

The Mariposa Grove of Giant Sequoias

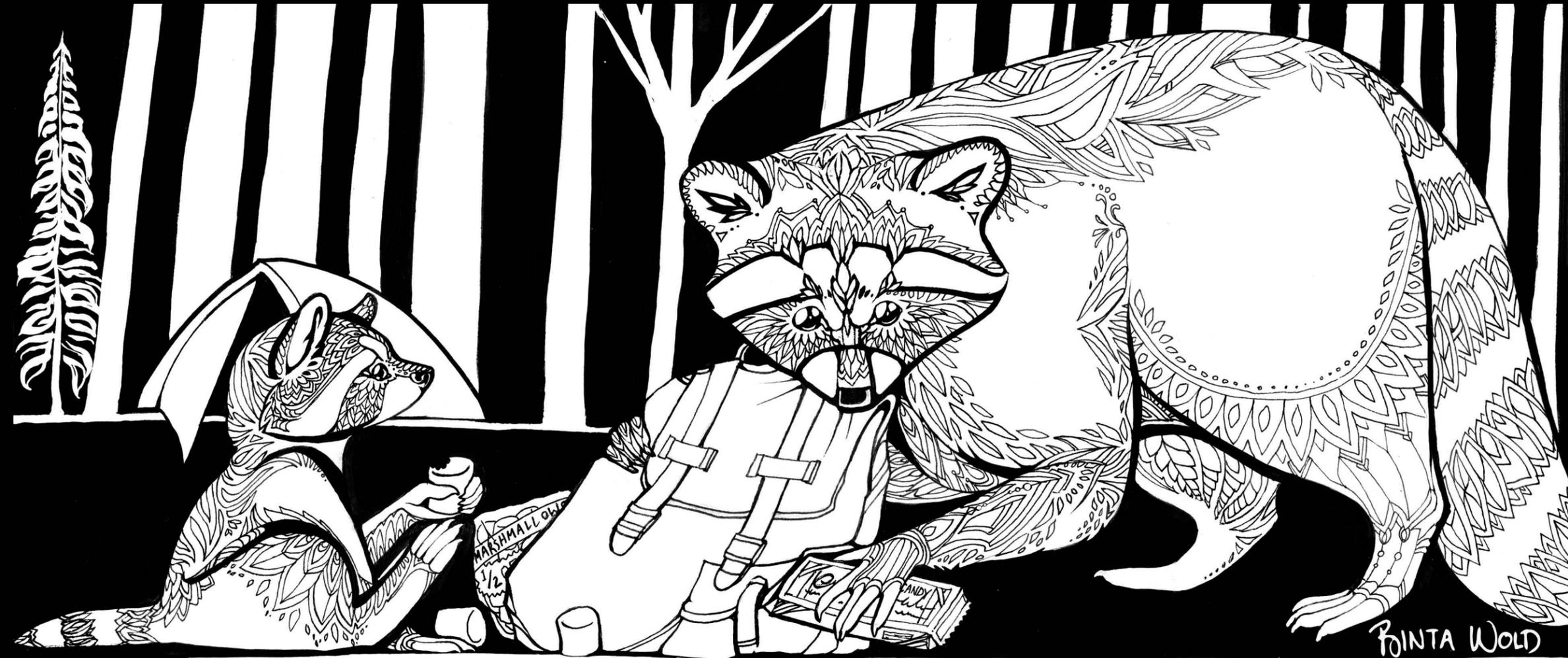
In 1864, **for the first time in history**, the United States Congress passed an act protecting two pieces of land for **preservation and public use, forever**. This act laid the foundation for the national parks and protected areas in our country today. Those two pieces of land were Yosemite Valley and the **Mariposa Grove of Giant Sequoias**.

The ecology of giant sequoia groves is complex and remarkable. We often think of **fire** as a bad thing, but **sequoia ecosystems depend** on it. Frequent fires clear the immense amount of branches, needles, and cones on the forest floor, enriching the soil so sequoia seedlings can thrive. When there is no fire, there is not enough open space or nutrients for new sequoias to grow.

The cones of the giant sequoia are small and secure; tightly retaining over 200 seeds inside. Another reason sequoias need fire is to **open up those tightly sealed cones** and release the tiny seeds inside to float down to the forest floor, where they can germinate and grow.

Perhaps the most famous tree in the grove, the **Grizzly Giant**, is about **1,800 years old**. Can you imagine the millions of people and animals who have come and gone and been thankful for that one tree?





Raccoons in Yosemite

Raccoons are **adaptable and intelligent animals**, and use their dexterous and sensitive front paws to forage for food such as insects, frogs, crayfish, and plant matter. Like bears, they can easily learn to use human development as a food source. This causes many problems for raccoons and people alike. Raccoons in Yosemite have been known to go as far as to unzip tents or run off with backpacks to eat any food forgotten inside- another reason to store your food in a bear-resistant food locker when camping!

Food left out around human development can cause unusually high populations of raccoons to collect where people spend time. This is problematic because of the changes it causes to raccoons, but also for human safety. Not only do **Yosemite's raccoons can carry diseases dangerous to people**, but the presence of raccoons (and other smaller mammals, including squirrels) in turn attracts larger predators like mountain lions and coyotes.

Store your food properly, never feed or approach any wildlife, and avoid leaving "microtrash" (scraps from cooking, etc.) behind! These steps can help to keep raccoons safe and you healthy.





Speeding Kills Bears (And Other Wildlife!)

Black bears are one of the most iconic and beloved animals in Yosemite. Unfortunately, for bears, living here comes with some serious drawbacks. One of those is that four million visitors each year means millions of cars on Yosemite's roads; many with distracted drivers, folks who are not familiar with the area, or folks who are excited to get where they are going. **More than 400 bears have been hit by cars in Yosemite since 1995**—and often, collisions with vehicles are fatal to bears.

It is not just bears who face danger on Yosemite's roads: **owls, Pacific fishers, butterflies, rare amphibians like frogs and salamanders; and mammals like deer, foxes, and mountain lions** are also often hit and killed on Yosemite's roads.

If you want to help save wildlife, stay alert! Scan the sides of the road in front of your car and obey posted speed limits. **Talk to your friends about why it is important to drive slowly and pay attention while driving on the roads in Yosemite!**

POINTA WOLD



Wildlife Science in Yosemite: Wildlife Tracking

There are many ways that **wildlife biologists** find out new information about the animals they study. One of them is by **tracking wild animals**.

Biologists use tracking devices in the form of **collars, tags, or tiny antennas** to track wild animals. This gives biologists the ability to find out more information about where animals are moving, how large of an area they use, and what kind of habitat they use.

Some tracking devices send **GPS points** directly to biologists, and tell them where tagged animals are moving every hour. Other devices store data and biologists have to retrieve the data later. Still other trackers don't collect GPS data, but instead, help biologists locate animals by putting out a **radio signal (telemetry)**. This signal can be picked up using a radio receiver and an antenna, like in the picture here!

Biologists make sure that tracking devices weigh less than 3% of an animal's body weight, and that they are made of smooth, safe materials, so that they **do not harm wildlife**. The information biologists collect by tracking wildlife helps better **understand and protect** many species within the park!

POINTA WOLD