FIG. 1. *Philodryas olfersii* using diving as defensive behavior.

snake submerged under water and then quickly emerged (Fig. 1), swimming to the other side of the stream. The second snake was observed about 30 m away from the first individual and acted in a similar way. However, as it dove into the water, it tried to hide in crevices and rocks. After concealing its body, it remained almost motionless for nearly 8 min, but never ceased to watch us, even while submerged. This defensive behavior by completely altering the micro-habitat is described as an alternative escape mechanism, where the exchange of microhabitat makes the prey inaccessible to most predators of the original site (Greene 1988. *In* Gans and Huey [eds.], Biology of the Reptilia, Volume 16, Ecology B, pp. 1–152. Alan R. Liss, New York).To our knowledge, this is the first record of escape into aquatic habitat in the defensive behavior of *P. olfersii*.

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***PITUOPHIS CATENIFER CATENIFER* (Pacific Gophersnake). ARBOREAL HABITAT USE and DIET.** Although generally considered to be terrestrial or fossorial, *Pituophis catenifer* have occasionally been recorded to climb and forage up to 12 m off the ground in trees (Iverson 2013. Herpetol. Rev. 45:342). While searching for Red Tree Voles (*Arborimus longicaudus*) on 8 August 2017 near Monroe, Oregon, USA (44.289°N, 123.382°W; WGS84), we spotted a large stick nest 8.3 m up in a 22-cm dbh Douglas-fir (*Pseudotsuga menziesii*) tree. Upon climbing to the nest we found that it was occupied by a female *P. catenifer* (SVL= 98 cm) that was curled up under some loose twigs on top of the nest. The snake was very docile and had a large lump in its midsection. Upon forcing the snake to regurgitate its meal, we found that the lump was a freshly killed, lactating female Townsend's Chipmunk (*Tamias townsendii*; external measurements in mm: 280 total length; 120 tail; 35 hind foot; 22 ear; 122.4 g). The nest in which the snake was found was constructed by a woodrat (*Neotoma* sp.), and consisted of a large mass (80 cm diam. × 35 cm deep) of densely woven twigs completely encircling the tree trunk (Fig. 1). The nest tree was located at the edge of a dense stand of 25-yr-old Douglas-fir, adjacent to a recent clear-cut that had been harvested ca. 9 months earlier. The tree had numerous live and dead limbs that started about 1 m from the ground, and were spaced in whorls around the trunk at intervals of 50–80 cm. In over 40 years of working in the forests of the Pacific Northwest

FIG. 1. *Neotoma* sp. nest occupied by a *Pituophis catenifer* near Monroe, Oregon, USA.

and climbing thousands of trees to investigate nests of arboreal rodents, this is the first instance in which we have confirmed a *P. catenifer* climbing and foraging in the forest canopy. We are aware of a previous case in which a gophersnake fed on a Red Tree Vole (Swingle et al. 2010. Northwest Sci. 84:255–265), but in that case it was unclear whether the snake captured the vole in the forest canopy or on the ground. In the current case we are reasonably certain that the snake captured the chipmunk in the arboreal nest, because it seems highly unlikely that the snake would climb so high up into a tree after eating a large meal.

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***PITUOPHIS CATENIFER SAYI* (Bullsnake) and *PANTHEROPHIS VULPINUS* (Western Foxsnake). INTERGENERIC HYBRIDIZATION.** Reproduction between different species within the same genus is a relatively common occurrence across plants and animals. However, hybridization at the generic level is not common, especially among squamates (LeClere et al. 2012. J. Herpetol. 46:257–262). LeClere et al. (2012) reported the discovery of two naturally occurring, intergeneric hybrids between *Pituophis catenifer sayi* and *Pantherophis vulpinus* from Madison County, Iowa, USA, and Wabasha County, Minnesota, USA. Herein, we use molecular genetic data to describe a third intergeneric

TABLE 1. Segregating sites between *Pituophis catenifer sayi* and *Pantherophis vulpinus* for the Vimentin, intron 5, gene (VIM) among sampled *Pituophis c. sayi, Pantherophis vulpinus,* and *Pituophis c. sayi* × *Pantherophis vulpinus* specimens. GenBank IDs are in parentheses. Site number is indicated by column and sites missing sequence data are indicated by dashes (-).

Sample	30	69	156	256	412	430	563
Pituophis catenifer sayi, Cochise County, Arizona, USA (FJ627902)	G	A	A	A	T	A	C
Pituophis catenifer sayi, Sherburne County, Minnesota, USA (JF750666)	G	A	A	A	T	A	C
Pantherophis vulpinus, Ottawa County, Ohio, USA (FJ627910)	A	G	T	G	C	G	G
Pantherophis vulpinus, Bremer County, Iowa, USA(JF750665)	A	G	T	G	C	G	G
P. c. sayi × *P. vulpinus*, Madison County, Iowa, USA (JF750668)	A/G	A/G	A/T	A/G	C/T	A/G	-
P. c. sayi × *P. vulpinus*, Wabasha County, Minnesota, USA (JF750667)	A/G	A/G	A/T	A/G	C/T	A/G	G/C
P. c. sayi × *P. vulpinus*, Linn County, Iowa, USA (KY963825)	A/G	A/G	A/T	A/G	C/T	A/G	G/C

