

# NCC Quarterly

## Orange County Native Seed Partnership

The Orange County Native Seed Partnership is officially open for business. The mission of the Partnership is to improve access to affordable and genetically appropriate native seeds. Participants include signatories and land managers of NCCP/HCP designated lands in Central and Coastal Orange County, and potentially other OC based agencies with a defined conservation purpose.

The Partnership is administered by the Natural Communities Coalition (NCC) and is charged with solving the ongoing challenge of procuring high-quality, genetically appropriate native seed in adequate quantities. "The landowners and managers of the Nature Reserve of Orange County (NROC) expressed their desire early in the planning process for high quality, genetically appropriate seed that would assist them in accomplishing restoration and enhancement projects that are not only successful in the short term but are also resilient for long-term success. That is what the Partnership is designed to do," said Mendel Stewart, Natural Resource Management Coordinator for NCC.

Seed partnerships are starting to fill a niche in the conservation land management sector as an innovative and economically favorable approach to addressing seed supply chain issues. Examples of established seed partnerships include Seed LA and the Mid-Atlantic Regional Seed Bank. Both of these organizations are solving regional problems through a collaborative approach and are revealing seed banking as an effective and efficient way to ensure the long-term survival of plant species impacted by habitat fragmentation and ecological change.

One of the key benefits to engaging with the Orange County Native Seed Partnership, versus the traditional method of purchasing seed from commercial seed vendors, is the simplification and ease of acquiring seed when it is critically needed. Seed supplied by the Orange County Native Seed Partnership will be largely directed to various restoration projects planned within NROC and adjacent areas. It is anticipated through the duration of the NCCP/HCP Permit (2071), that a significant percentage of Reserve acreage has been impacted or will be subjected to various disturbances, including wildfire, invasive species, unauthorized public use, and climate change. As many as 6,000 acres of grasslands have already been designated for restoration in the immediate future.



As indicated in its Strategic Plan, the Partnership will act as a native seed broker in the Orange County region, collecting orders from participants, coordinating seed collection and production and fronting the capital (when necessary and to the extent feasible) to establish production contracts at the appropriate time. Participation in the Partnership will allow land managers to plan restoration activities beyond the current funding cycle and will support larger-scale production than may be available to individual participants with the certainty that the seed they receive is representative of our region.

Those interested in acquiring seed in the future, obtaining a copy of the strategic plan, or learning more about how the Partnership may tailor its services to meet the unique needs and constraints of its members, are urged to contact Mendel Stewart via email at [mstewart@oconconservation.org](mailto:mstewart@oconconservation.org).

## USFWS Proposes Listing of Western Spadefoot Toad



The United States Fish and Wildlife Service (USFWS) has determined the western spadefoot toad (*Spea hammondi*) is comprised of two geographically distinct population segments and is seeking public comment

on its proposal to list both distinct population segments as threatened under the Endangered Species Act. The Federal Register posting of the proposed listing can be accessed by clicking [here](#).

The western spadefoot toad is one of the target and identified species receiving regulatory coverage under the Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP of Central/Coastal Orange County). Since the 1950's, the western spadefoot population is believed to have declined by 80%. According to USFWS, the likely causes of the toad's weakened status are habitat loss, fragmentation and degradation due to development and land conversion, predation by nonnative species such as bullfrogs, and the effects of climate change such as an increase in the frequency, intensity and duration of drought and wildfire.

Spadefoot toads are small 2-3 inch amphibians, which spend much of their lives burrowed underground, where they can be near moisture. The "spadefoot" name is derived from the hard, keratinous protrusions on their hind feet, which look like the blade of a shovel and provide the ability to efficiently dig backwards into the soil as the species prepares for hibernation.

Starting in 2019, western spadefoot toad habitats at Crystal Cove State Park and other locations in the Nature Reserve of Orange County have either been created, or actively restored and monitored. While the restoration work is now complete, monitoring has been ongoing and is scheduled to continue through 2025. The integrated team of scientists, land managers, and landowners collaborating in this project include California State Parks, OC Parks, University of California Los Angeles, United State Geological Survey, Irvine Ranch Conservancy, Land IQ and Nakae and Associates. Project funding was provided by the California Wildlife Conservation Board and the Natural Communities Coalition.

Members of the public may comment on the proposal to list the southern distinct population segment and the northern distinct population segment of the western spadefoot toad. USFWS will consider comments from all interested parties through February 5, 2024. The proposal and information on how to submit comments can be found at [www.regulations.gov](http://www.regulations.gov). When landing on the regulations.gov website, click on the "Dockets" tab and enter FWS-R8-ES-2023-0095 in the search bar.

