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## ENTANGLEMENT OF A WESTERN SCREECH-OWL (*MEGASCOPS KENNICOTTII*) IN COULTER SPIDERLING (*BOERHAAVIA COULTERI*)

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**ABSTRACT**—We report an incident from southeastern Arizona of an adult western screech-owl (*Megascops kennicottii*) entangled in Coulter spiderling (*Boerhaavia coulteri*), a native forb. *Boerhaavia* thrives in open areas, such as heavily grazed rangeland and other anthropogenically disturbed land. Rapid urban development may create favorable conditions for proliferation of *Boerhaavia* and promote avian entanglements.

**RESUMEN**—Reportamos un incidente en el sudeste de Arizona de un adulto tecolote occidental (*Megascops kennicottii*) enredado en *Boerhaavia coulteri*, una planta nativa. *Boerhaavia* crece en áreas abiertas, como por ejemplo pastizales con pastoreo fuerte y otras áreas que han sido perturbadas por el hombre. El rápido crecimiento urbano puede crear condiciones favorables para la proliferación de *Boerhaavia* y promover el enredo de aves.

Entanglement of birds in anthropogenic structures (Lincoln, 1931; Cornwell and Hochbaum, 1971; Johnson, 1987, 1988; Allen and Ramirez, 1990), spider webs (Hoyt, 1960; Graham, 1997), and natural vegetation (Needham, 1909; McNicholl, 1988, 1994; Nealen and Nealen, 2000; Hinam et al., 2004; Cain and Jansen, 2005) has been reported commonly. The latter occurrences often involve introduced noxious weeds, commonly burdock (*Arctium*; Needham, 1909; McNicholl, 1988, 1994; Nealen and Nealen, 2000; Hinam et al., 2004; Van Damme, 2005), or native flora with defensive structures such as nettles, barbs, spines, or thorns (Craves, 1998; Cain and Jansen, 2005). We report an adult western screech-owl (*Megascops kennicottii*) entangled in Coulter spiderling (*Boerhaavia coulteri*), a native forb lacking defensive structures (Kearney and Peebles, 1960; Parker, 2003).

On 22 September 2006 at 2000 h in Sabino Canyon Recreation Area, Coronado National

Forest, Pima County, Arizona, we encountered an adult western screech-owl struggling to fly from the ground with wings prostrate. Feathers of the bird were stuck to sticky stems of Coulter spiderling causing the owl to damage a number of flight feathers and tear off parts of several remiges while flapping its wings as it attempted to escape. We removed the owl from the plant because the bird was unable to escape on its own. However, the owl was unable to fly upon release due to the damaged remiges; therefore, we transported the bird to a wildlife rehabilitator.

The owl was discovered just after dusk, and we suspect that the owl became entangled while diving for prey because of the prostrate position of the wings. Owls pull their outstretched wings back as they approach a prey item to slow and stall as they seize the prey, often landing on the ground with their wings still outstretched (Everett, 1977; König et al., 1999). Based on its general body condition and defensive behavior,

the owl was in good health despite the damaged remiges and was not molting at the time of entanglement. Given this evidence, we assumed the owl had only recently become trapped, because a prolonged entanglement during daylight hours would likely have resulted in death from exposure. This is apparently the first documented occurrence of an avian species entangled in spiderling.

Coulter spiderling is a low-growing weed with viscous stems, common in sandy washes, desert foothills and other xeric environments throughout southern Arizona (Kearney and Peebles, 1960; Parker, 2003). Peak growth of spiderlings occurs in late summer following monsoonal rains (Parker, 2003). Spiderling grows well in disturbed and open areas (Kearney and Peebles, 1960; Parker, 2003). Urban settings, overgrazed, and eroded lands may create conditions favorable for proliferation of *Boerhaavia*. On a coarse scale, urban development and consequent habitat loss and fragmentation is having a negative effect on numerous species of birds, including several species of owls (Johnson et al. 1999; Millsap and Bear 2000; Chace and Walsh 2006; Martínez et al. 2007). On a finer scale, disturbance from urbanization and overgrazing that favor proliferation of spiderling might enhance potential for detrimental occurrences such as entanglements. The potential impacts on ground-feeding aerial predators such as screech-owls is uncertain, and a viable conservation and management issue.

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