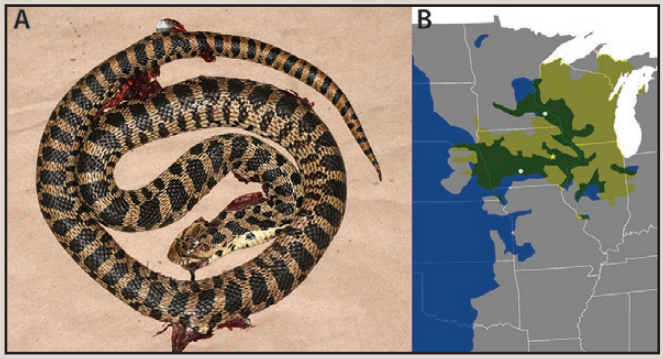

FIG. 1. A) *Pituophis catenifer sayi* × *Pantherophis vulpinus* hybrid from Linn County, Iowa. B) Geographic distributions of the parental species, *Pituophis c. sayi* (blue) and *Pantherophis vulpinus* (yellow) in the midwestern United States from Powell et al. (2016. Field Guide to Reptiles and Amphibians of Eastern and Central North America, 4th ed. Houghton Mifflin Harcourt, Boston, Massachusetts. 494 pp.). White circles represent the two previously identified *P. c. sayi* × *P. vulpinus* hybrids identified by LeClere et al. (2012) and the yellow star represents the locality of the hybrid snake identified in this study (DURC7384).

hybrid between *Pituophis c. sayi* and *Pantherophis vulpinus*, from Linn County, Iowa, USA.

The hybrid snake was found dead on the road after being hit by a vehicle in September 2016, and the specimen appeared morphologically intermediate between *Pituophis c. sayi* and *Pantherophis vulpinus* (Fig. 1A). This prompted our investigation using molecular genetic data. The specimen voucher was deposited in the Drake University Research Collection (voucher number DURC7384) and HerpMapper (HM162003). We extracted DNA using the Qiagen DNeasy kit and amplified the mitochondrial gene NADH-ubiquinone oxidoreductase chain 4 (ND4) and the nuclear gene Vimentin, intron 5 (VIM) using published primers (Arevalo et al. 1994. Syst. Biol. 43:387–418; Forstner et al. 1995. Mol. Phylogenet. Evol. 4:93–102; Pyron and Burbrink 2009. Mol. Phylogenet. Evol. 52:524–529). PCR amplicons were Sanger sequenced using GeneWiz® multi-pass sequencing; sequences were quality trimmed and assembled using Geneious® [v9.1.5] (Kearse et al. 2012. Bioinformatics 28:1647–1649; GenBank IDs: KY933400 and KY963825, respectively). Newly assembled sequence data were combined with previously published sequence data from LeClere et al. (*op. cit.*). We generated a rooted maximum-likelihood phylogenetic gene tree for ND4 using the RAxML-HPC BlackBox [v8.2.10] (Stamatakis 2014. Bioinformatics 30:1312–1313) on CIPRES (Miller et al. 2010. Proceedings of the Gateway Computing Environments Workshop, pp. 1–8). The phylogeny demonstrated that the mitochondrial genome of the putative hybrid animal was of *Pituophis c. sayi* ancestry (data not shown). Alignment of VIM with each parental taxon showed that the putative hybrid animal was heterozygous for seven species-specific segregating sites (Table 1). Taken together, these data suggest an intergeneric cross between a female *Pituophis c. sayi* and a male *Pantherophis vulpinus* similar to the results from LeClere et al. (*op. cit.*). It remains unclear how frequent this phenomenon is across the sympatric range of these species (Fig. 1) and whether F_1 hybrids are fertile. However, F_1 hybrids are thought to be the most difficult to successfully produce in highly divergent lineages, due to strong interspecific mating preference (Mallet 2005. Trends Ecol. Evol. 20:229–237). If these three specimens were fertile F_1 hybrids, then there is the possibility of unreported parental backcrossing occurring in nature. Backcrossed, or introgressed individuals, may be very difficult to diagnose in the field as they may be phenotypically alike either parental species, and therefore not as intermediate as the F_1 hybrids (Mebert 2008. Mol. Ecol. 17:1918–1929). Thus, putative backcrossed individuals require molecular genetic techniques for confirmation. We conclude by encouraging naturalists and biologists doing fieldwork and examining museum specimens to keep an eye out for "odd-looking" putative *Pituophis c. sayi* and *Pantherophis vulpinus* from this zone of sympatry in the midwestern United States (Fig. 1B).

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***PLIOCERCUS ELAPOIDES* (Variegated False Coralsnake). DEFENSIVE BEHAVIOR.** *Pliocercus elapoides* is a small to medium-sized, brightly colored dipsadine snake that is distributed at low and moderate elevations from central México to western Honduras and El Salvador (Köhler 2003. Reptiles of Central America. Herpeton, Verlag Elke Köhler, Offenbach, Germany. 367 pp.). Although their long, fragile tails (Wilson 1968. J. Herpetol. 1:93–94) and their precise resemblance to local *Micrurus* (Greene and McDiarmid 1981. Science 213:1207–1212) provide effective