

Ochlodes yuma (Yuma Skipper)



Steve Cary,

Taxonomy

- **Class:** INSECTA
- **Order:** LEPIDOPTERA
- **Family:** HESPERIIDAE
- **Genus:** Ochlodes
- **Scientific Name:** *Ochlodes yuma* (W. H. Edwards, 1873)
- **Common Name:** Yuma Skipper
- **Synonyms:** *Hesperia yuma* W. H. Edwards, 1873
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- **Taxonomic Name Source:** Pelham, J.P. 2023. A catalogue of the butterflies of the United States and Canada. Revised 15 February 2023.
<http://butterfliesofamerica.com/US-Can-Cat.htm>.

Agency Status

- **NMDGF:**
- **Federal Status:**
- **BLM Sensitive:**
- **USFS:**
- **IUCN Red List:** [Not Evaluated](#)
- **Nature Serve Global:** [G4](#)
- **NHNM State:** S1
- **NM Endemic:** NO

Description

Yuma Skipper is larger and brighter than its sister *Ochlodes* species. Dorsally, Yuma is fulvous (rusty gold) with dark marks along the wing margin. Males have a narrow black stigma.

Description courtesy of Steven J. Cary, [Butterflies of New Mexico](#), 2024.

Habitat and Ecology

This species is found in riparian areas where large amounts of its sole host plant, Common Reed (*Phragmites australis*) can be found (Scott *et al.* 1977, Scott 1986, Glassberg 2001, Cary *et al.* 2011, Cary and Toliver 2023). This species is thought to be very restricted to reed beds. Scott *et al.* (1977) suggest that individuals were typically found

within a few meters of their host plant, though in one instance they found one individual half a kilometer from the nearest reed bed (Scott *et al.* 1977). Studies of the Questa Skipper, *Ochlodes yuma anasazi*, found individuals traveling up to one kilometer to find nectar sources (Scott *et al.* 1977, Scott 1986, Cary *et al.* 2011, Cary and Toliver 2023). Regardless, this species is thought to have very limited dispersal capabilities.

The Yuma Skipper has either one or two broods depending on the location of the colony (Glassberg 2001, Lotts & Naberhaus 2021, Cary and Toliver 2023). In the eastern populations as well as in Oregon and Washington, this species has one brood in which butterflies emerge in July and fly until August or September (Scott 1986, Glassberg 2001, Pyle 2002, Lotts and Naberhaus 2021, Cary and Toliver 2023). In California, Nevada, and Utah, the species has two broods, with the first occurring from June to July and the second from August to September (Scott 1986, Glassberg 2001, Lotts and Naberhaus 2021). During flight males perch on their host plant and attempt to intercept females passing through the area (Scott *et al.* 1977). After mating the females oviposit on the leaves of Common Reed, towards the base of the plant (Scott *et al.* 1977). Larvae feed on the leaves and can often be found, due to their behavior of tying two leaf edges together with silk to make a shelter (Scott *et al.* 1977, Scott 1986, Cary *et al.* 2011). Adults of this species feed on flower nectar however, their primary nectar plants are unknown (Lotts and Naberhaus 2021, WDFW 2023).

Geographic Range:

The Yuma Skipper, *Ochlodes yuma*, occurs in a patchy distribution across the western United States, from Washington south to California and east to New Mexico and Colorado (Glassberg 2001, Lotts and Naberhaus 2021, Cary and Toliver 2023). While the distribution is vast, colonies of this species are generally very localized and separated by large distances (Scott 1986, Glassberg 2001, Cary and Toliver 2023). This patchy distribution follows seeps and marshes where Common Reed (*Phragmites australis*) can still readily be found (Scott *et al.* 1977, Scott 1986, Glassberg 2001, Cary *et al.* 2011). It has been theorized that this species' geographic range has been shrinking since the Pleistocene, as western North America has become hotter and drier (Scott *et al.* 1977). This shrinking distribution has left the species stranded in many geographically and reproductively disjunct satellite populations, fragmented from each other by great distances (Cary *et al.* 2011).

The Yuma Skipper has five recognized subspecies: the Questa Skipper, *Ochlodes yuma anasazi*, is a very geographically restricted and isolated subspecies located in northern New Mexico; The Great Basin Yuma Skipper, *Ochlodes yuma lutea*, is found only in Nevada; Woodland Skipper, *Ochlodes yuma sacramentorum*, is restricted to the Central Valley of California; *Ochlodes yuma scudderi* is primarily found in Wyoming, though its distribution extends into nearby Colorado and Utah; and the nominate subspecies, *Ochlodes yuma yuma*, occurs in southern California and Arizona, and there is one record from the Four Corners region of New Mexico (ITIS 2023, NatureServe 2024, Pelham 2023, Cary *et al.* 2011, Cary and Toliver 2024).