## Southwestern Pond Turtles Proposed for Threatened Listing



The United States Fish and Wildlife Service (USFWS) recently announced a proposal to list both species of western pond turtle, the northwestern pond turtle and the southwestern pond turtle, as threatened species under the Endangered Species Act.

Western pond turtles are the only native freshwater turtles on the west coast and are found from western Washington south to northwestern Baja California. In addition to ponds, the species are frequently discovered in marshes, lakes, and slow-moving streams.

Locally and within the Nature Reserve of Orange County, southwestern pond turtle populations have been detected at the UCI San Joaquin Marsh, Shady Canyon, Aliso Creek, Peters Canyon and Sand Canyon Reservoir.

The ongoing threats to the pond turtle include habitat loss and fragmentation, drought conditions, and predation by invasive species, such as non-native bullfrogs.

According to the USFWS, the best available science to evaluate the status of both species was completed through a Species Status Assessment. The assessment's findings concluded "the southwestern and northwestern pond turtle are likely to sustain populations in the wild over the near term, both species have increasing risk of extinction due to population losses, decreased genetic diversity, and reduced ability to adapt to changing environmental conditions in the next half century, thus warranting listing as threatened under the ESA."

The benefits of being listed under the ESA include protection, recovery, enhanced public knowledge of the threats and an invitation to engage in conservation. In addition, the "threatened" listing brings wildlife agencies, government entities, military installations, non-profit groups, and Tribal assemblies together in developing action plans to protect the pond turtle.

A few of the interesting features of the southwestern pond turtles are they live for approximately 40 years, feed on aquatic invertebrates, small fish and plants, and are known to bask in the sun on logs or rocks near the water to regulate their body temperature.

While the southwestern pond turtle is not on the list of target and identified species receiving regulatory coverage under the NCCP/HCP, the Natural Communities Coalition supports the efforts to the species and its habitat for the purpose of maintaining biodiversity and ecological balance of freshwater ecosystems throughout the Nature Reserve of Orange County.

# Gypsum Canyon Wilderness Opens

**N**orth Gypsum Canyon, a 1040-acre conservation easement located at the intersection of State Route 241 and State Route 91, was officially opened for public access on November 14, 2023. The property is restricted to conservation-based undertakings, which includes research, monitoring and compatible recreational uses such as hiking, mountain biking, and horse riding.

The land parcel was gifted to the public from the Irvine Company in 2014, through an agreement with the County of Orange to be conserved for perpetuity in its natural state. The Orange County Parks Foundation was designated as the non-profit conservation easement holder and provides assurance that the conservation mandates imposed on the land are strictly upheld. OC Parks serves as the landowner and maintains responsibility for land management duties.

There are multiple types of habitat within North Gypsum Canyon which vary in size and condition. Six vegetation communities complete the landscape, which include grasslands, coastal sage scrub, chaparral, riparian, woodland, and cliff and rock.

Per monitoring studies conducted in 2022, there is a large variety of birds at Gypsum Canyon. A total of 47 different bird species were found within the coastal sage scrub sections, 21 different bird species on the grassland portions, and 46 different bird species within the oak woodland habitat. These counts included the discovery of the Coastal California gnatcatcher and coastal cactus wren, both of which are NCCP/HCP target species.

Herpetological surveys indicated the presence of Blainville's horned lizard, western fence lizard, and side-blotched lizard. Wildlife surveys revealed frequent sightings of gray fox, mule deer, coyote, desert cottontail, bobcat and mountain lion. Rare plants found at Gypsum Canyon include many-stemmed Dudleya, Coulter's saltbush, and chaparral beargrass.

For recreational use, Gypsum Canyon Wilderness has seven trails which cover nearly six miles. The trails are rated as easy to moderate in difficulty. Trail connectivity to Gypsum Canyon Nature Preserve and Weir Canyon Nature Preserve is reachable through Irvine Ranch Conservancy docent led programs. The site also offers picnicking facilities, portable restrooms, map displays and plentiful parking for cars and horse trailers. All public access to Gypsum Canyon Wilderness is managed through a registration process. Please go to [www.letsgooutside.org](http://www.letsgooutside.org) to sign up for future use.

Gypsum Canyon Wilderness is the result of a multi-year collaboration involving the Irvine Company, OC Parks, Irvine Ranch Conservancy, and the Orange County Parks Foundation. The benefits of this land acquisition and conservation easement address the current and future needs of Orange County residents by providing natural systems which filter clean water, enhance biodiversity, provide an aesthetic break from residential development, and connect people to the awe-inspiration of nature.

