# What to do if you find it:

## *Make an observation*

The first thing to do is to **record your observation**. We prefer to use the iNaturalist app for that (visit www.iNaturalist.org to learn more), but you could also upload your observation to Mushroom Observer (visit www.MushroomObserver.org). The QR code to the right will take you to the Fungal Diversity Survey (FunDiS for short) website on how to "Contribute Observations" to the project.

fundis.org/observe/contribute-observations

The best thing you can do is take *lots* of photographs and notes. Typically, smartphones will automatically georeference any photos taken, but it is good practice to note your exact location, preferably with GPS coordinates, and what trees or other habitat features are nearby. For example, was the mushroom growing from duff and humus, or from bare soil? Did it have a particular smell?

## *Collect a specimen*

If you are in an area where it is allowed and have any necessary permits, **we strongly urge you to create a vouchered collection**. This means a dried specimen for deposit in a herbarium, where researchers can access it for things like DNA sequencing. If you don't know how to do this, please see:

fundis.org/sequence/sequence/dry-your-specimens

In California, collecting mushrooms is usually allowed in National Forests **with a permit**. Permits can be obtained at the headquarters of the National Forest you're visiting, and are usually inexpensive or free. However, restrictions vary among the individual National Forests, so make sure to find out the specifics when picking up your permit. State and County Parks generally do not allow mushroom picking, but regulations vary, so make sure to check your destination before you go out.

Don't forget to look for other mushrooms and fungi while you're there! Like other Rare Fungi, part of why this mushroom is rare is because it grows **in a place that mushroomer pickers don't generally go:** Coastal Cypress Groves. Since you've already got iNaturalist open, why not record your other finds?

Most mushrooms are like fruit: picking an apple from an apple tree doesn't hurt the tree. In the same way, **harvesting mushrooms does not generally hurt the mycelium of the fungus**. We do still recommend leaving some mushrooms behind, and not picking perennial mushrooms, like brackets and conks.

## *Who to contact*

If you think you've found this mushroom, and you're not sure about any of the above, such as how to report the find, whether you can collect it, or what to do with it once you have collected it, please contact us!

**conservation@fundis.org**

# Habitat

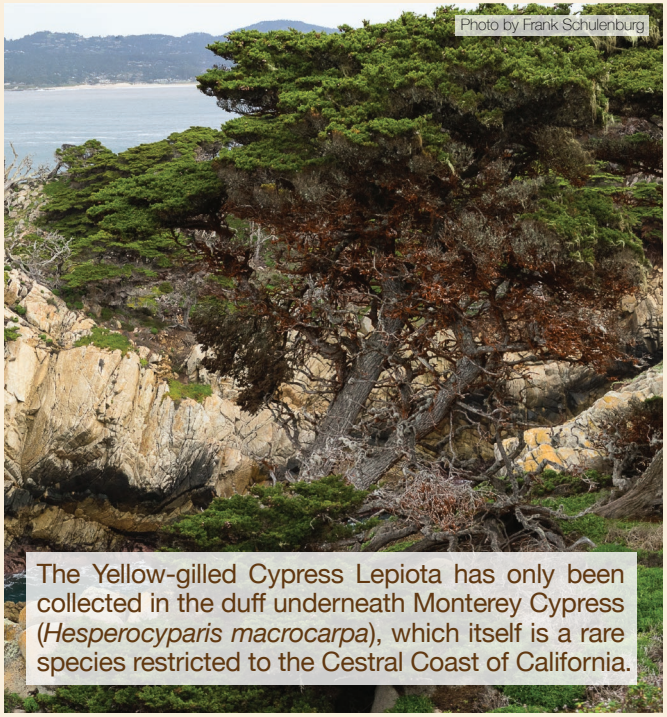


Photo by Frank Schulenburg

The Yellow-gilled Cypress Lepiota has only been collected in the duff underneath Monterey Cypress (*Hesperocyparis macrocarpa*), which itself is a rare species restricted to the Cestral Coast of California.

