

VSCI 329 Information Illustration

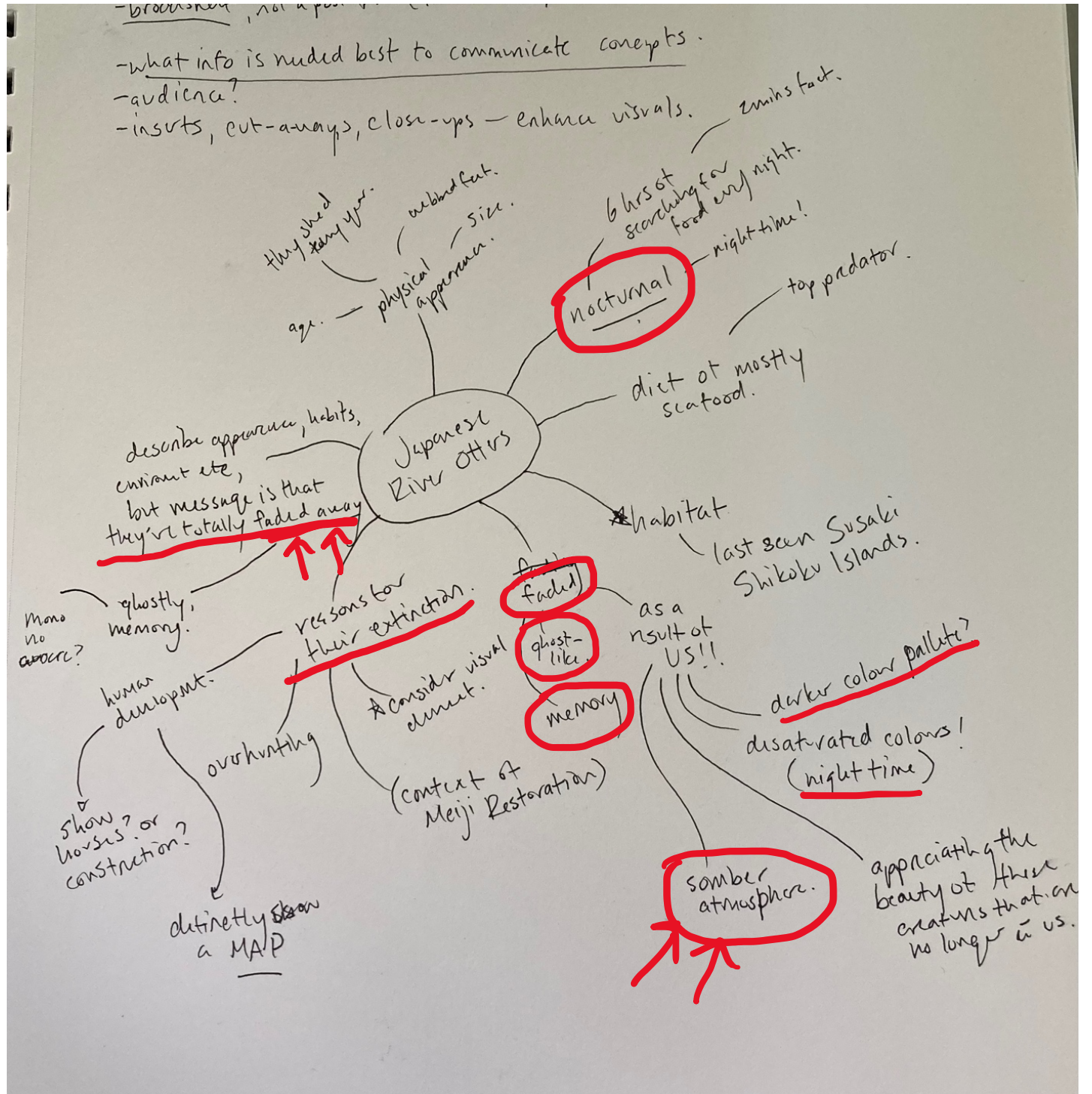
Tivadar Bote

Project 1: Something You Can't See Information Broadsheet

October 11th, 2022

Clara Strum

Initial Ideas:

