom are indicating Mars's grandcalves–Nile's calves.

Right Whale Family Trees, cont.

It is tricky to make a complete family tree for whales, because the fathers play no role in raising their offspring. By simply observing whales, scientists have no idea who the fathers are--they are never with the mother and calf. The only way to know is by doing genetic testing. How is that done?

A biopsy is a skin and blubber sample that is obtained from a whale. Scientists are permitted to gather these for research. This is the process (and it will sound worse than it is.) A scientist uses a crossbow to shoot a dart at the whale. It goes into the whale's skin and blubber and then pops out and floats in the water. The scientists then retrieve the sample, (which is roughly an inch long) store it, and have it for future analysis in a lab. Click here to watch scientists biopsy sample a right whale.

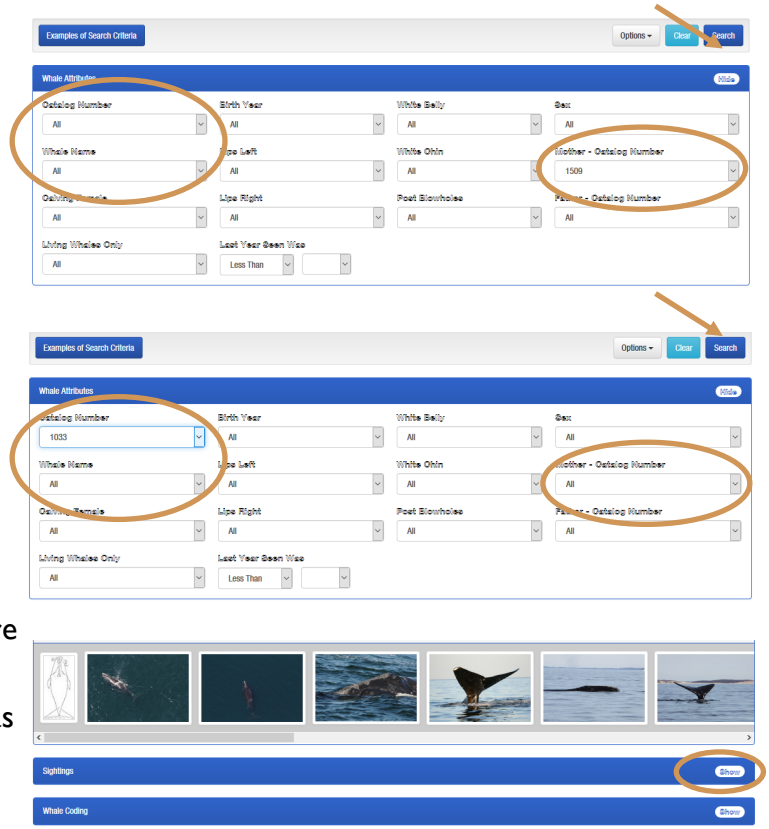
The biopsy sample in the vial to give a sense of size. Credit: Ocean Alliance

The population of right whales is so small that a higher percent of the population has been biopsy sampled compared to other species of whales. Through genetic analysis, quite of a few of the fathers of whales have been identified. That brings us to this activity.

