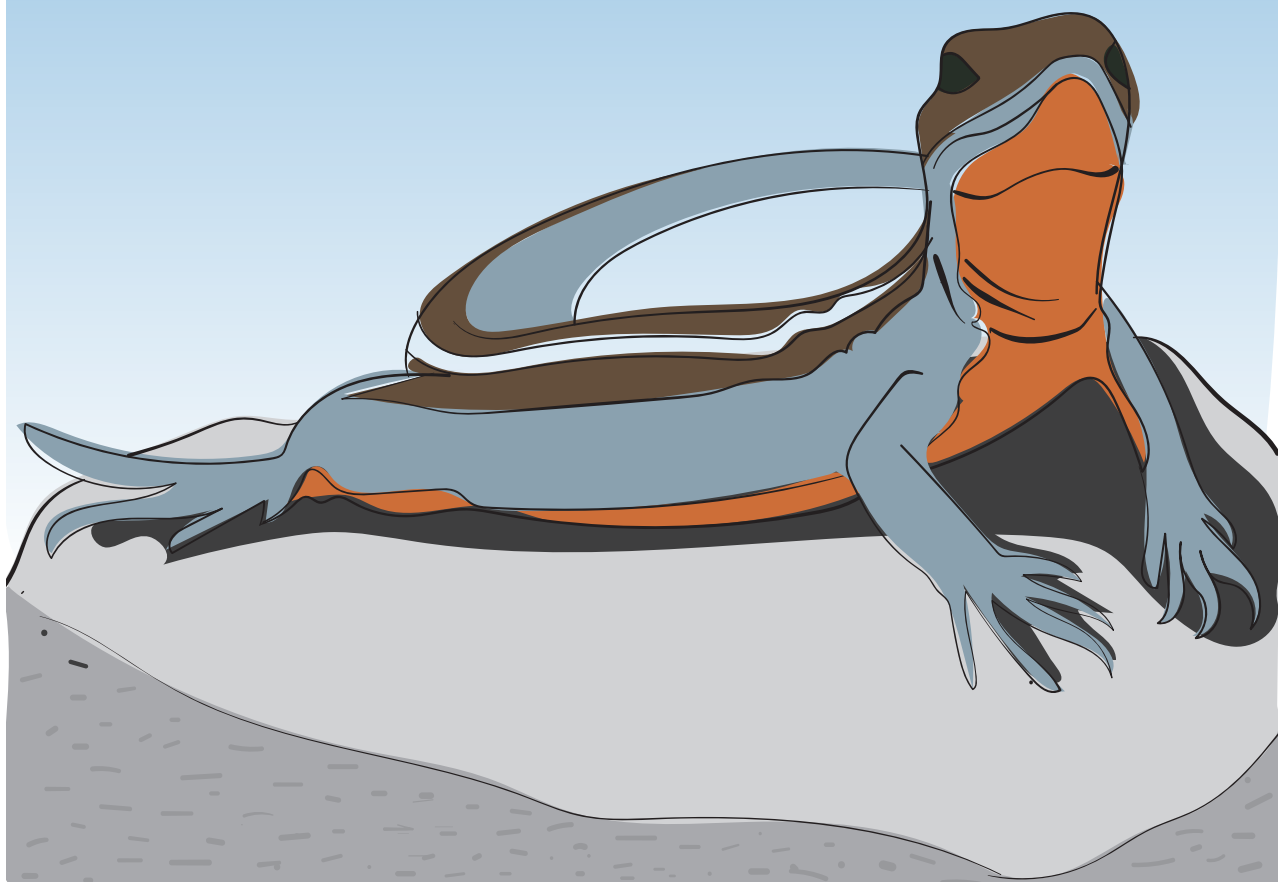


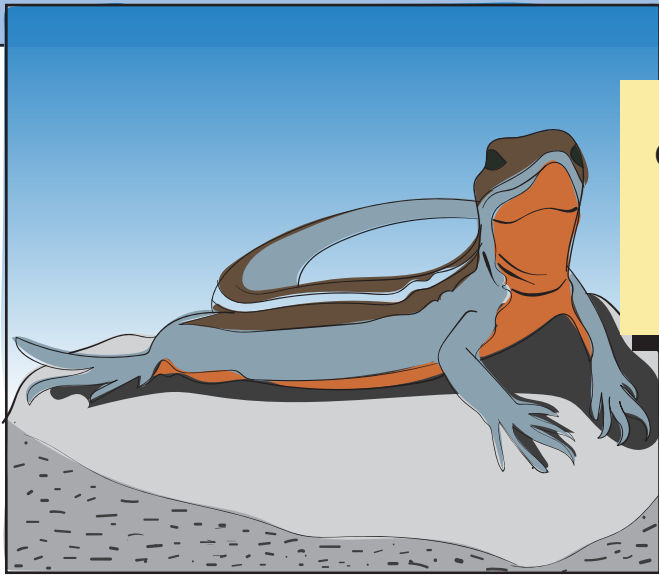
Clone of a kind



On a beautiful day
in San Diego...

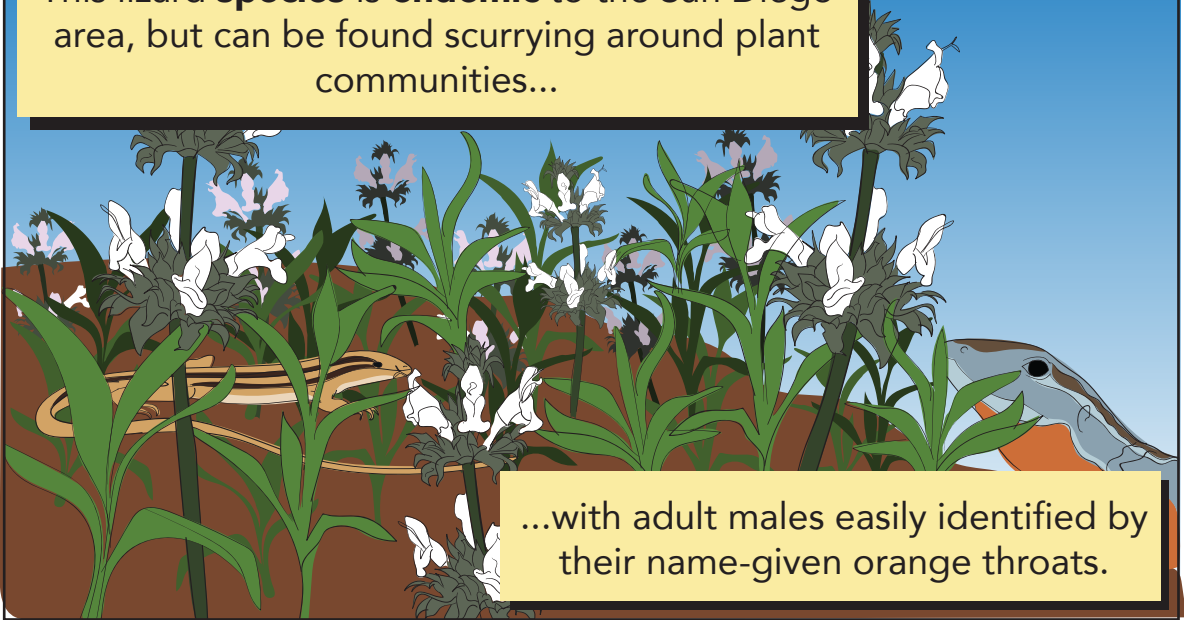


Cabrillo National Monument

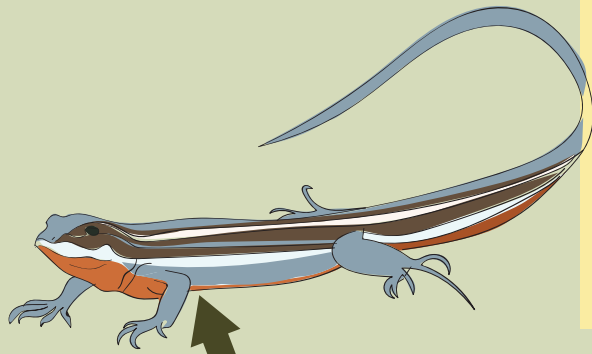


...a **Belding's Orange-throated Whiptail** finds a warm place to sun itself at Cabrillo National Monument (CNM).