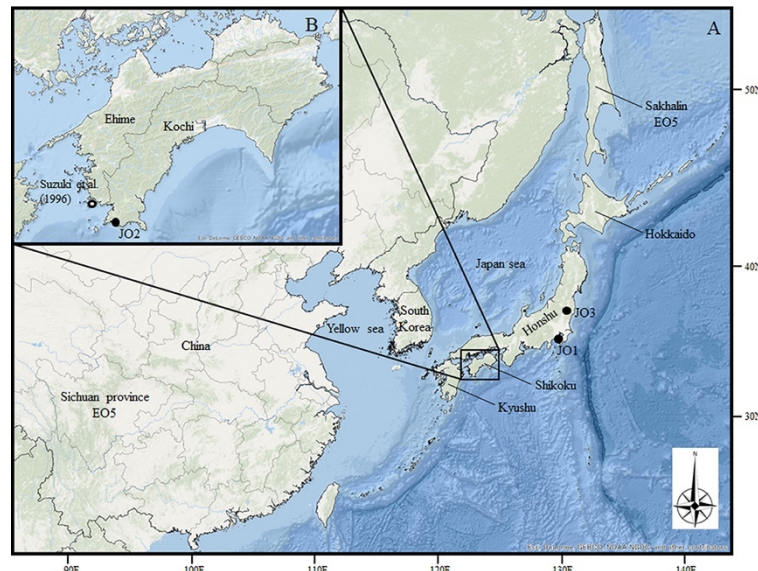
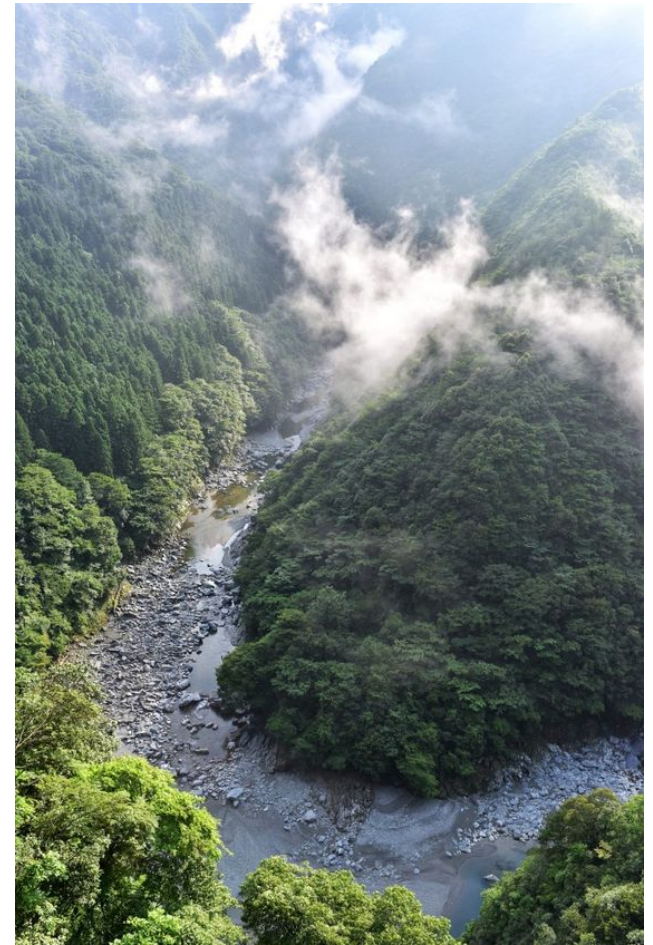


References of Japanese Otters:

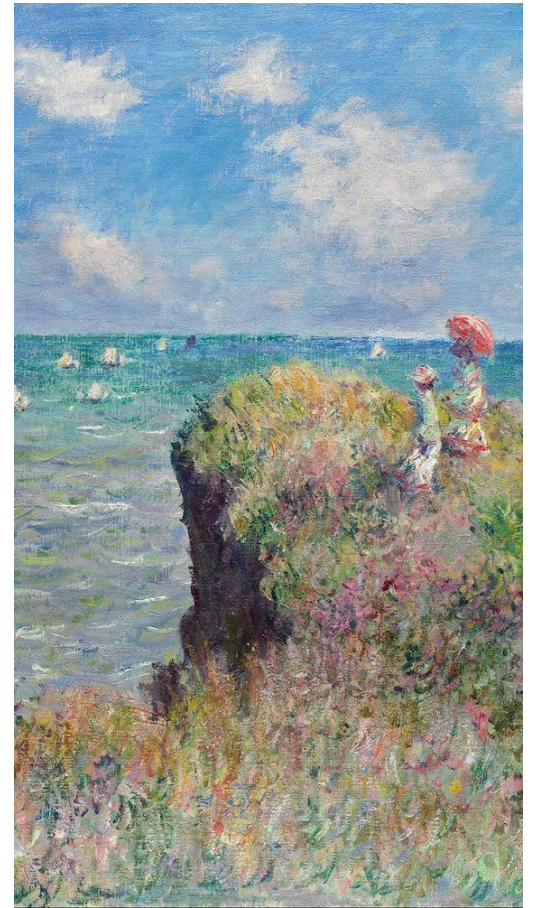
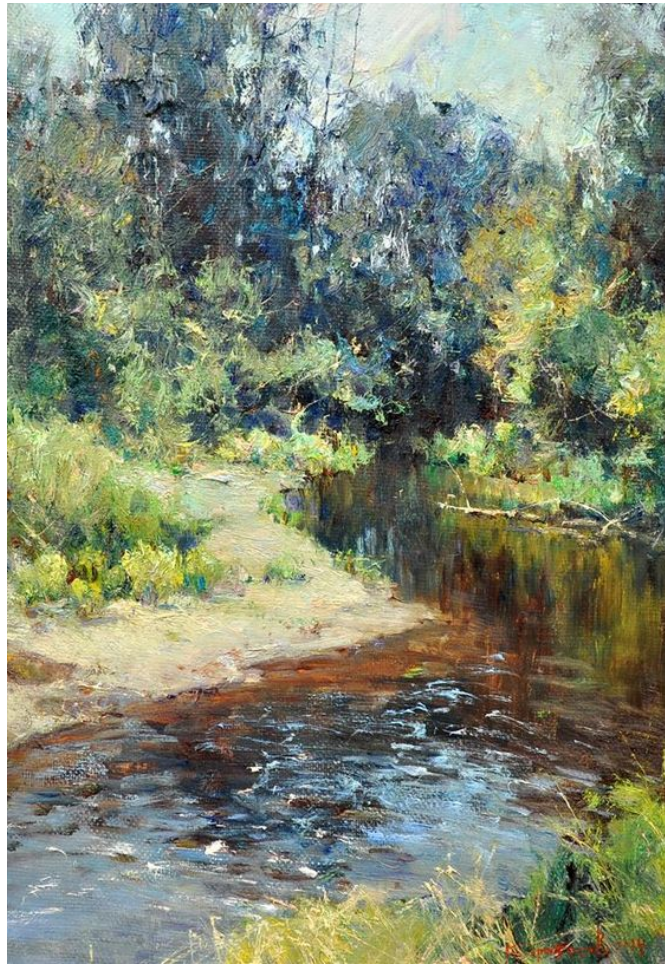
↓ (these two are Eurasian otters) ↓



