

Handout

Mushroom Tour

Summary of the Mushroom Foraging Tour at Waldsamkeit

Below you will find the most important facts and guidelines for a successful start in independent mushroom foraging:

Most mushroom poisonings do not come from toxic mushrooms but from already spoiled edible mushrooms. Therefore, it is recommended to collect only young or fresh, firm-fleshed, mostly maggot-free mushrooms that are also free from mold.

As an identification aid and to prevent poisonings, there are so-called "mushroom advisory centers." These are staffed by mushroom experts specifically trained to safely identify all edible and poisonous mushrooms. See: <https://www.dgfm-ev.de/service/pilzsachverstaendige>

It is of utmost importance that these mushrooms are not confused with the deadly Amanita species. These have white gills and a non-movable, membranous ring on the stem. Another important feature to prevent confusion with the deadly Green Amanita is the present volva at the soft, bulbous base.

Finally, a few recommended mushroom books:

- All current mushroom books from Kosmos Verlag
- Rita Lüder – Basic Course in Mushroom Identification: A Practical Guide for Beginners and Advanced

Additionally, it is always worthwhile to check the website: www.pilze123.de

Good luck with your foraging, and take your time.

Greetings,

Avi and Victor
Waldsamkeit

Earthstars

Genus: Geastrum

Inedible

Bowl-shaped fruiting body with star-shaped, spread-out segments (hence the name!). Within this lies a spherical to pear-shaped spore sac.

Grows in mixed forests and along paths, always on soil.

Children often enjoy playing with earthstars, as stepping on them releases clouds of spores.



False Chanterelle

Hygrophoropsis aurantiaca

(Genus: False Chanterelles)

Toxic!

Color often bright orange, cap margin long inrolled. Gills regularly forked several times toward the cap edge. Flesh is rather fibrous compared to true chanterelles. Often more symmetrically built than true chanterelles. Primarily found in coniferous forests, on stumps, or buried wood. Consumption of a few specimens is generally harmless, whereas larger quantities can cause gastrointestinal discomfort.

The false chanterelle has true gills, which are more or less easily separable from the flesh. In contrast, true chanterelles belong to the family of ridged mushrooms. Their veined ridges (not gills!) are firmly fused with the cap flesh.



Common Puffball

Lycoperdon perlatum (Genus: Puffballs)

Edible

Visually divided into a stem-like base and a spherical main body. Covered with fine, pointed scales. Young mushrooms have firm white flesh; at spore maturity, it becomes olive-brown and powdery. Found in mixed forests or along paths on soil, rather rarely on dead wood. Puffballs are still edible when the inner flesh remains white up to the center. It is crucial that there are no gill structures inside, as this could indicate young and highly poisonous *Amanita* species. Among puffballs, the smooth giant puffball is the best edible species and can be sliced and used as mushroom cutlets.



Amanita Mushrooms

Very Toxic!

Green Amanita

Bulbous base, ephemeral membranous volva. Stem often greenish and patterned. Rarely odorless; otherwise initially sweet, later smelling like carrion or an animal cage (ammonia).

Yellow Amanita

Thick bulb, no volva, clearly separated. Smells like a potato cellar or sprouting potatoes.

Panther Amanita

Turnip- or onion-shaped bulb, no volva. Stem appears as if "grafted": resembles children's or hiking socks. Cap margin striated. Ring smooth (not striated). Found primarily in deciduous to mixed forests, also in coniferous forests. Very common. Amanitas, particularly the Green Amanita, are responsible for the majority (approximately 90%) of fatal mushroom poisonings in Germany (around 5 deaths per year). The Panther Amanita can be mistaken for the popular edible *Agaricus* (Pearl Mushroom). It contains compounds similar to the most well-known Amanita: the Fly Agaric, but in significantly higher concentrations. Due to the considerable dangers posed by Amanitas, collecting mushrooms with white gills is strictly forbidden for beginners!



