Magic

NORDIC LIBERTY CAP HUNTER’S
FIELD GUIDE
TO THE READER

Magic mushroom photography is an interesting hobby that provides a lot of fun and enlightenment to both beginners and more seasoned photographers.

This is a beginner’s guide for people interested in Magic Mushroom photography. The aim is to help the beginner through the sometimes frustrating process of finding your first Magic Mushrooms.

While there are several species of Magic Mushrooms growing in the Nordic countries, we concentrate on the one species that is by far the most popular, most common and easiest to identify. This mushroom is Liberty Cap (Psilocybe semilanceata). All the other Magic Mushroom species growing in the region are much more difficult to find and identify. For those more seasoned photographers who want to take their hobby a bit further, there is a huge body of knowledge available about other Magic Mushrooms both in the literature and in the Internet.

Magic Mushrooms also have medical and spiritual properties. This might be one of the reasons they are called Magic Mushrooms in the first place. Psilocybin and psilocin are the most effective medication for cluster headache (Horton’s syndrome). They are also a much safer and more effective alternative to toxic psychiatric drugs - pushed by the Big Pharma - that do not heal you but in fact cause even more mental problems.

This guidebook does not give instructions on medical, ritual or recreational use of the mushrooms, because these activities are currently prohibited by law in all Nordic countries. Until the Prohibition is repealed, you should stick to photography and other legal mushroom-related activities.

Possessing, growing and consuming magic mushrooms is currently prohibited by law in all Nordic countries.

MAGIC – Nordic Liberty Cap Hunter’s Field Guide.

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Picking magic mushrooms is currently prohibited by law in all Nordic countries.

Photo © Knarkkorven.
LIBERTY CAP HUNTER’S SUCCESS RECIPE

It all boils down to four simple rules: **Search for the right mushrooms. Search in the right time. Search from the right places. Search carefully.**

**Search for the right mushrooms**

There are thousands of identified mushroom species growing in the Nordic countries, along with estimated hundreds of species yet to be identified. A newbie Liberty Cap photographer often has more eagerness than patience. Thus she might neglect studying the exact identification rules of Liberty Caps and just go out there looking for any mushrooms that look a bit like them. Unfortunately it doesn’t work that way. In order to succeed, you need to study closely the pictures and memorize the key identification rules.

**Search in the right time**

In the Nordic countries, Liberty Caps may be found from July up until the time of snow and permanent frost. However, the quantities will remain very low during the summer months, even in the best years. In the high season, the average air temperature will be between +5 and +15°C (night temperature below 10°C). Also, there has to be a lot of rain as Liberty Caps need enough moisture to grow. Typically the best season will be between September and November.

Experienced photographers may be able to find small quantities of Liberty Caps from familiar spots already in July. However - for a beginner - searching before mid-August will probably be a waste of time. In fact she might get frustrated and give up by the time the actual season starts.

The spare time in summer months is best used by looking for locations that look suitable for an on-site search in the autumn.

The most popular Liberty Cap areas near big cities get often visited by people who will pick the mushrooms despite the Prohibition. This may be a bit frustrating from a photographer’s point of view. Luckily the lifecycle of a Liberty Cap is only a few days. Thus when the weather is right, there will probably be new Liberty Caps growing by the time you get there.

**Search from the right places**

Hopeful enthusiasm may trick the beginner to see all locations as favorable for Liberty Caps. Many people spend days on end looking for Liberty Caps from wrong places and never finding them.

One of the most typical beginner’s mistakes is to look in areas that are either too forest-like or too dry. **Liberty Caps don’t like trees** - this applies especially to coniferous trees. If there are lots of trees growing in the area, it is not a good candidate for a thorough search. In addition, **Liberty Caps need moisture to thrive.** Thus even terrains filled with tufted hair-grass might not be potential candidates, if they are very dry.

**Finding Liberty Caps on your home lawn is possible but very, very, very unlikely.** Yet, every autumn surprisingly many people seriously think that they have done just that. Apart from one lucky chap - whose house was located in the middle of cow pastures - I have yet to meet a person who really found Liberty Caps in their courtyard.

If you wish to succeed, you really need to start by first **looking for locations that have the correct habitat** instead of just fiercely wishing that destiny brought Liberty Caps right to your door.

**Search carefully**

Liberty Caps are small and often well hidden in the vegetation. Especially when they are growing in tall grass tufts, you might have to almost dive into the tuft a bit to find them. Quite often, after you’ve found the first mushrooms, you will notice that they’re all around you. **They will manifest themselves to you if they see that you’re worthy and come in peace.**
SELECTING A SPOT TO SEARCH
Liberty Caps grow in a variety of different habitats. However, certain types of terrains are very potential for finding Liberty Caps and others aren’t.