This lizard **species** is **endemic** to the San Diego area, but can be found scurrying around plant communities...



...with adult males easily identified by their name-given orange throats.

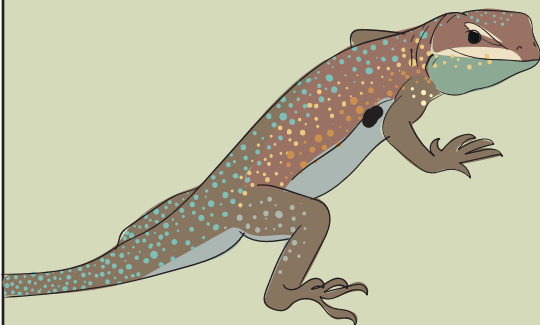


The Belding's Orange-throated Whiptail can also be identified by the long pale lines down its **dorsum** (back) and its whip-like tail that can be twice as long as its body length!

Aspidocelis hyperythra beldingi

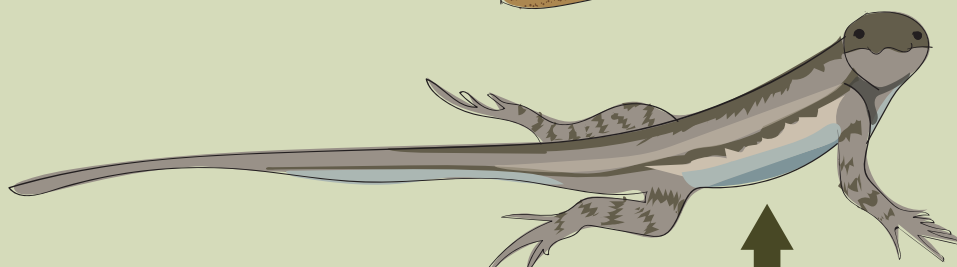
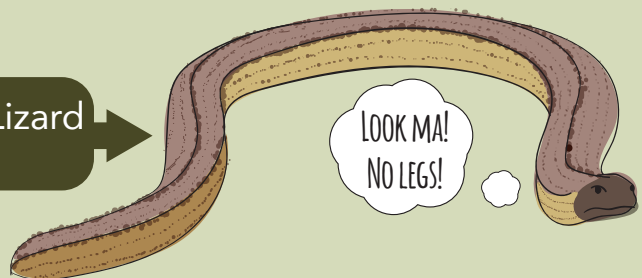
They are one of five species of lizards at CNM. Others include:

Southern Alligator Lizard
Elgaria multicarinata webbii



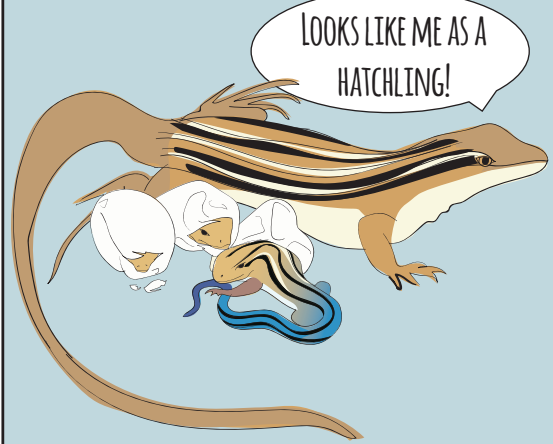
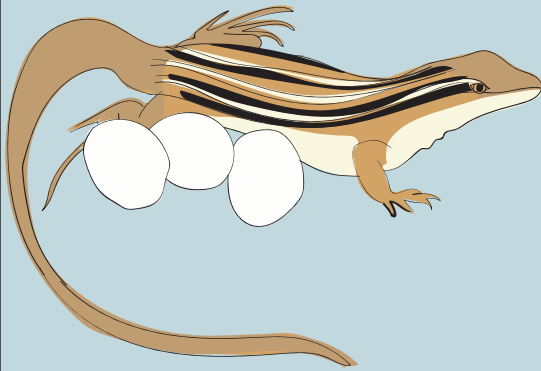
Western Side-blotched Lizard
Uta stansburiana elegans

