



Desert National Wildlife Refuge

Junior Refuge Ranger Parent/Leader Guide



Before You Get Started

Approximate Length: about 2 hours

Target Ages: 7-12

What You Will Need:

- 1 Junior Refuge Ranger book per child
- pencils

WAYS TO COMPLETE THE PROGRAM:

TODAY



Earn Your Junior Refuge Ranger Badge:

- If child is 7 or UNDER: complete any 2 PAGES
- If child is 8-10 years old: complete 3 PAGES (of pages 1-7)
- If child is OVER 10 years old: complete 4 PAGES (of pages 1-7)



Earn a Refuge Pin:

- Complete page 8: Corn Creek Tic-Tac-Toe
- Fill in the Desert Refuge Journal entry

LATER

Earn More Refuge Pins!

- Visit our sister refuges and complete the specific refuge page
- Fill in the Refuge Journal entry for each refuge you visit
- Present your completed pages at the front desk



Earn a Junior Refuge Ranger Patch

- Once you earn the badge and all 4 refuge pins, you can present your completed pages to the visitor center front desk to receive your Junior Refuge Ranger Patch.



Additional Information

Badges and pins are available only during visitor center open hours. Please visit our website <http://www.fws.gov/desertcomplex> or call 1-702-879-6110 to check the current visitor center schedule.

START BY THE FLAG POLE IN FRONT OF VISITOR CENTER

Ask children: “What is a refuge?”
(take 2-3 answers, then ask the following)
“Why is this refuge here?” [answers follow]

Tell them: A refuge is a safe place for wildlife to live. Desert National Wildlife Refuge was created to protect the Desert Bighorn Sheep, but many other animals live here, too. Different kinds of animals need different habitats, or homes, to live in.

What kinds of animals do you think might live at the refuge? [coyote, birds, rabbits, tortoises, etc.] **(take 2-3 answers, then ask)**
Why is the refuge a good home for those animals?

Ask children to turn to page 4: The Story of the Refuges. Fill out together. (NOTE: This page may be too difficult for children 10 & under and can be skipped for those ages.)

If you are trying to earn a Desert refuge pin, introduce Corn Creek Tic-Tac-Toe now. Read each box out loud and tell children to keep an eye out for ways to complete the boxes while they walk.

Follow the blue creek through the breezeway to the sidewalk/trailhead. Take the right fork. Stop by the bridge.

STOP 1: Archway/Bridge

Ask children to look over the bridge.

Ask them: “Where did the water come from? How can there be water in a desert?”
[answers follow]

Tell them: Water is important to all living things, but it is especially important in the desert.

Ask: “What animals do you think you might see on the refuge today?”
[lizards, birds, rabbits, etc.]

Ask: “How do those animals get the water they need to stay alive?” [answers follow]

Tell children: Many desert animals drink water from natural springs that bubble up from underground lakes or aquifers. Follow the underground maze in Page 3 of your Junior Refuge Ranger book to see how rainwater travels from high up in the mountains, down deep under the ground, and back up to the surface of a desert spring.

Continue over the bridge and take a right onto Bighorn Loop. Follow the trail until you reach a shade structure with benches that look out toward the mountains.

STOP 2: The Lookout

Tell children: From this viewpoint, you can see the Sheep mountain range and many desert plants. This is what most of Desert National Wildlife Refuge looks like. Notice the creosote bushes and cacti around you. The rest of the Corn Creek area (the area around the visitor center) looks very different.

The man-made pond and creek make it possible for many non-desert plants to grow such as grass and fruit trees. Most of the area by the visitor center has been changed by humans over time. Different plants and animals live in this part of the refuge because of changes such as how we use water and what seeds we plant.

Another way humans can change the desert is with our garbage. When trash ends up in the desert it can leak chemicals into the environment or be mistaken for food by animals. Complete Page 5 of your Junior Refuge Ranger Book to see how long garbage takes to decompose.

Continue on Bighorn loop past Whispering Ben until you reach Coyote Loop. Take a right. Stay right to reach the cabin.

STOP 3: Railroad Tie Cabin

Ask children: How can you tell humans have been here? [trails, cabin, tools, etc.]

Tell them: The railroad tie cabin was built in the 1920s by the Richardson family. There isn't a lot of wood in the desert, so how did they make a wooden cabin? They used the wooden "ties" from a defunct railroad that used to run from Las Vegas to Tonopah.

Ask: How can you tell if animals have been around? [answers follow]

Tell them: Some animals are very hard to spot. Wildlife has found lots of different ways to hide from humans: they could use camouflage to blend into their surroundings or be so fast that we can't catch them! Some animals are mostly active at night and are hidden in their burrows or nests during the day. Even if we can't see all the animals that live on the refuge, we can sometimes see their tracks.

Refuge Rangers can tell which animals have been around based on the tracks they see. Can you solve the mystery of who walked by? Complete Page 2 of your Junior Refuge Ranger book to test your tracking detective skills.

If you are looking at the Railroad Tie Cabin from the trail, your next stop is right behind you. Walk over to the Refugium--a large fish tank which holds the endangered Pahrump Poolfish.

STOP 4: Refugium

Tell Children: Historically, the Pahrump poolfish was found only in Manse Spring in Nye County, but that spring dried up in 1975 due to overuse of groundwater pumping. The U.S. Fish & Wildlife Service along with partners saved as many of the poolfish as possible before the spring dried up and brought them to the refuge. They are now kept safe in this refugium, which is designed to have the same water temperature and features as the original spring.

Allow children to look through the windows to spot the very small fish.

Remind them not to tap on the glass.

There is no page from the book for this stop.

Continue down Coyote Loop until you reach the orchard.

Stop 5: Orchard

Tell children: A refuge is a safe place for wildlife to live. It is also important for a refuge to be a healthy place to live. Look around the area by the orchard and the creek. Is this a healthy place for wildlife to live? Complete Pages 6 & 7 of your Junior Refuge Ranger book to help you decide.

[This is a healthy habitat; answers on page 7 should all be 4 or 5 with a total of 20-25.]

Fill out the Desert Refuge Journal entry on Page 12 of the Junior Refuge Ranger Book.

Have the children completed the "Corn Creek Tic-Tac-Toe" on Page 8 yet? Encourage them to try to fill in any empty boxes as you make your way back to the visitor center.

Return to the visitor center front desk and present your workbook to a ranger to receive your badge and pin.

Corn Creek Trail System