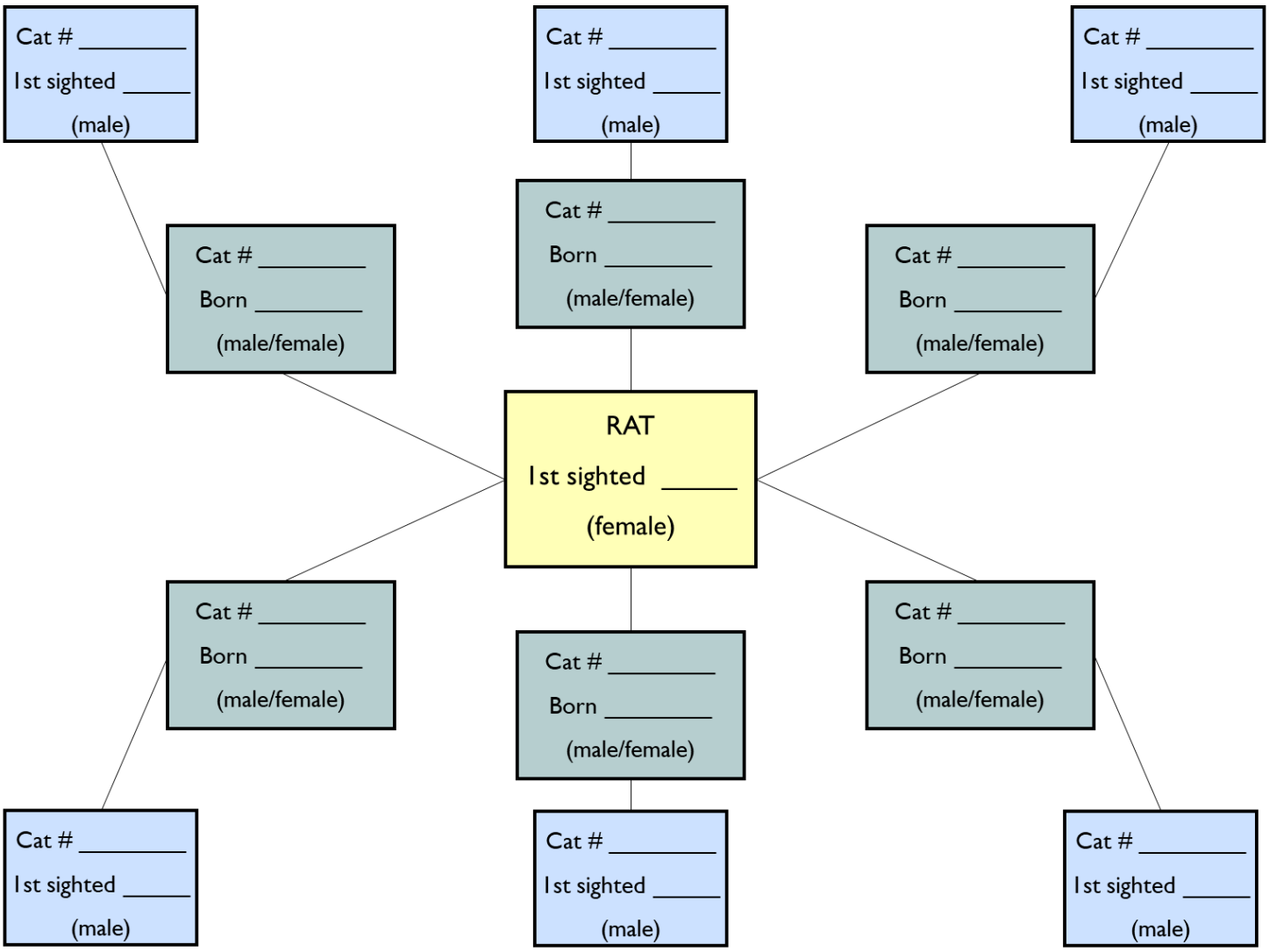
DIRECTIONS:

You are going to fill in the family tree of a right whale named Rat. The blank family tree is on the next page.

1. Click here to go to the search page in the Right Whale Catalog.
2. Under *whale's name* choose Rat and click search.
3. Fill in her information on the family tree.
4. In order to learn about her calves, choose ALL under whale name and put Rat's catalog number into the Mother—catalog number. When you hit search, you can scroll through all of Rat's calves. Fill in information about the calves and their father's, and then you can look up the fathers.
5. To learn about the father's, put the father's number into the Catalog Number (making sure all other fields say "All") and hit search.
6. To find out when the father's were first seen, scroll down the page and click on sightings. There you will find all of the recorded sightings of that whale. The first date listed is when the whale was first seen.



Rat's Family Tree



Directions for BLUE BOXES (the calves' fathers)

Cat # refers to the catalog number in the Right Whale Catalog

!st sighted is the year the animal was first sighted. To find this, you might need to look under the sightings at the bottom of the whale's catalog page. Click on sightings and find the earliest sighting (should be listed first).

Obviously all the blue boxes will be males because they are the calves' fathers.

Directions for GREEN BOXES (the calves)

Cat # refers to the catalog number in the Right Whale Catalog

Born is the year the animal was seen with its mother Rat.

Circle either male or female. This information is found in the catalog.

Extend the Learning

What Did You Observe?

INTERESTING NOTES from the CATALOG

_____

_____

_____

_____

Do right whale calves have the same father?_____

Search online and find some animals that mate for life (meaning the mothers and fathers will always be the same.) List three:

1._____

2._____

3._____

Find three other animals that, like whales, do not mate for life List three:.

1._____

2._____

3._____

Had any whales died when you were looking for this family tree? A whale is only listed as dead in the catalog if it's body was recovered. Sometimes, the whales haven't been seen in 20 years. Did you notice when the whales were last seen? Do you think many of them are still alive?

If you are interested, you can pursue this family tree more. One of the father's is a whale that was born in 1987. Can you look up the mother and father and add to this family tree? Do those whales have connections to more whales? Have the father's had other calves? Try putting the father's number in the Father—Catalog Number category and see what you find. You might need to be creative about how you draw out the family tree. We would love to see what you create. Please email your trees to info@yearoftherightwhale.org