Bay Bolete, Chestnut Bolete

Xerocomus badius (Genus: Suede Boletes)

Good edible mushroom

Surface dry: felt-like to velvety; wet: rather slimy. Color when young: dark chestnut brown; becomes paler with age. The tubes on the underside of the cap are pale yellow when young, turning greenish-yellow with age, and blue when pressed. The stem often shows brown tones. Grows in coniferous and mixed forests; in our region also in pine forests. Mycorrhizal. Common. The Bay Bolete can be confused with other suede boletes, such as the Goat's Bolete or the Red-footed Bolete. All of these are good edible mushrooms. The inedible Bitter Bolete has a distinctly brown reticulated stem, white to pink tube openings, and tastes strongly bitter.



Parasol Mushroom

Macrolepiota procera (Genus: Parasol Mushrooms)

Good edible mushroom

Movable ring! Gills are not attached to the stem – the stem can be pulled out of the cap without damaging the gills. Smell is nutty. Grows primarily in deciduous forests, along paths, and on meadows. Common. Caps can reach up to 30 cm in diameter. These mushrooms should not be collected from compost heaps or greenhouses, as toxic relatives from warmer regions may be present there.



Rosy Bonnet

Mycena rosea (Genus: Bonnet Mushrooms)

Toxic!

Cap light pink, hygrophanous (color varies with moisture), distinctly striated (gills visible through the cap). Smells like radish.

Found in mixed forests, often with beech trees. Very common.

Possible confusion with the also common but edible Violet Waxcap. In that species, the cap and gills are the same color, and the gills are widely spaced.



Red-footed Bolete

Xerocomellus chrysenteron (Genus: Suede Boletes)

Edible

Cap surface gray-brown to beige-brown, velvety-felted, typically cracking in a field-like pattern. Feeding marks on the cap are light reddish. Stem may have red parts or be completely red. Tubes and stem turn slightly to moderately blue when bruised.

Found in mixed forests, often near conifers. Very common.

There is a wide variety of Red-footed Boletes, which mainly differ in color on the cap and stem, as well as the type and intensity of bruising.

All suede boletes, including Red-footed Boletes and Bay Bolete, are very often affected by health-damaging molds. To avoid this, the entire mushroom should be checked carefully for patchy white-yellow mold spots.



Sulphur Tuft

Hypholoma fasciculare (Genus: Sulphur Tufts)

Toxic!

Cap orange to green-yellow, often with veil remnants on the edge. Gills greenish to grayish.

Common mushroom, usually found in clusters on dead deciduous or coniferous wood.

In dry years, it is often one of the few mushrooms still found in the forest. The related Smoky Spore Sulphur Tuft is a good edible mushroom, but due to its strong resemblance to the toxic Sulphur Tuft, it should not be collected.



Porcini Mushrooms (Spruce Porcini, Summer Porcini)

Boletus edulis and *Boletus reticulatus* (Genus: Boletes)

Good edible mushrooms

Cap light to dark brown, usually with a lighter line at the cap edge. Flesh firm. Stem usually swollen, hence the genus name "Boletes," but can also be slender and cylindrical. The "true" Porcini, the Spruce Porcini, has a white reticulated pattern only on the upper part of the stem. The Summer Porcini often has a continuous brown reticulation along the stem.

Spruce Porcini mainly grows with spruce, but in northeastern German lowlands also in mixed forests and occasionally with pine. Summer Porcini is found primarily with oak and beech. Common, but often solitary.

Porcini mushrooms should not be confused with the Bitter Bolete. The Bitter Bolete also often has a large stature, a brown cap, and a brown reticulated stem. However, the reticulation is much more pronounced and appears furrowed in older specimens. Tube openings in the Bitter Bolete do not turn yellow-green with age but pink. The Bitter Bolete tastes strongly bitter.

Caution is advised with Boletes that have a red stem and a light cap. The Satan's Bolete and the Scarletina Bolete are the most serious potential lookalikes.

