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 to explain how to contribute to the project.

fundis.org/protect/take-action

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. In Oregon, most State and Federal lands allow collecting up to a gallon without a permit, but again, regulations vary, so check ahead of time. In BC, collecting is allowed on Crown land without a permit, but it's illegal to pick mushrooms in a provincial or national park.

Don't foget to look for other mushrooms and fungi while you're there! Since you've already got iNaturalist open, why not record your other finds?

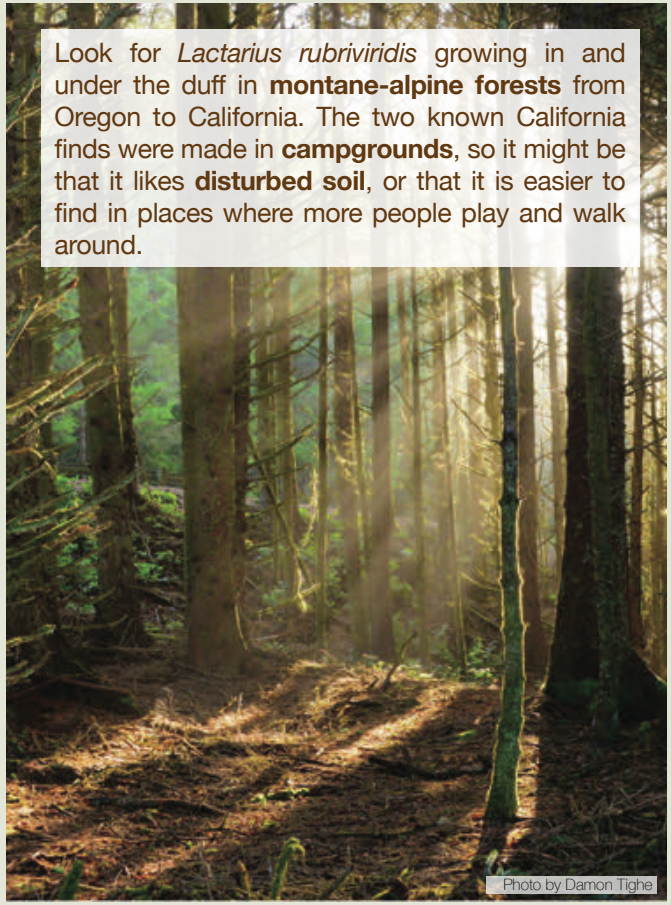
Most mushrooms are like fruit: picking an apple from an apple tree doesn't hurt the tree. In the same way, **harvesting mushrooms does not generally hurt the mycelium of the fungus**. We do still recommend leaving some mushrooms behind, and not picking perennial mushrooms, like brackets and conks.

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!

WestCoast_Rare@fundis.org

Habitat



Look for *Lactarius rubriviridis* growing in and under the duff in **montane-alpine forests** from Oregon to California. The two known California finds were made in **campgrounds**, so it might be that it likes **disturbed soil**, or that it is easier to find in places where more people play and walk around.

Photo by Damon Tighe

More information

Kuo, M & Methven, A. 2010. *100 Cool Mushrooms*. University of Michigan Press: pg. 107

Siegel N. 2020. *Lactarius rubriviridis.* The Global Fungal Red List Initiative.
iucn.ekoo.se/iucn/species_view/373910/

Desjardin, DE. 2003. A unique ballistosporic hypogeous sequestrate Lactarius from California. *Mycologia, 95*(1), 148–155.
doi:10.1080/15572536.2004.11833144

Kuo, M. 2009, Dec. *Lactarius rubriviridis*. Retrieved from MushroomExpert.com
mushroomexpert.com/lactarius_rubriviridis.html

This species has been proposed for the **IUCN Red List of Threatened Species**, *but has not yet been assessed, accepted, or published.*

The Red-Green Truffle Milky

Lactarius rubriviridis

Photo by Mike Wood

RARE

Status: ***RARELY COLLECTED***

This Milky is a real challenge to find, since it does not have showy above ground mushrooms - instead it **grows under duff**. It is **potato-shaped**, with a **bumpy surface**. Yet unlike potatoes, the surface has openings that show its spore forming surfaces. It does not look anything like other milk caps, since it lacks a cap, gills, and stem, but it does have characteristics in common with other milk caps. It has the **red 'milk'** of *L. rubrolacteus*, and the **green discoloring** of *L. deliciosus*. The fruitbodies develop in the soil, and will occasionally just pop up out of the duff!