Southern California Legless Lizard
Anniella stebbinsi

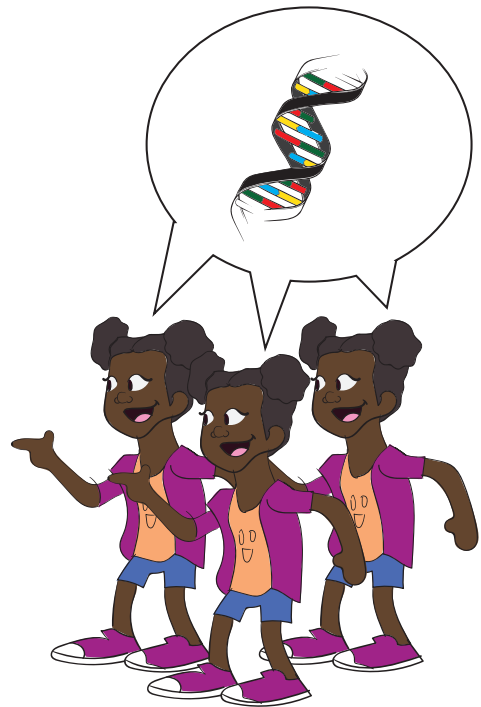
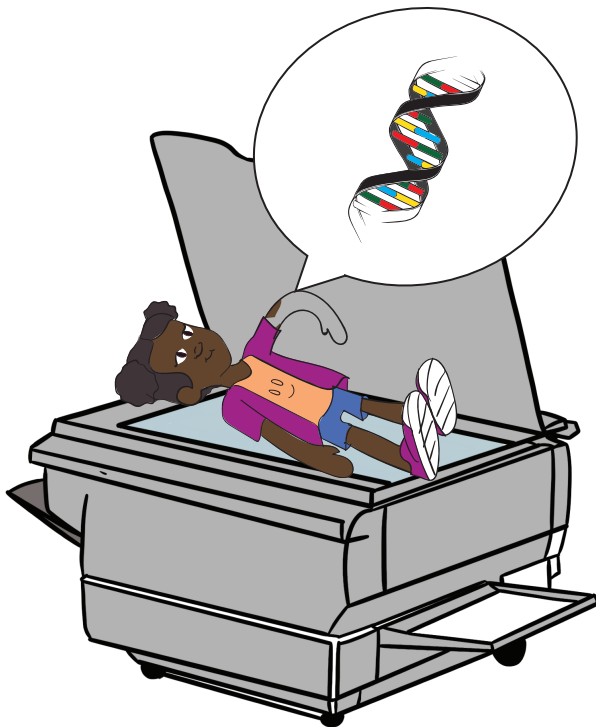


Great Basin Fence Lizard (*Sceloporus occidentalis longipes*)

In addition to their striking appearance, Belding's Orange-throated Whiptails belong to a family of lizards that are often **parthenogenetic**.



This means that a female lizard can produce **offspring** without a male by creating **clones** of herself!



These offspring are **genetically identical**, meaning their **DNA** is 100% the same. It would be like placing you in a 3D photocopier and pressing copy - the machine fires up and spits out three exact duplicates of you!

We know so much about lizard species like the Belding's Orange-throated Whiptail because of **herpetologists** that specialize in lizard research.

