# Liberty Wildlife Rehabilitation Foundation



## **Education Program's Natural History**



Western Screech Owl Ivan

### Western Screech Owl (Megascops kennicottii)

**Range**: Found only in North America, the Western Screech Owl is one of the most common owls found throughout northwestern Mexico, southwestern United States and along the Pacific coast. In the United States, they are generally found within 12 western states. Within the last 40 years, their range has expanded as far east as Texas, co-sharing the same range as their close relative the Eastern Screech Owl. A 2004 survey estimated the Western Screech Owl population at 740,000 across its range.

The Western Screech Owl can be found throughout Arizona, but are less common in the northeastern part of the state. They are essentially nonmigratory throughout their range.



Habitat: The Western Screech Owl lives in a wide variety of woodlands, deserts, and forest habitats with the highest concentrations found in riparian deciduous woodlands at low elevations. It is tolerant of humans and often will nest and hunt in residential areas and suburban parks if suitable trees for nests and roosts are available.





**Description**: The Western Screech Owl is a small owl that exhibits considerable variation both in size and color based upon its geographic area. In the dry southwest, they are typically a paler gray while those in the humid northwest are darker and browner. A red phase is rare and usually found only in the Pacific Northwest. In all variation, the plumage will be mottled dark and light, resembling the tree bark, which they use for camouflage. They have distinct ear tufts and facial disks. They range in length from 7 1/2 to 10 inches with wingspans measuring from 21 to 22 inches. Their average weights are between 4 and 7 ounces and will vary depending upon their location with those in the north being heavier than those in the south of their range. The females are at the larger range of these measurements. Their feet and toes are feathered in the northern populations and bristled in the southern deserts. The ear



openings are located on the side of the head and are slightly offset, enabling the owl to triangulate sounds and locate prey. The have yellow eyes and dark beaks.

During direct flight, Western Screech Owls fly fairly rapidly with a steady wing beat of about 5 strokes per second. They rarely glide or hover, but may fly bat-like with erratic movements when flying through wooded areas.

Their most common call is a unique song of 5 to 15 hollow, whistled hoots that speed up toward the end, sounding like a bouncing ball. Other calls include a double trill and a bark, this is an aggressive alarm. A typical call may be heard at:

http://www.allaboutbirds.org/guide/Western\_Screech-Owl/sounds

**Hunting/Prey**: Western Screech Owls are primarily "sit and wait" hunters that sit on their perch waiting for prey. They will also capture prey on the ground, snatch insects from foliage, catch fish in shallow water and hawk flying insects.

They are nocturnal, beginning to hunt alone at twilight throughout the night and returning to the roost 30 minutes before sunrise. They prefer small mammals, birds, insects and amphibians. Mice, shrews, and insects make up the majority of their diet, but they will also take toads, scorpions, crayfish, fish and worms.

Songbirds that are frequently hunted by the Western Screech Owl, such as northern cardinals and white-throated sparrows, often will mob the owl, especially during the spring and early summer.

The following websites provide some Western Screech Owl behaviors:

http://www.youtube.com/watch?v=ztgD24L2jQw

http://www.youtube.com/watch?v=tvCwMjegsZE

http://www.youtube.com/watch?v=RtSeM5p-RiY&NR=1

**Breeding/Nesting**: The Western Screech Owls are usually monogamous. Mated pairs stay together and defend their territory year-round. Mating begins in January or February and will include



Figure 5. Allopreening is an important component of pair-bonding behavior in the Western Screech-Owl. Drawing by T. Angel.

mutual preening of the head and neck area (allopreening) which furthers the bonding behavior. From 2 to 7 (3 to 5 on average) white, oval eggs are laid a day or two apart between March and May and hatch a month later. Nesting duties are strictly divided, with the male providing almost all of the food for the female and young, while the female incubates the eggs and broods the young. Nestlings fledge at 4 to 5 weeks. Fledglings will remain with the parents for another 1 or 2 months before dispersing.

Typically, the Western Screech Owl has no true second brood as the Eastern Screech Owl will have, however, if the first clutch is abandoned or predated early in the season, they likely will replace it.