Identify Monterey Cypress and related species by the scale-like leaves and characteristic cones.

Photo by David Eickhoff

# *More information*

Siegel N & Schwarz C. 2016. *Mushrooms of the Redwood Coast: A Comprehensive Guide to the Fungi of Coastal Northern California*. Ten Speed Press: pg. 63 (mentioned in note for *L. castaneidisca*).

Schwarz C & Vellinga EC. 2017. *Lepiota luteophylla*. The IUCN Red List of Threatened Species 2017: e.T95384528A95385509.
doi.org/10.2305/IUCN.UK.2017-3.RLTS.T95384528A95385509.en

iNaturalist (2 obs.):
inaturalist.org/taxa/563839-Lepiota-luteophylla

Mushroom Observer (0 obs.):
mushroomobserver.org/name/show_name/2874



# *The* Yellow-gilled Cypress Lepiota

## *Lepiota luteophylla*

RED LIST CRITICALLY ENDANGERED CR

Photo by Christian Schwarz

IUCN Red List: ***CRITICALLY ENDANGERED***

A truly rare species or an overlooked species? That is the question we'd like to answer for this beautiful parasol mushroom. It's really only known from one place, a Monterey Cypress grove near San Francisco, despite the efforts of experts to find it elsewhere.

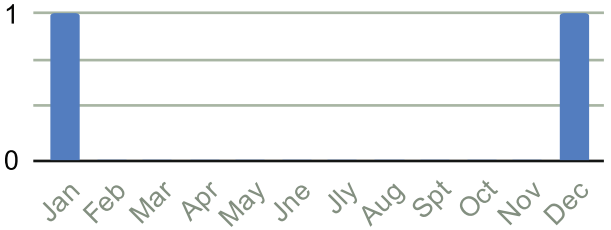
*Is there only one place in the* **whole world** *where this mushroom grows?*

FUNGAL DIVERSITY SURVEY

*This pamphlet prepared by:*
Roo Vandegrift, Else C. Vellinga & Joanne Schwartz


# When & Where?

Look for the Yellow-gilled Cypress Lepiota from **late November through February**. The two times that it has been found recently have been in January and December.




Data from iNaturalist & Mushroom Observer


# Description

The Yellow-gilled Cypress Lepiota has fruitbodies that are around 2 inches high, with a 1-1.5 inch wide sepia-brown cap that is slightly wrinkled. The cap is convex with a slight bump in the middle. **The gills are an intense yellow** that is a bit on the orange side; they are free from the stem, quite distinctly so when seen from below. The stem is sturdy, with some flimsy remnants of a ring, hollow, and the overall colors are light brown.

The easiest way to show that you really have found the Yellow-gilled Cypress Lepiota is to make a **sporeprint** — cut off a cap and put it, gills down, on a piece of paper or aluminum foil, put a glass or cup over it, and let it stand for 6–9 hours. Lift the cap off the paper and photograph the spore print. Is it salmon-pink-brown? then you've found a *Pluteus* species. Is it white? then bring out the cake and celebrate: it is a *Lepiota*!

## *What can it be confused with?*

Goldleaf Shield (*Pluteus romellii*) looks very similar, it also has yellow gills that don't reach the stem but the gills are close together, and the slightly wrinkled cap is the same kind of brown as in the *Lepiota*. The big difference is that it has **salmon-pink colored spores** and a more translucent stem than the *Lepiota*. Another difference is the habitat: **the *Lepiota* grows on soil**, but the Goldleaf Shield is most often found on wood and woodchips, very rarely just on soil.

There is also a similar—but smaller and more slender—species of *Lepiota* in the Midwest, which has been confused with the western species (e.g., mycomap.com/1521).

**CAUTION:** Never eat wild mushrooms without a confident identification! Contact Poison Control if you think you have eaten a poisonous mushroom: 1-800-222-1222