Some successful photographers prepare for the search by using free Internet tools such as Google Earth or Bing Maps that let you identify potential terrains from satellite photographs.

Typical habitats of Liberty Caps
Liberty Caps are found especially in moist, fertile meadows, pastures and old abandoned fields that are growing a lot of grass in mats of tufts. Good terrains also often have some clover and moss.

On the other hand, if the meadow has lots of flowers or herbs, it is most likely not a good candidate. The same goes for meadows on which the grass has grown too long.

Liberty Caps growing inside tufted grass are often quite big. On the other hand, Liberty Caps growing on grazed pastures are smaller, but there are lots of them.

Liberty Caps never grow directly from dung. On the other hand, on pastures it often grows in the right beside the dung heaps.

The most important environmental parameters for Liberty Cap are the growing substrate and the moisture balance. Liberty Caps typically grow in areas where there is a lot of grass or hay and also a lot of moisture. Liberty Caps take their nutrients from decaying plant material that has often been accumulating in the area for some time. Otherwise the soils in potential terrains is often a bit sandy.

Because of the moisture requirement, Liberty Caps don’t grow in hilly terrains. Especially larger spots are typically on plateaus. However, small depressions are often good growing spots as they collect moisture.

Liberty Caps usually grow in terrains with either very few trees or no trees at all.

What kinds of terrains should I check out?
As a beginner, it is by far the best choice to concentrate on pastures and meadows. Once you gain more experience, you can expand to other kinds of potential terrains.

Pastures (+++)
Pastures for cows, horses and sheep are among the best terrains for photography together with meadows and old hayfields. It is worth checking both those pastures still in active use, as well as the ones where there are no longer any animals grazing.

Meadows and hayfields (+++)
Fields abandoned from agricultural use are often quickly taken over by tufted-hair grass. In a few years, there is enough decaying grass material in the ground that – provided that there is also enough moisture around – makes it an ideal habitat for Liberty Caps. Old hayfields are preferred by many photographers, because they have tufted-hair grass growing in wide sectors and it is relatively easy to find large quantities of Liberty Caps. The current Nordic policy of replacing locally produced agricultural crops with toxin saturated import crap is in fact very favorable for Liberty Cap photographers, as the amount of fallow fields will just keep on rising.

PLEASE NOTE! Liberty Caps do not grow on agricultural fields currently in use.
Fertile lawns (++)
Fertile lawns favorable for Liberty Caps are often found even inside cities. For this reason, they are especially popular among those photographers that don’t have a car at their disposal. One particular urban area worth checking are the public dog yards that are surrounded with fences. In general, it is always good to keep an eye for lawns with the right type of grass tufts.

Grassy areas under electric lines (++)
Liberty Caps are often found in areas where people have “wounded” the nature. Among these areas are the ones found from under big electric lines where the trees have been cut to make way for poles and cables. These areas are all around us and they are easy to find. However, it is good to keep in mind that areas under electric lines are not automatically potential for Liberty Caps. They still need to have the correct vegetation and moisture balance.

Golf courses (++)
Liberty Caps can be found on such golf courses where fungicides are not used. Because lawns are kept very short, it is very easy to locate the mushrooms. The place to look is fairways and roughs. Greens are mowed too short for Liberty Caps. Timing is essential: you need to find them before the Lawnmower Man does. While moving around the golf course, keep in mind that golfers are usually uptight snobs trapped by their narrow world views. They often despise Liberty Cap photographers, so you might want to keep a low profile.

Road shoulders (+)
You can often find the right kind of grass tufts growing along road shoulders. Sadly these areas are often so small that you will usually not find large quantities of Liberty Caps. On the other hand, in the trenches next to the roads you might sometimes find also larger deposits.

Paths and meadows inside forests (+)
Although forests should usually be avoided when looking for Liberty Caps, sometimes the paths of meadows inside the forest might hide some nice surprises.

Terrains to avoid
While sometimes you find Liberty Caps in very strange places, there are some terrains on which you should not waste time hoping to find Liberty Caps.

Forested areas (---)
Liberty Caps do not get well along with coniferous trees. In general, if there are lots of trees around, the place is not a particularly good candidate. A rare exception to this are meadowy areas inside forests.

Agricultural fields and vegetable gardens (---)
You will not find Liberty Caps in fields that are in active agricultural use, potato fields nor gardens. The edges of fields and open trenches might be exceptions to this rule, as you might find the correct kind of grass growing there.

