

was cleared in glycerol, mounted on a glass slide, cover-slipped, examined under a compound microscope, and determined to be a larva (reproductive system primordia absent). The general shape of the body appeared as a slender cylinder measuring 0.57 mm in diameter by 30 mm in length with pronounced narrowing toward the anterior end. Present also was a short, somewhat bluntly rounded tail terminating in a sharp point. The anterior end had four submedial rounded elevations and a V-shaped cuticle expansion representing a “larval tooth”. The esophagus was cylindrical, 3 mm in length; ventriculus and intestinal caecum were absent. These characters are consistent with characters listed for the subfamily Ascaridinae within the family Ascarididae (Anderson et al. 2009. Keys to the Nematode Parasites of Vertebrates. Archival Volume CAB International. Oxfordshire, UK. 463 pp.). Because our specimen was a larva, we could not designate a genus and assigned the specimen to the Ascaridinae. A voucher helminth was deposited in the Harold W. Manter Laboratory (HWML), University of Nebraska, Lincoln, USA as (HWML 112306). An ascarid larva in *P. ornata* represents a new host record.

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STEPHEN R. GOLDBERG, Department of Biology, Whittier College, Whittier, California 90608, USA (e-mail: sgoldberg@whittier.edu); **CHARLES R. BURSEY**, Department of Biology, Pennsylvania State University, Shenango Campus, Sharon, Pennsylvania 16146, USA (e-mail: cxb13@psu.edu).

RANA DRAYTONII (California Red-legged Frog). ANOPHTHALMIA. Malformations in amphibians have been reported in many species and in many areas world-wide (de Souza et al. 2020. Herpetol. Notes 14:31–41). Amphibians in the United States show a variety of malformations that appear attributed to a variety of mechanisms (Meteyer 2000. Field Guide to Malformation of Frogs and Toads, Biological Sciences Report USGS/BRD/BSR-2000-005, US Department of Interior, U.S. Geological Survey. 16 pp.; Blaustein and Johnson 2003. Front. Ecol. Environ. 1:87–94). On the west coast of the United States malformations have been reported for *Rana boylei* (Foothill Yellow-legged Frog) and *R. draytonii*, with broadly different reasons for the malformations (Kupferberg et al. 2009. Copeia 2009:529–537; Johnson et al. 2013. Nature 494:230–234; Alvarez et al. 2021. Northwest. Nat. 102:258–260). Reported malformations primarily include additional limbs and missing limbs (Meteyer 2000, *op. cit.*) but may include a variety of other physical anomalies. A specific malformation, anophthalmia, is a developmental condition where an individual is missing a single eye or both eyes (Castro-Torrelblanca and Blancas-Calva 2021. Rept. Amphib. 28:22–23; Ocampo and Roa Mata 2022. Herpetol. Rev. 53:111). We collected larvae of *R. draytonii* and noted a case of anophthalmia.

We collected amphibian larvae, during a peer-level workshop, from a constructed pond in Michigan Bluff, Eldorado County, California, USA (39.04039°N, 120.73295°W; WGS 84; 1046 m elev.). We collected and identified numerous larvae of *R. draytonii* which were placed in clear viewing containers so that their developmental stages could be determined (see Gosner 1960. Herpetologica 16:183–190), and individuals could be counted. Upon close inspection of each individual, we noted a single larva with one eye on the left side and no eye, nor eye remnant (no scar), on the right side (Fig. 1). Long-term monitoring of this site has shown that no malformations of either larvae or adults have been documented.

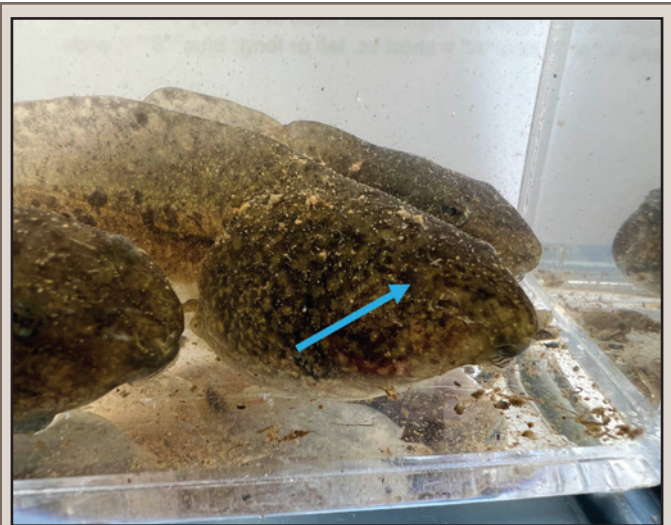


FIG. 1. A larval *Rana draytonii* with anophthalmia. The blue arrow indicates the approximate natural location of a normally located eye.

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Researchers have speculated on the causes of amphibian malformations, including anophthalmia, which include metals, pesticides, herbicides, petrochemicals, chemical pollutants, retinoids and steroids, and retinoid and steroid-mimics (Hall and Henry 1992. Herpetol. J. 2:65–71; Chambon 1993. Gene 135:223–228.; Kirk 1998. Herpetol. Rev. 19:51–53; Marco et al. 1999. Environ. Toxicol. Chem. 18:2836–2839; Hayes et al. 2002. P. Natl. Acad. Sci. 99:5476–5480; Degitz 2003. Toxicol. Sci. 74:139–146). Other researchers have shown that parasitic infections, ultraviolet radiation, and climate change are also generating malformations in amphibians (Johnson et al. 2001. Herpetologica 57:336–352; Ankley et al. 2002. Environ. Sci. Technol. 36:2853–2858; Schoff et al. 2003. J. Wildl. Dis. 39:510–521).

We sample many populations of ranids in California on a yearly basis, and very rarely note a malformed amphibian of any species or life stage. Placement of the eye on the body can be diagnostic for some sympatric species and is regularly noted when identifying larvae. This is the first instance of anophthalmia in any ranid we have sampled to date. Further, we believe this is the first report of anophthalmia in the threatened *R. draytonii*.

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JEFF A. ALVAREZ, The Wildlife Project, P.O. Box 188888 Sacramento, California 95818, USA (e-mail: jeff@thewildlifeproject.com); **MARIO GAY-TAN**, Algas Ecological Services, 3605 Burnaby Drive, Bakersfield, California, 93312, USA (e-mail: megaytan123@icloud.com); **JEFFERY T. WILCOX**, Sonoma Mountain Ranch Preservation Foundation, 3124 Sonoma Mountain Road, Petaluma, California, 94954, USA (e-mail: jtwillcox@comcast.net).

RHINELLA ATACAMENSIS (Atacama Toad). DEATH FEIGNING. Death feigning is an anti-predator strategy used by various species when threatened by potential predators (Humphreys and Ruxton 2018. Behav. Ecol. Sociobiol. 72:1–16). In anurans, two categories