FUNGAL DIVERSITY SURVEY

This pamphlet prepared by:
Else C. Vellinga, Tiffany Theden, Alex Mayberry & Roo Vandegrift

Description

This truffle-like mushroom is the size of a **small potato**, up to 2.5 inches across, with a **pitted, brownish surface** that **stains dark greenish grey to bluish green**. The inside is full of **orange-pink-brown pits** and holes with some **white 'veins'** running through it - the vestigial stem.

It will ooze a bit of **dark red milk** when cut open, and it has a mild to **slightly sweet smell**. Typically in truffles, spores remain inside the fruitbody and are not actively shot off, like in gilled cap-and-stem mushrooms. *L. rubriviridis* breaks this rule, and the spores are still shot off from the basidia.

What else could it be?

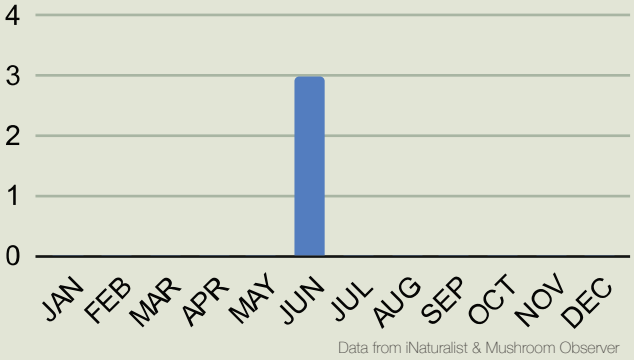
To be honest - it does not really look like a mushroom, more like a misshapen piece of plastic with weird colors. Most other truffle-like mushrooms have a **skin or covering over the internal structure**, and only the **pink-brown *Gautieria*** species could be confused with this milkcap, but **they don't turn green, nor ooze red milk** when cut. *Gautierias* also have a rather **disgusting odor**.

***Truffles** and other underground mushrooms are the staple **food for many squirrels, chipmunks** and such; their **excellent noses** are able to find these underground mushrooms without fail.*

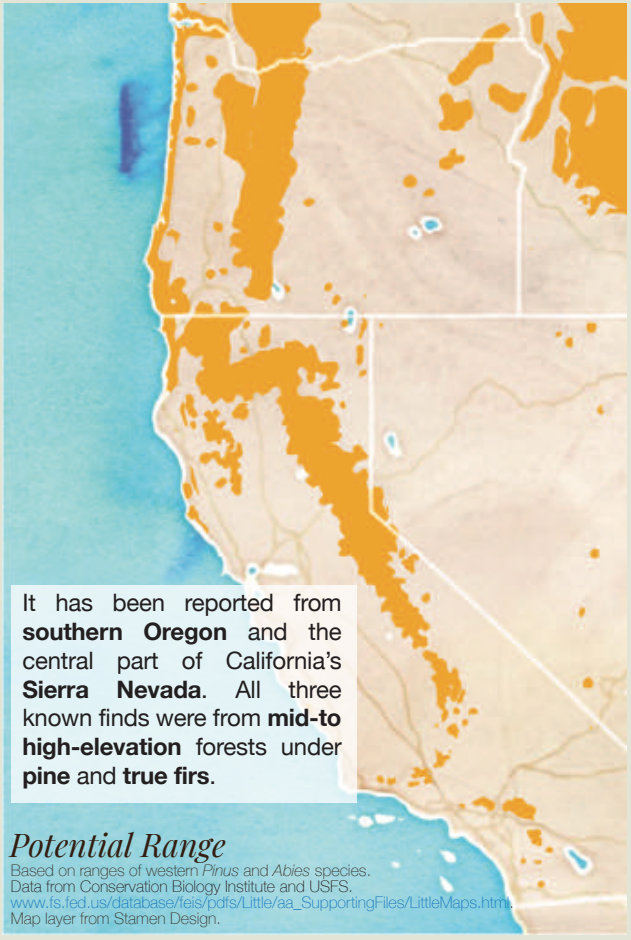
CAUTION: Never eat wild mushrooms without a confident identification! Contact Poison Control if you think you have eaten a poisonous mushroom: 1-800-222-1222

When & Where?

The only times this hard to find species has been found has been during the **first half of June** in montane forests.



Data from iNaturalist & Mushroom Observer



It has been reported from **southern Oregon** and the central part of California's **Sierra Nevada**. All three known finds were from **mid-to high-elevation** forests under **pine** and **true firs**.

Potential Range

Based on ranges of western *Pinus* and *Abies* species.
Data from Conservation Biology Institute and USFS.
www.fs.fed.us/database/feis/pdfs/Little/aa_SupportingFiles/LittleMaps.html
Map layer from Stamen Design.