Swamps (--) 
Although Liberty Caps like moisture, they usually don’t grow on swamps or swampy land. It is not impossible, but highly unlikely to find Liberty Caps there.

Dry meadows and hayfields (--) 
While tufted-hair grass is a good indicator plant for Liberty Caps, it thrives in a much wider range of habitats compared with Liberty Caps. Especially moisture is not quite as essential for tufted-hair grass. Thus the presence of tufted-hair grass does not automatically guarantee that you will also find Liberty Caps there. One good complementary indicator is the presence of other mushrooms. If you don’t find any other mushrooms growing in the area, it is either not a potential area or the time is not right.
Plants and mushrooms that grow together with Liberty Caps

**Grass and hay**
*Tufted-hair grass* (*Deschampsia cespitosa*) is by far the most important indicator plant among grasses. *Soft rush* (*Juncus effusus*) is another popular indicator plant. In general, the presence of grasses and hays (for instance bentgrass or Sweet Flag) is a good sign that there might also be plants that often grow together with Liberty Caps.

Although Liberty Caps do not usually grow next to willowherb (*Chamerion angustifolium*), the presence of willowherb is a telltale sign about the fertility of the land. This also increases the possibility of finding Liberty Caps nearby.

**Moss**
Mosses thrive in moist places just as Liberty Caps do. Especially *waxyleaf moss* (*Dicranum polysetum*) and *springy turf-moss* (*Rhytidiadelphus squarrosus*) are often found together with Liberty Caps. However, Liberty Caps seldom grow in places that have a lot of moss.

**Trees**
While it’s not a good idea to go looking for Liberty Caps from the forest, you will often find some *birch*, *alder* or *willow* growing next to grassland plots truly worth a search.

**Mushrooms**
You will typically find other mushroom species growing at sites where there are Liberty Caps. The presence of any mushrooms in otherwise promising terrain is a very good sign that you should search the area really carefully.

Many Liberty Cap photographers see *Ink caps* (*Coprinus sp*) as important indicators for the presence of Liberty Caps. They usually start by first looking for areas with ink caps then search those areas for Liberty Caps. Other good indicator mushroom genera include *Panaeolus*, *Mycena* and *Conocybe*. On pasture, *Dung Roundhead* (*Stropharia semiglobata*) is a good indicator mushroom. Likewise *Blue Roundhead* (*Stropharia caerulea*) is a good indicator mushroom on lawns and old fields.

*A fistful of forbidden keys to the subconscious.*

Photo © Knarkkorven.
Tufted-hair grass (*Deschampsia cespitosa*)
Focused search in the selected spot
After locating a promising location, it is time to make a more thorough investigation. Especially when driving a car, it is often difficult to make conclusions about the potential of the area before getting out of the car and closer to the location.

The evaluation is made in two stages. You should start with just a quick walkthrough inspection before deciding if the area is worthy a thorough search. At this point you should try to locate indicator plants and mushroom, as well as evaluate if there is enough moisture in the ground.

If the initial inspection seems promising, you should reserve at least a couple of hours for the actual search. Liberty Caps often grow in only some parts of the area. A too hasty search might lead into abandoning a site that actually contains Liberty Caps. On the other hand, if the area turns out to be less potential, you will save a lot of time and effort by making a quick decision about ending the search. After all, you can only inspect a few locations thoroughly during one day.

If you have a lot of time, it makes sense to search the whole area very carefully. If you are in a hurry, you should concentrate on areas that look lusher than the rest. Often you can locate these greener areas from far away. You should also pay more attention to areas that contain other mushrooms.

On meadows that grow tufted-hair grass, the most obvious place to look is inside those tufts. You should stop at each tuft and bend down or even kneel. A little humility goes a long way when looking for Liberty Caps. They often hide inside those tufts, so that you don’t see them before you push the grass a little to the side. In addition to the tufts, you should also look under grass that has been felled to the ground.

When you find the first Liberty Caps in a location, you should be extra careful in searching the rest of the area. Often it turns out that your little friends are all around the place.

IDENTIFYING A LIBERTY CAP CANDIDATE
The appearance of a Liberty Cap varies a lot and depends on many variables. Because of this, especially beginners have a hard time distinguishing other mushroom species from Liberty Caps. If you have a strong urge to find Liberty Caps, you might focus too much on the similarities while turning a blind eye to the different features in other species. If you have any doubts at all about the mushroom not being a Liberty Cap, it most probably isn’t.