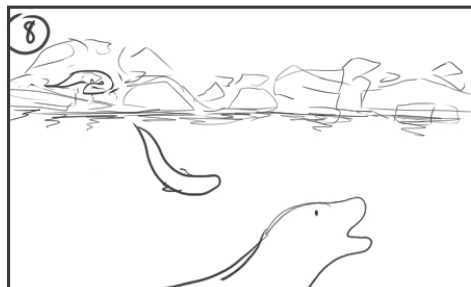
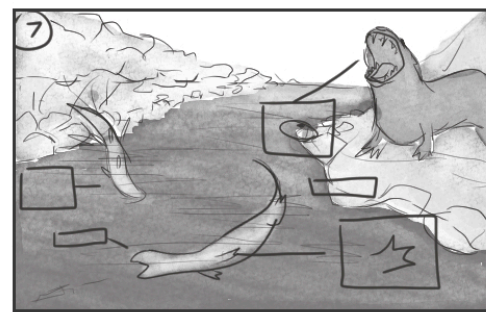
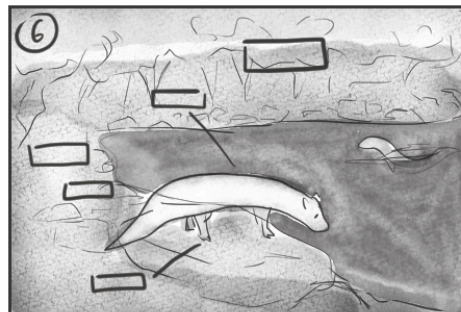
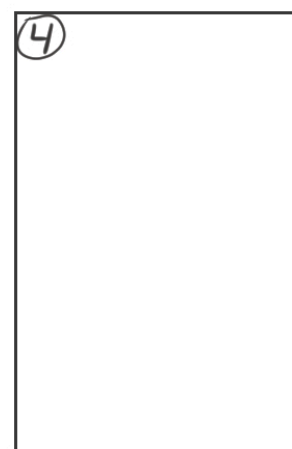
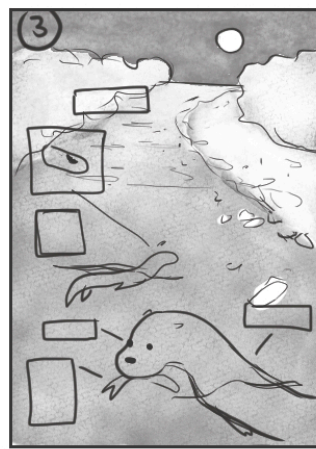
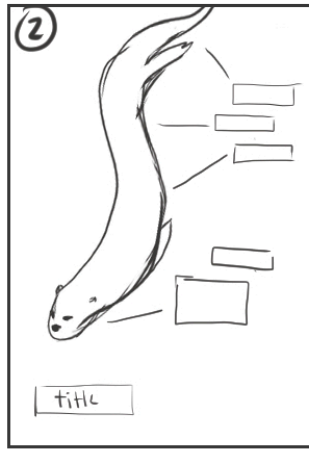
Shikoku Island Japan: (Shimanto River, Susaki)



Inspiration and Colours:

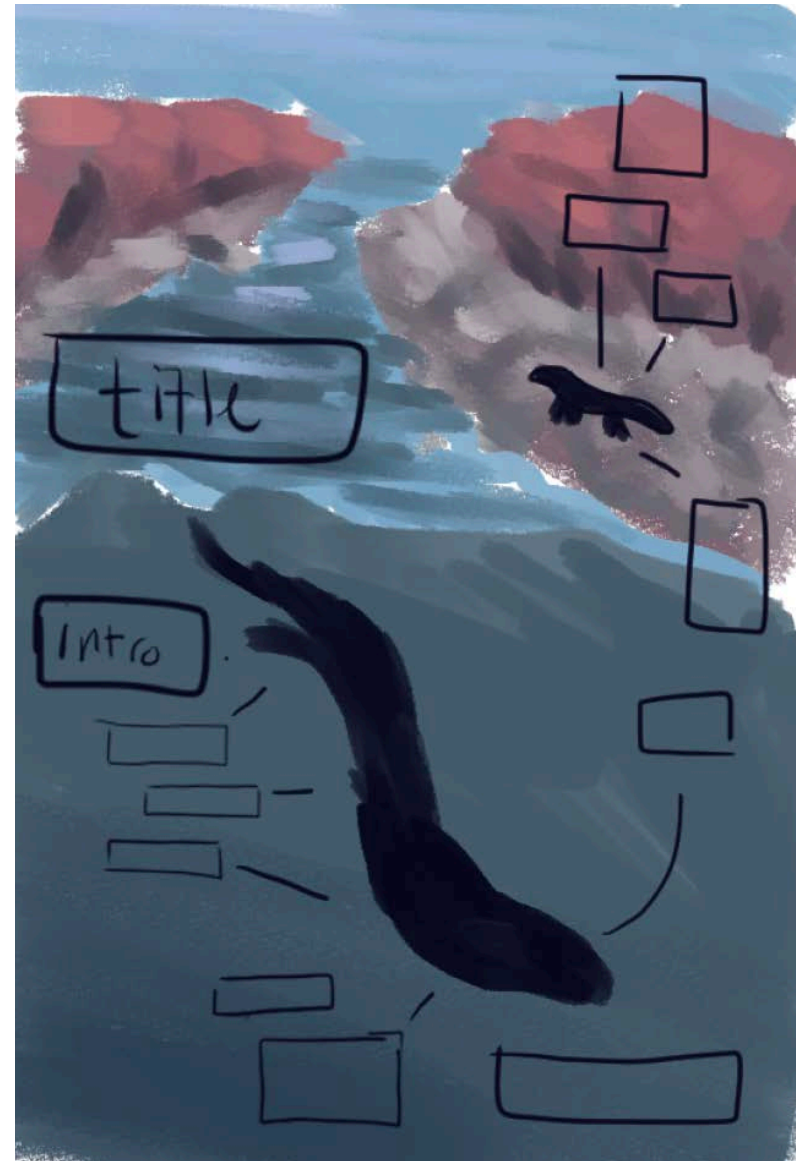


Thumbnails and idea generation:



Exploration:









The Disappearance of the Japanese Otter

Rockwell Bold

The Disappearance of the Japanese Otter

Poppins Semibold

The Disappearance of the Japanese Otter

Optima Bold

The Disappearance of the Japanese Otter

Macha Medium

The Disappearance of the Japanese Otter

Gurmuhki MN Bold

[The Disappearance of the Japanese Otter

Futura Medium]

[-This species is also known as water cat since they have the habit of playing with their prey before consuming them as food.

Capitolina Regular]

-This species is also known as water cat since they have the habit of playing with their prey before consuming them as food.

Palatino Regular

-This species is also known as water cat since they have the habit of playing with their prey before consuming them as food.

Time New Roman Regular

Title: Futura Medium 65pt

Subhead: Futura Medium 22pt

Subhead 2: Capitolina ExtraBold Italic 16pt

Body: Capitolina Regular 10pt

The Japanese Otter: Now a Memory

1 This paragraph will be discussing the first year of an otters life. Interesting note is that they reside in small dens on the shores of rivers and creeks

2 This is years 2-3 of an otters life, noting that this is when they begin to get food on their own, and start mating.

3 We have the mid years of their life, and go more in detail into their diet, as well as their routine/schedule for hunting prey (nocturnal).

4 Them reaching the end of their lives. Note - underwater fun fact

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An Introduction

this is going to be an introduction paragraph. it will be discussing an overview of the otter, including when it was last seen, when it was declared extinct, where they once lived, aka their habitat, (shikoku islands japan), and a brief explanation of their appearance and generalized information (like how old they would get). Additionally, this paragraph will go over what the diagram is about - it is showing the lifecycle of a japanese river otter, as well as pointing out interesting and unique features of these forgotten fellas.

Unique Features

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The Timeline

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The Japanese Otter: Now a Memory

1 Infancy

An Introduction

The Japanese River Otter, known as *Lutra nippon*, were elusive creatures that once lived on the riversides of Shikoku Island Japan, basking in the sun during the days and hunting fish all night (see Fig 1 A). Until the 1920s Japanese otters were commonly dispersed throughout the main islands of Japan, including Hokkaido, Honshu, Shikoku, and Kyushu. However, due to the Meiji Restoration in the late 1800s, a new policy of wealth emerged, and so the luxurious furs of Japanese otters became highly desired. The otters' populations were annihilated when this wave of hunting arose during the period, until Japanese otters became entirely scarce. The last Japanese otter was seen in 1979 in the city of Susaki, Shikoku (see Fig 1 B).

Japanese otters would reach around 65 to 80 centimeters, with thick, lush dark-brown fur, short webbed feet and a long fluid body perfect for maneuvering through water.

