TEAR DROP MOSS

Tiffany Theden
Scientific Name: *Dacryophyllum falcifolium*

Common Name: Tear Drop Moss

Global Rank: Imperiled

State Rank: Imperiled; CNPS 1B.3

UCSC Rarity: Very rare

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**General Description**

Tear Drop Moss is characterized by small, asymmetric, pointed and flat leaves. It is green to green-yellow, has short 1-2 cm long branches, and grows in fan-like shelves or mats. It is sparsely distributed, has very strict habitat requirements, and is not found intermixed with more common mosses. It is often overgrown with algae or lichen, and the tips of the mats can be dried and golden-brown.

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**Identification**

**Color:** Yellow-green  
**Stem length:** 1.5cm × 0.8-1mm  
**Leaf shape/size:** Asymmetric, scythe-like, 0.3-0.5 × 0.1-0.2 mm  
**Growth Form:** Shelf-like mats  
**Sporophytes:** Unknown; vegetative asexual reproduction  
**Habitat:** Calcium-rich, vertical & overhanging rock faces in redwood forests

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**Geographic Range**

Known only from Santa Cruz and Monterey counties in California. Has only been observed in Coast Redwood (*Sequoia sempervirens*) forests along the coast, with limestone or other calcium-rich rock. Known locations include several drainages along the Big Sur coast, the UCSC campus, and Fall Creek Unit of Henry Cowell SP.
Ken Kellmann, a frequent sight at the UCSC Norris Center, collected the type specimen of this species. Go say hi to him, he’s great!

Tear Drop Moss has only been recorded in a few drainages in Big Sur, and at mature redwood forest locations in Santa Cruz. It is likely other places, just waiting to be discovered.

The CZU and Dolan fires in 2020 burned many of the locations this moss has been observed. It is not known if those populations have survived.

Not much attention is paid to bryophytes, so get out there, find some new species, and help increase the knowledge of these amazing plants! Case in point: this species wasn’t described until 2004!
### Conservation Status

**California Native Plant Society**

**Rare Plant Rank: 1B.3**

A California endemic that is rare throughout its range. This moss is eligible to be listed under the California Endangered Species Act. Currently, there is relatively low immediate threat to the known populations, but this species is lacking data on its full range.

### Threats

<table>
<thead>
<tr>
<th>Statewide:</th>
<th>UCSC campus:</th>
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<tbody>
<tr>
<td>1. Lack of awareness of its existence</td>
<td>1. Graffiti at Empire Cave</td>
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<td>2. Wildfires</td>
<td>2. Climbing on moss covered rocks</td>
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<td>3. Habitat loss</td>
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<td>4. Drought stress on trees from decreasing summer fog and sporadic winter rain</td>
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<td>5. Logging and fragmentation of redwood forest habitat</td>
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### Ways you can help

1. Raise awareness of bryophytes

2. Don't climb on or spray paint on moss covered rocks. You never know, it might be a rare moss!

3. Do what you can to decrease carbon emissions and help slow climate change.
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