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Use all your senses when looking for and identifying mushrooms!
As a rule of thumb, you should never leave the identification to one sense only. Many experienced Liberty Cap photographers apply this rule subconsciously when they check with their fingers that they can feel a slimy film on the cap.
The key identification features of Liberty Caps

The shape of a Liberty Cap differs greatly on individual level and also based on the phase of the lifecycle. In the beginning you should only look for specimens that have the classic Liberty Cap features. Once you get more familiar with Liberty Caps, you will have the necessary experience to also identify specimens that differ from the standard. Liberty Caps often grow in clusters, which makes them easier to identify. You don’t need to do the identification based on one specimen, as you will usually find several mushrooms that represent different stages of their lifecycle.

Cap shape
Liberty Cap has a distinctive conical or bell-shaped cap which is about 0.5-5 cm wide and 1-3 cm tall. The most distinctive feature of the Liberty Cap is the small nipple-like protrusion on the top. Liberty Cap’s protrusion is sharper and more nipple-like than most other mushrooms, but please remember that there are lots of other mushroom species that also have a protrusion in the cap. To add to the confusion, there are also some Liberty Caps whose nipple is not that sharp.

The cap margin is initially rolled inward and often asymmetric. In young Liberty Caps the gills never show over the cap margin.

In maturity, the cap margin unrolls to become straight or even curled upwards. The cap shape is more conical, a bit like an umbrella or parasol. The margins are often a bit frayed. The nipple is not quite as highlighted as with younger specimens. However, the cap is hardly ever the shape of a tea saucer or half moon. Such specimens do exist but they are in the range of one in a thousand.

The cap has a distinctive film, which feels sticky and jellylike when moist. It is also easily peeled away. This is a very good identification feature if the identification is otherwise not clear.

Cap color
Liberty Caps are hygrophanous, meaning that the cap changes color according to its state of hydration. Young and fresh mushrooms have a dark brown or greenish brown cap which is a bit transparent so that you can actually see the gills as vertical lines through the cap. On the other hand, specimens that have dried out a bit are very pale brown and no longer transparent.

This relation between moisture level and color applies to both young and old Liberty Caps. In fact it is one of the best identification clues once you learn to leverage it. You might find other mushrooms that have a similar color as Liberty Caps, but hardly mushrooms that change color in the same manner.

If you pick a dark brown and transparent Liberty Cap from the ground and put it to dry for a couple of hours, it will change the color to pale brown. Likewise if you soak an already dried Liberty Cap in a cup of water, it will once again become dark and transparent. However, keep in mind that picking a Liberty Cap is prohibited by law in all Nordic countries. Another popular identification clue is the dark stain in the cap margin caused by falling spores. Liberty Cap spores are purplish brown.
**Gills**
The gill attachment to the stem is adnexed (narrowly attached). The gills are never in a 90 degree angle to the foot. They are initially cream-colored before quickly tuning into gray and finally brownish purple as the spores mature.

**Stem**
The stem is hollow with a fine pith, very long and very narrow: length 4-10 cm and thickness 0.1-0.3 cm.

The stem is often a bit twisted or bent, very rarely completely straight. It is elastic and has a smooth surface. It does not snap easily which is a very good identification clue to separate Liberty Caps from other mushrooms with which you might confuse it.

The stem is colored pale brown, not white, yellow, orange or purple. The color gets a bit darker towards the base. When the mushroom is moist, the stem color is a bit darker brown.

With many other *Psilocybe* species, the bruising effect caused by psilocin oxidation is one of the best identification clues. With Liberty Caps, you usually see bruising only at the base of the stem. In any case, if you respect the Nordic Prohibition on Magic Mushrooms, you should not be picking the mushrooms and thus you will not see any bruising at all.

**Odor**
Liberty Caps have a very mild, earthy odor. More seasoned Liberty Cap photographers learn to use it as a secondary identification feature, but it doesn’t make sense for a beginner to try to distinguish Liberty Caps by smell.

**Flavor**
None of the mushrooms growing in the Nordic countries – not even the notorious Death Cap - are so poisonous that you couldn’t completely safely taste a small bit in your mouth as long as you spit it away right after tasting.

Liberty Caps taste a bit like champignons with a bit more earthy flavor.

**Identifying a Liberty Cap during different phases of its life cycle**
It is very important for a beginning Liberty Cap photographer to get familiar with the way in which both the hydration level and the phase of the life cycle affects appearance of Liberty Caps.

If you look up a bunch of Liberty Cap photos in the Internet, you will quickly realize that there is a huge variety in the appearance of Liberty Caps. This can be very confusing for a beginner and it often results in “false positive” identifications. However, by combining a few simple identification rules, you will avoid false positives completely.