For nests, Western Screech Owls use existing cavities in trees, saguaros, and nest boxes that have been excavated by squirrels, flickers, woodpeckers and starlings. They prefer cavities that are at least 1 foot deep with an entrance just a few inches wide to preclude predation by raccoons or other animals. They add no new material to the nest.

**Lifespan**: Western Screech Owls live from between 1 and 8 years in the wild. The longest recorded wild one lived for 13 years while the longest captive one lived to 19 years.

**Threats**: Loss of riparian habitat, including the removal of dead or dying trees, is the greatest threat to the Western Screen Owl populations. Territorial lost to the invasion of the Barred Owl is also being recorded. Collisions with vehicles account for their losses. Natural predators include the Great Horned Owl, Spotted Owl, Barred Owl, Crows, Jays, raccoons and gopher snakes. Their conservation status is "Least Concern."

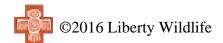
#### Other Western Screech Owl Facts:

- Screech-owls are one of the most common owls in the United States.
- Until 2003, New World screech owls were thought to be related to Old World scops owls and merged into the genus *Otus*. In 2003, the relationship was determined to be distant and the genus Megascops was resurrected and all New World screech owls (Western & Eastern Screech Owl and Whiskered Screech Owl) except the Flammulated Owls were moved to this new genus. Some research continues to show the scientific name as Otus kennicottii.
- The scientific name comes from the Greek words *megascops*, referring to great seeing or vision, and the Latinized name for the American naturalist Robert Kennicott. The common name indicates its range in North America. Screech-owls have also been known as Little Great Horned Owl, Little Grey Owl, Mottled Owl, Little Cat Owl, and Scritch Owl.
- The word owl came from the Anglo-Saxon word *ule*, which was derived from the Latin word *ululo*, which means *to cry out*. Owls often have an eerie call that is mostly uttered at night.
- The Western Screech-Owl does not screech, but instead uses a trill of hoots similar to a fast bouncing ball.
- Screech-owls are one of the most common owls in the United States.
- The Eastern Screech-owl is slightly smaller than the Western Screech-owl and occupies the United States east of the Rocky Mountains and northeastern Mexico. Eastern screech-owls are distinguished from their close relative western screech-owls, by their grayish-yellow bill while the Western Screech Owl has a gray to black bill. Vocalizations are different: The Western



Screech Owl's bouncing ball call is replaced by the Eastern Screech Owl's descending whinny, and the Western's double trill is replaced by the Eastern's long, single trill.

- The ear tufts may be held erect or flattened depending upon the situation.
- The young owlets are skillful climbers and are able to climb back up a tree trunk if it happens to leave the nest too early.
- Colonies of tree ants sometimes occupy the Western Screech Owl's nest site and apparently protect the nest from disturbance by biting and stinging potential predators.
- Although generally nocturnal hunters, males will hunt during the day if nesting food requirements demand it.
- Bill snapping is issued in response to close proximity to a predator such as crow, squirrel or human.
- In the recent book <u>Legend of the Guardians: The World of Ga'Hoole</u>, Spoorn is a Western Screech Owl. With Skench a Great Horned Owl, they are leaders of the St. Aegolius Academy of Orphaned Owls.







### Ivan

Ivan was discovered on the ground in Paradise Valley by one of Liberty Wildlife's Guardians in 2003. During his examination at Liberty, Ivan was found to have a congenital eye disease that required his eye to be removed. While birds can survive with one eye in the wild, Ivan has remained at Liberty to be sure that he does not have any babies with the same eye disease. Since then, Ivan has become an outstanding educator going to schools and events.





### Stella

Stella was brought to Liberty Wildlife as a juvenile in 2012. It was unknown how long she had been kept by her rescuer but it quickly became apparent that she was very comfortable being with people. She was placed with foster parents and other young Western Screech Owls, but remained too comfortable when staff approached her. Stella was determined to be too habituated to release for her safety and was transferred to her new assignment as an educator.

Compiled by Max Bessler

Photos courtesy of Barb Del'Ve

Sources: Cornell Lab of Ornithology, The Peregrine Fund, University of Michigan Museum of Zoology. North American Owls, 2<sup>nd</sup> ed. by Paul Johnsgard, The Owl Pages, Snake River Birds of Prey National Conservation Area, Desert USA, Arizona Wildlife Views (March-April 2007, p.13)