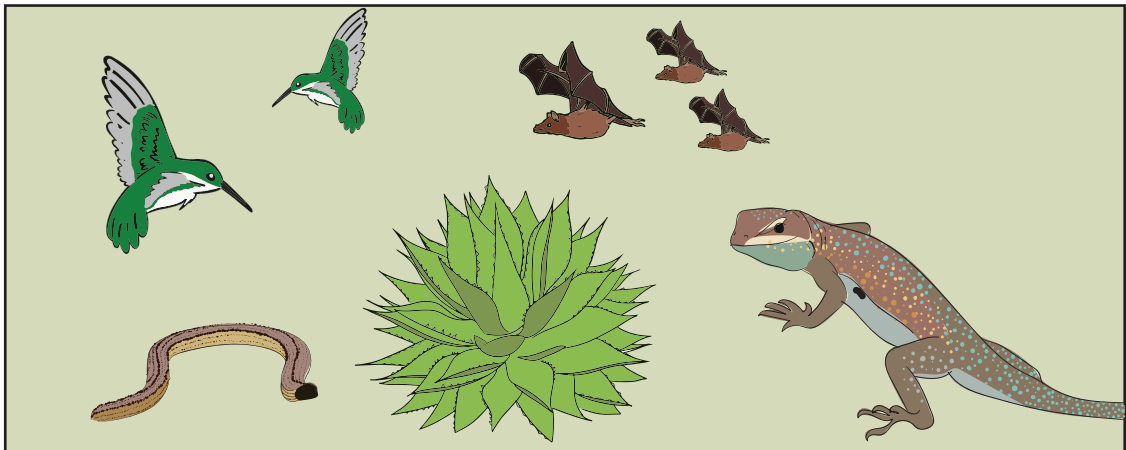


- Local to southern California
- Jerking gait
- Juveniles have cobalt blue legs and tails
- Length nose-to-base of tail is 2.0-2.8 inches

Herpetologists like Earyn McGee not only discover cool facts about lizards, they study these animals to understand how they live, what they need to survive, and their role in their **ecosystem**.



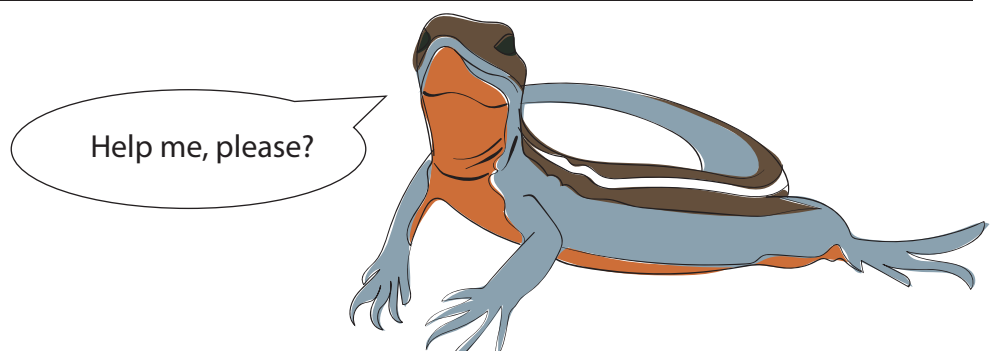
These are all important things to know for **conservation** - that is, the preservation and protection of these species.



In fact, the mission of the **National Park Service** - the organization that CNM is a part of - is to preserve and protect all the native plants and animals that live in our national parks and monuments.