Conservation Considerations:

This species receives no direct conservation actions currently, though it is a candidate for state listing in Washington, and was designated as a Species of Greatest Conservation Need on that State's 2015 State Wildlife Action Plan (WDFW 2023). Due to the host specificity, widespread habitat declines, and fragmentation, it is currently considered critically imperiled in Washington, California, and New Mexico, imperiled in Colorado, Oregon, and Nevada, and vulnerable in Idaho (NatureServe 2024). This species would benefit from several conservation actions including invasive species control, habitat management, and captive rearing of the species to ensure longevity of populations. Additionally, controlling the use of insecticides and up river contaminants will benefit long term health of Yuma Skipper populations. Land managers should also refrain from spraying herbicide on *Phragmites* in areas where Yuma Skippers

are present.

Threats:

Despite occurring in many western states, subpopulations of this species are only found in narrow pockets of habitat, often separated by many kilometers of terrain lacking Common Reed (*Phragmites australis*) (Scott *et al.* 1977, Scott 1986). Additionally, these colonies of Yuma Skippers are often supported by very small patches of reeds, covering an area between five and three hundred meters squared (Scott *et al.* 1977, Cary *et al.* 2011). These small and fragmented patches put them at extreme risk of extirpation, and due to their isolated nature there is limited possibility of recolonization once these populations become extirpated (Fahrig 2003, Crooks *et al.* 2017).

This species also specializes on only one host plant, putting it at higher risk of extinction (Kotiaho *et al.* 2005, New 2013, Palash *et al.* 2022, Forister *et al.* 2023). In addition, the Yuma Skipper is a habitat specialist, relying on riparian ecosystems (Poff *et al.* 2011). These systems are highly threatened across the range of the species; western North America is expected to become hotter and drier due to climate change and wetlands are susceptible to many human caused hydrological changes, such as dams and water diversions (Cook *et al.* 2009, Seagar *et al.* 2012, Cook *et al.* 2015). As this species is reliant on seeps, streams, and snowmelt to create the reed beds it relies on, climate change and increased drought pose a major threat to this species (Cary *et al.* 2011). It is thought that this species has been declining for 20,000 years as the western United States has gotten hotter and drier, eliminating this species habitat (Scott *et al.* 1977). This decline is expected to continue further reducing habitat for this species and extirpating occurrences.

While this species' host plant is native to North America, there are invasive and prolific strains from Europe that are considered noxious (Tulbure *et al.* 2007, WDFW 2023). Currently over four million dollars a year is spent in the US to remove invasive *Phragmites* with herbicides. Occasionally, land managers mistake native *Phragmites* for invasive strains, and end up killing or removing critical habitat for this species (Martin and Blossey 2013, WDFW 2023). Additionally it is unknown whether this species can use the invasive strains and they may end up outcompeting the native *Phragmites* for the same habitat (Cary *et al.* 2011). Besides the invasive strains of *Phragmites australis*, invasions from other species are also a major threat to this species. This is especially true for woody invasives such as Salt Cedar (*Tamarix spp.*), Russian Olive (*Elaeagnus angustifolia*) and Siberian Elm (*Ulmus pumila*). Common Reed is intolerant of shade, and these woody invasives tend to form large thickets, which shade out and kill this species (Cary *et al.* 2011). These invasive species are widespread across riparian areas in the region and pose a serious threat to the critical habitat of this butterfly (GBIF.org 2023, iNaturalist 2023). This species is also very susceptible to many other threats to riparian ecosystems, including pesticide and pollution runoff, as well as activities that lower the water table. Water diversion projects and the destruction of wetland areas kill the specie's host plant and reduce habitat (Cary *et al.* 2011, Natural Resource Institute 2019, NatureServe 2023).

All of these threats are somewhat amplified in the extremely disjunct outlier subpopulations especially in Oregon, Washington, Wyoming, and New Mexico. The reproductive isolation and small habitat ranges in these states make the Yuma Skipper exceptionally prone to extirpation and extra care should be taken to protect these populations.

Population:

The population size and trend are not known for this species. Although highly localized and rare when found, it is reported somewhat abundant where found (Lotts and Naberhaus 2021). However, it has likely been declining for the last 20,000 years and continues to do so, as disturbance to wet habitats in the western United States continues (Scott *et al.* 1977, Cary *et al.* 2011). Determination of population size and monitoring of population trends is important to better understand the conservation status of the species, especially as several widespread, relatively common species of butterfly are in decline across the region (Forister *et al.* 2021).

References:

- [Pelham, J.P.. 2023. A Catalogue of the Butterflies of the United States and Canada. Revised 23 February 2023. <http://butterfliesofamerica.com/US-Can-Cat.htm>](http://butterfliesofamerica.com/US-Can-Cat.htm)

More Information