The diagram above will serve as an appreciation for the life of the Japanese otter, delving into the full life cycle from when they were born to the end of their lives, as well as highlighting some interesting features and facts about these creatures.

Unique Features

Japanese River Otters are characterized for having thick coats of brown fur, short webbed feet, and long tails. They were often calm and passive during the days, and wildly energetic at night as they would search for food. These critters came from the weasel family, and are closely related to Eurasian otters, known as *Lutra lutra*, however researchers have concluded that Japanese Otters are their own distinct species. An interesting fact is that Japanese Otters would search for food for 6 hours every night, however they could swim underwater for no more than 2 minutes at a time.

The Timeline

Infancy

Young Japanese otters live the first month of their lives completely blind, making them entirely helpless and vulnerable. Luckily for the babies, female otter mothers would nurse them for more than 6 hours a day, teaching them important survival lessons, and fiercely protecting them. Once the baby otter would reach 4 months old, their mother would begin to feed them solid food, and teach them how to properly hunt in rivers.

2 Early Adulthood

3 Adult Life

Adult Life

The rest of Japanese otter's lives consist of living in solitude and searching for food. These creatures were nocturnal, so they would search for food when the sun sets and spend an average of 6 hours every night looking for food. They would search 10 miles in diameter around their habitat, looking for seafood such as crabs, shrimp, and fish. The otters were not very demanding when it came to selecting their food so they would eat everything their habitat offered them, as they would consume about 15% to 25% of their body weight. They were known to be the main carnivores of the aquatic food chain in their habitat.

Early Adulthood

After the first year of an otter's life, they are considered as an adult, and must prepare to live a life of solitude until mating season. When it is mating season, the male otters would make an effort to find a mate by calling out to females for permission, and then moving on if they were declined. The female otter would roll around with the male otter to let them know they want to mate. After reproduction, male and female otters would rarely live together, however.

Japanese otters continue to mate for the rest of their lives, having as little as one and as many as six offspring per litter.

Gone, But Never Forgotten

These beautiful creatures no longer exist, and this is due to us. In ancient Japan, Japanese otters were believed to be a form of medicine; thought to cure tuberculosis. This caused an early incentive to hunt these river otters. In the late 1800s in Japan, the Meiji Restoration brought about a new policy of wealth and military prowess. As Japan was adopting a more materialistic, western view of wealth, the demand for Japanese River Otter furs rose extremely high. The result of this was a mass hunting of Japanese Otters, and their population rapidly decreased until it was unknown if they even existed. Additionally, industrial developments and pollution caused by humans devastated Japanese otter's habitats and left fewer sources of food and materials for them to make dens and survive.

The death of this species could have been avoided if we regulated hunting them and made an effort to conserve their habitat. It is devastating that many species like the Japanese river otter are hunted to extinction because the death of their role as a top predator disrupts the food web in Japan's rivers. They were a fascinating creatures, and now they no longer exist.



Fig 1. A map of Shikoku Island, Japan depicting the geographic location of where Japanese River Otters used to live

References:

- Hance, Jeremy. "Japan Declares Its River Otter Extinct." *Mongabay Environmental News*, Jeremy Hance, 28 Aug. 2012, <https://news.mongabay.com/2012/08/japan-declares-its-river-otter-extinct/#:~:text=Japan's%20Ministry%20of%20the%20Environment,of%20habitat%20due%20to%20development>.
- "The Japanese River Otter and Other Extinct Animals of Japan." *YABAI*, YABAI Writers, 2018, <http://yabai.com/p/4003>.
- Waku, Daisuke, et al. "Evaluating the Phylogenetic Status of the Extinct Japanese Otter on the Basis of Mitochondrial Genome Analysis." *PLoS ONE*, vol. 11, no. 3, Mar. 2016, pp. 1–19. *EBSCOhost*, <https://doi-org.ezproxy.acsaa.talonline.ca/10.1371/journal.pone.0149341>.
- "River Otters: Characteristics, Types Habitats and More." *Discovering All Marine Species*, 10 Nov. 2018, <http://ourmarinespecies.com/c-otter/river-otters/>.