

Heritage Rank Status Factors

Elcode NFSM000065
Gname GALERINA CERINA
Gcomname

Number of Occurrences

E = >300

Comments The number of occurrences worldwide is not known completely, but >228 occurrences are reported in the literature and/or in herbarium databases. In the northern spotted owl region of the U.S., the ISMS-ONH 2002 database reports only 4 occurrences; Roger (1998) however verified 17 for the Regional Mycologist and Norvell (Norvell 2002 pers comm.) has verified another 21 from Oregon in July, 2002. *Galerina cerina* is regarded as relatively common to frequent in the appropriate habitats.

Number of Occurrences with Good Viability

E = Many (41-125) occurrences with good viability

F = Very many (>125) occurrences with good viability

Comments The number of reported occurrences do not accurately reflect the number of actual occurrences; however, as *Galerina cerina* is relatively common to frequent within the appropriate habitats, this author estimates that the number of viable occurrences at the present time is probably relatively high. (Norvell 2002 pers comm)

Population Size

U = Unknown

Comments Records reflect only species occurrence, i.e. fruitbodies, not numbers of individuals. Fungal genets cannot be delimited without DNA sampling.

Range Extent

H = > 2,500,000 km² (greater than 1,000,000 square miles)

Comments *Galerina cerina* is known from South America (Bolivia), North America, Great Britain and Europe.

Area of Occupancy

U = Unknown

LU = Unknown

Comments Area of occupancy can only be roughly approximated from fungal fruitbodies as the vegetative organism is hidden from site within the substrate. Saprophytic and/or bryophilous fungi have spotty distributions that are tied to the presence of appropriate substrates. The area of occupancy in this instance can be assumed to be very small, generally the size of a collection and in this instance cannot be predicted.

Long-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

E = Relatively Stable ($\pm 25\%$ change)

Comments Given the number of occurrences in the literature and the number of recent confirmations in Oregon (Norvell 2002 pers comm), and the amount of appropriate habitat still available in all regions of the range, the long-term trend for *Galerina cerina* is regarded as stable.

Short-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

E = Stable. Population, range, area occupied, and/or number or condition of occurrences unchanged or remaining within $\pm 10\%$ fluctuation

Comments Given the number of occurrences in the literature and the number of recent confirmations in Oregon (Norvell 2002 pers comm), and the amount of appropriate habitat still available in all regions of the range, the short-term trend for *Galerina cerina* is regarded as stable.

Threats

G = Slightly threatened. Threats, while recognizable, are of low severity, or affecting only a small portion of the population, occurrences, or area. Ecological community occurrences may be altered in minor parts of range or degree of alteration falls within the natural variation of the type.

Scope Low Severity Low Immediacy Low

Comments *Galerina cerina* is found in forested habitats and other places where there are large moss beds, bogs, or mossy hummocks. The primary threat to *Galerina cerina* is exposure to the full sun and substrate (moss) removal. All populations are at risk to incidental catastrophic events, such as hot fires, and logging activities that destroy canopy coverage and expose previously moist areas to sun and wind. (Roger 1998. pers comm.; Norvell 2002 pers comm).

Number of Appropriately Protected and Managed Occurrences

U = Unknown whether any occurrences are appropriately protected and managed

Comments Insufficient data to predict for *Galerina cerina* worldwide. In the northern spotted owl region of the US, only 4 occurrences are documented to be in protected sites; far more are anticipated. At the current time, no known sites in the region are specifically managed for *Galerina cerina*, but rather for the habitat that supports it.

Intrinsic Vulnerability

B = Moderately Vulnerable. Species exhibits moderate age of maturity, frequency of reproduction, and/or fecundity such that populations generally tend to recover from decreases in abundance over a period of several years (on the order of 5-20 years or 2-5 generations); or species has moderate dispersal capability such that extirpated populations generally become reestablished through natural recolonization (unaided by humans). Ecological community occurrences may be susceptible to changes in composition and structure but tend to recover through natural processes given reasonable time (10-100 years).

C = Not Intrinsically Vulnerable. Species matures quickly, reproduces frequently, and/or has high fecundity such that populations recover quickly (< 5 years or 2 generations) from decreases in abundance; or species has high dispersal capability such that extirpated populations soon become reestablished through natural recolonization (unaided by humans). Ecological community occurrences are resilient or resistant to irreversible changes in composition and structure and quickly recover (within 10 years).

Comments Given the wide distribution and common to frequent reports of *Galerina cerina* within its range, it appears fairly resilient to all but extended-drought and moss removal.

Environmental Specificity

B = Narrow. Specialist or community with key requirements common.

C = Moderate. Generalist or community with some key requirements scarce.

Comments *Galerina cerina* is generally found in moist forests, Sphagnum bogs, mossy hummocks, and other soggy areas. It is bryophilous and dependent upon *Polytrichum* and other mosses, although it has sometimes been found on humus in Sphagnum bogs or burned areas. In the north temperate

zone it is more common in the spring and early summer than in the fall. (Smith & Singer 1964; Roger 1998, Norvell pers comm). Its precise biological and ecological requirements are unknown.

Other Considerations

NRANK - N4. There are several varieties of *Galerina cerina* that are not differentiated for the purposes of this ranking. Redhead (1979) notes that while Smith & Singer, 1964 felt they had explained the nomenclatural confusion behind their use of a name also applied to another fungus, there is still some cause for a confusion in the historical literature, if not at the present time. The relatively few herbarium collections made within its range probably do not reflect the actual number of occurrences but more likely the fact that it is very small and inconspicuous and thus undercollected. (Norvell 2002 pers comm)

Edition 11/25/2002 **Edauthor** Lorelei L Norvell

Grank G4 **Grank Date** 11/25/2002

Reasons

Galerina cerina is widely distributed throughout the globe and is known from North America, England, Europe, and South America. In North America it is known from the east coast to the Pacific Coast. It has a patchy distribution and spring phenology. Its fruitbodies are very small and inconspicuous and it is presumed far more abundant than the >228 herbarium collections indicate. It is dependent on mosses, generally producing gregious small fruiting bodies on *Polytrichum* and other mosses, sometimes on humus in *Sphagnum* bogs or burned areas.

BCD Sources

New Sources

Smith & Singer, 1964. A monograph of the genus *Galerina* Earle. New York: Hafner. ALSO Roger. 1998. *Galerina cerina*. From unpubl. report for Regional Mycology Lab in Corvallis, Oregon. ALSO Redhead. 1979. A study of the sphagnicolous fleshy basidiomycetes in the eastern sections of the Canadian boreal forest. U of Toronto PhD dissertation. ALSO Watling, Gregory, Orton. 1993. British fungus flora Agarics & Boleti 7. Edingurgh: Royal Botanic Garden. ALSO Moser. 1981. Keys to Agarics and Boleti. Phillips. ALSO ISMS-ONH. 2002. ISMS data; ONH protection extrapolations; GIS map for GACE.