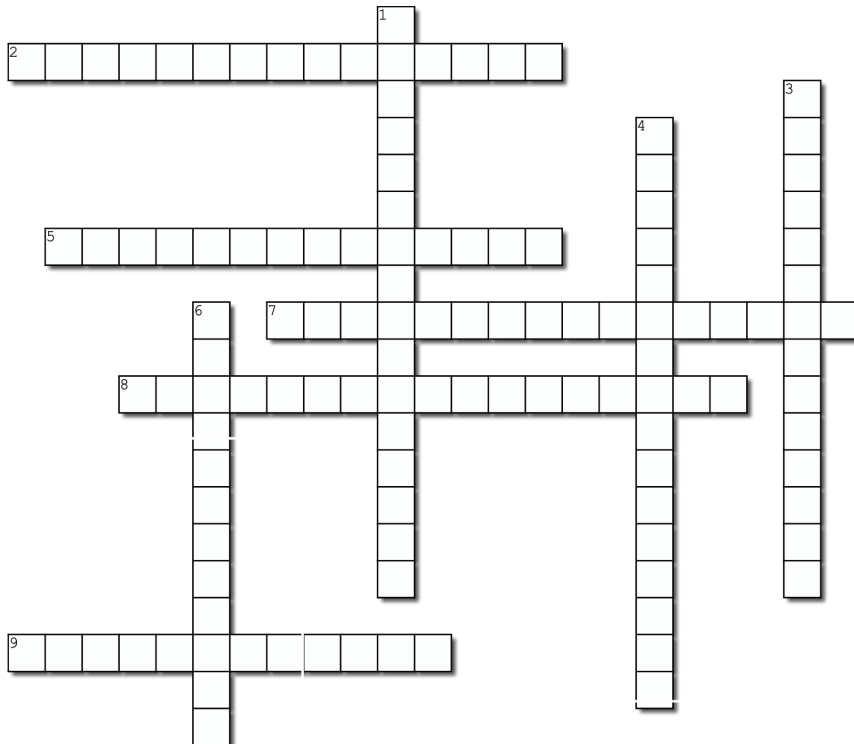
The research these scientists do is vital, because these lizards are in trouble. Why? Find out when you visit CNM!



Name: _____

Read the definitions, then use the hints to fill in the crossword puzzle below.
Hint: #3 is abbreviated!

- **Biodiversity** - the variety of life in the world or in a particular habitat or ecosystem.
- **Mass extinction** - The extinction of a large number of species within a relatively short period of geological time.
- **Ecological island** - an area of land which is isolated from the surrounding land.
- **Population bottleneck** - an event that drastically reduces the size of a population. The bottleneck may be caused by various events, such as an environmental disaster, the hunting of a species to the point of extinction, or habitat destruction that results in the deaths of organisms.
- **Genetic diversity** - is the diversity or variability of genes within species, a community or group.
- **Habitat fragment** - when a large expanse of habitat is transformed into a number of smaller patches. These patches are "fragmented", or isolated from each other.
- **Invasive species** - is an organism that causes harm in a new environment where it is not native.
- **Ecosystem services** - the contributions of ecosystems to human well-being. They support our survival and quality of life, such as clean water or air.
- **Urbanization** - the process by which large numbers of people become permanently concentrated in relatively small areas, forming cities.



ACROSS

2. intruder alert!
5. what happened to the dinosaurs?
7. cut into pieces.
8. helpful to humans.
9. the opposite of becoming rural.

DOWN

1. an assortment of jeans.
3. find a message in one of these.
4. not quite where Gilligan landed.
6. variety is the spice of life!

KNOW BEFORE YOU GO

On your virtual field trip, you'll be digitally visiting one of our nation's most culturally, historically, and naturally valuable places! Cabrillo National Monument is part of the National Park System, which means it is preserved and protected land. To make your virtual field trip enjoyable please follow these guidelines:

- **Be prepared** – make sure you have read the comic book and finished your crossword puzzle.
- **Be polite** – raise your hand when you wish to speak and do not interrupt each other: Please keep mic muted unless you are instructed otherwise. If comfortable, please turn on your camera. The use of an appropriate background is fine. All voices are welcome! This is a discussion where curiosity, questions, and respectful dialogue is encouraged.
- **Be present** – come awake, alert, and ready to learn.
- **Have fun** – enjoy digitally exploring San Diego's only National Park!