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| common name | Fairy Shrimp |
| scientific names | <i>Linderrella occidentalis</i> <i>Branchinecta lindahli</i> and other species |
| phylum | Arthropoda |
| subphylum | Crustacea |
| class | Branchiopoda |
| order | Anostraca |
| habitat | vernal pools |
| size | 10-44 mm long |

- description** Fairy Shrimp are pale-colored (normally gray-white) and [transparent](#). They have a long, narrow body with 11 pairs of paddle-like legs. Females have a brood pouch which holds eggs located directly behind the legs.
- fun facts** The Fairy Shrimp that inhabit vernal pools are very small, but some species of Fairy Shrimp are huge. One species, *Branchinecta gigas*, lives in muddy, plant-less, desert lakes, and can grow to 150 mm. That's about the size of a hot dog!
- life cycle** Fairy Shrimp cysts hatch as soon as there is water in the vernal pools. Individuals grow quickly and can reach maturity in 18-60 days depending upon species and the pool conditions. After the adults mate, [cysts](#) begin to develop in the female's brood pouch. Once the cysts are fully formed, they are released and sink to the vernal pool bottom. The female may mate again and repeat the process. A single female can produce several hundred cysts during one season. The cysts usually remain [dormant](#) until the next year's rain, but they can last for [decades](#).
- ecology** Fairy Shrimp suck water through filters and eat the particles that they strain out of the water. These include bacteria, algae, protozoa, rotifers, and detritus. Fairy Shrimp are a main food source for many creatures. They are eaten by Tadpole Shrimp, Backswimmers, aquatic beetles, [aquatic insect larvae](#), tadpoles, toads, salamanders, Killdeer, and ducks.
- conservation** *Branchinecta lynchi* is listed as a Threatened species. It is found in the Central Valley and a few places in the Coast Ranges where it occurs in only certain types of vernal pools. It may be threatened by extinction due to loss of its

vernal pool habitat through development and new agriculture. *Linderiella occidentalis* is the most common of California's vernal pool Fairy Shrimps.

investigate *Linderiella occidentalis* is the only species of Fairy Shrimp that has red eyes. All other species have black eyes. See if you can find the red eyes on shrimp in the field.

Cysts versus eggs?

Birds, reptiles, fish and a number of other creatures produce eggs. An egg is a single cell enclosed in a hard or leathery shell. Development of the embryo (earliest life stage) does not take place until after the egg is laid. It takes weeks of perfect conditions for the embryo to fully develop and hatch.

Cysts are fully developed embryos enclosed in a hard, spongy shell. Fairy Shrimp and Tadpole Shrimp produce cysts instead of eggs. This is a great advantage when you live in a quickly disappearing habitat like a drying vernal pool. The embryo can hatch out of its shell as soon as there is water in the vernal pool.