

# CREATE A SPOOKY NOCTURNAL LANDSCAPE

Learn about nocturnal animals at the Don Edwards San Francisco Bay National Wildlife Refuge. Draw your own nocturnal landscape using chalk and nocturnal animal cutouts

# What is nocturnal?

Nocturnal means happening at night or active at night. Nocturnal animals are adapted to be awake and active during the night rather than the daytime. Humans, on the other hand, are diurnal because we are mostly active during the daytime.

# Nocturnal Animals found at the Don Edwards San Francisco Bay National Wildlife Refuge

# Grey Fox

Although you may see the Grey Fox occasionally during the daytime, it is primarily nocturnal. The Grey Fox has coarse, salt and pepper gray hair with black markings on the head, nose and muzzle. They'll also have black strip down the top surface of the tail with a black tip. Adult grey foxes weight from 6 - 15 pounds. Using their wet nose and great sense of smell, the Grey Fox feeds on rabbits, mice, squirrels, fruits, nuts, and some insects. They have a unique capability to climb trees to den, forage or escape predators.



# Barn Owl



Barn Owls are nocturnal and can hunt in complete darkness because of their large eyes providing low light vision and round, concave face providing excellent hearing. Barn owls have a white heart-shaped face and dark eyes. They have a mix of buff and gray on the head, back, and upper wings, and are white on the face, body, and underwings. Their wingspan can be up to 49 inches! At night, Barn Owls hunt by flying low, searching for small rodents by sound. They have super soft feathers that help them hunt silently so their prey cannot hear them.

# Salt Marsh Harvest Mouse

The Salt Marsh Harvest Mouse, also known as "Salty," is an endangered and nocturnal species that lives only in the salt marshes of the San Francisco Bay. It is the size of an adult thumb, with a rich reddish-brown color and black eyes. Salty lives in salt marshes covered with dense pickleweed plants. Their main diet consists of pickleweed and saltgrass. Salty has large eyes and cupped ears so it can see in the dark and hear potential predators from far away!





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# Northern Racoon

Northern Racoons have excellent night vision, but poor distance vision. They also have excellent hearing and smell to find their meals at night. Racoons are omnivores who will eat frogs, mice, insects, fruits, and plants. Racoons are known for their "mask", a covering of black hair around their eyes framed by white "eyebrows" and a white snout. This black "mask" helps deflect glare, increasing their night vision! The body of the Racoon is covered by a mix of dark and light hair, which helps them blend into forest habitat.



# Mexican Free-tailed Bat

The Mexican free-tailed bat has reddish to dark brown or gray fur with black, forward pointing ears allowing for excellent hearing! Free-tailed bats have long and narrow wings; their wingspan is between 12-14 inches. They consume large amounts of moths and other insects, which they find using echolocation. Their roosts (where they live) can contain millions of bats! In large roosts it is estimated that they eat 250 tons of insects every night! Mexican free-tailed bats are the "jets" of the bat world; they are very fast flyers. Note: Hoary and Western Red Bats also live at the Refuge.

# Nocturnal Adaptations

Adaptations are body parts or behaviors that help plants and animals survive

### SMELL

Many nocturnal animals such as foxes and racoons have a heightened sense of smell. This allows them to find food miles awav

# HEARING

With cupped ears nocturnal animals can take in more sound. Some animals have asymmetrical hearing which means they can hear separately with each ear to tell where things are

Nocturnal animals have large eyes that can collect more natural light to see in the dark.

# **ECHOLOCATION**

Bats use echolocation in order to find their food in the dark! This adaptation reflects sound, providing the location of tasty insects.

# Create a spooky nocturnal landscape

### STEP 1

Draw your spooky landscape using chalk on black construction paper.

### STEP 2

Color in then cut out animals on the next page. You can also draw your own animals into your landscape.

Paste animals on your landscape drawing using a glue stick or tape.

Share your drawing with others or tape it on your window so your neighbors can see!