You should get familiar with how both the hydration level and the phase of the lifecycle affects the appearance of Liberty Caps.
Young Liberty Caps
The youngest Liberty Caps are the hardest to identify, as the distinguishing features of a classical Liberty Cap are not quite as visible. The nipple is so small that you might not yet see it. On the other hand, the tip of the cap might “glow” as a bit transparent. The color of young Liberty Caps is a bit paler than the more mature specimens, and their cap margins have not yet been stained by spores. Young Liberty Caps are almost always well hydrated for the simple reason that typically new mushrooms only start to grow after the rains when the moisture level is high.

Mature Liberty Caps
A mature Liberty Cap is closest to the classic “standard” specimen with the most distinguishing features:

- Bell-shaped cap with a “nipple”
- Irregular cap margin that is rolled inward and stained dark by spores.

A mature Liberty Cap has often already dried a bit so that the transparent darker brown color has turned into opacity and a yellowish light brown color.

Old Liberty Caps
Especially on meadows growing tufted-hair grass, it is often the old Liberty Caps that first grab the attention of a Magic Mushroom photographer, as they have already grown a bit taller and can be more easily seen inside the tufts. Towards the end of its lifecycle, the cap has opened up so that it may look very different from the classic Liberty Cap shape. The cap is more conical and umbrella shaped and the cap margins are no longer rolled in. In fact they are often a bit frayed. Some caps can already be almost decayed, in which case the identification must be done based on the shape and elasticity of the stem. When fully moist, old Liberty Caps are often colored a bit darker brown than the younger specimens. When dry, they have the same familiar light brown color.

In the best case you will see the Liberty Caps directly inside the grass tufts. However, often you need to twist the grass a bit before they show themselves. Resilience pays off.

Sometimes you may have to kneel a bit to find God.

Photo © Knarkkorven.
Very young Liberty Caps.

Notice the dark brown color and the cap margins stained by spores.

Young, moist Liberty Caps.

The nipple is a bit transparent.
The cap on the left has dried a bit from the top. The lower part of the cap is still transparent and you can see the gills. The cap on the right is a bit more moist and still has a transparent nipple.

The top part of the foot is stained with spores.

Full grown "classically shaped" Liberty Caps that show how moisture level affects the color and transparency of the Liberty Cap.

Photo © Lion’s Mane.
Notice the cone-like cap shape and frayed cap margins.

Also the mature Liberty Caps have a light brown colored cap.
Confirm your identification
Once you gain a bit of experience, you will be able to identify Liberty Caps on your own. However, especially when doing your first identifications, you might want to consider having a more experienced photographer verify your findings. This is where the mushroom identification service provided free of charge by Shroomery.org comes in handy. By uploading one or more photos about the Liberty Cap candidate, you will usually get an expert answer in a few hours. To make the identification easier, it is recommended to have several photos from different angles and also an overview picture of the site where the mushroom is growing. You should also get familiar with the instructions given at shroomery.org.

If you shoot photos with a smartphone, please keep in mind that your phone might also store the GPS coordinates in the image file. This is not a problem unless you want to keep the secret about the location of your site. There are lots of free tools available for removing metadata from image files.

Please respect the shroomery.org community by avoiding unnecessary identification requests. If you are already almost sure that the mushroom is not a Liberty Cap, it isn’t. The primary purpose of the identification service is to help you avoid “false positives”. The idea is not to send photos of all different mushroom species you encounter and asking “what mushroom is this?” There are other more suitable services for general mushroom identification purposes. Please send only photos that in your eyes most likely are Liberty Caps but for which you hope to get an expert opinion just be on the safe side.

It is important to make a correct identification because you don’t want to be photographing wrong mushrooms. However, it is even more important to make a correct identification if there is a possibility that someone will ingest them with a spiritual, medical or recreational purpose.

PLEASE NOTE!! Possessing, growing and consuming magic mushrooms is currently prohibited by law in all Nordic countries.

By breaking the law you might end up in jail or beaten by cops, but by eating the wrong mushrooms you might end up in a dialysis machine for the rest of your life.

NEVER EAT A MUSHROOM IF YOU HAVE ANY DOUBT ABOUT ITS IDENTITY!

OTHER FUNGI THAT LOOK LIKE LIBERTY CAPS
It is quite typical for beginners to identify all kinds of strange fungi as Liberty Caps. There are numerous other fungi that share some identification features with Liberty Caps. However, just a handful of mushroom species cover most of the “false positive” identifications.

- Panaeolus species, especially P.sphinctrinus, P.acuminatus and Panaeolina foenisecii (commonly known as mower’s mushroom).
- Conocybes, especially C.albipes and C.tenera
- Inkcaps, especially humpback inkcap (Coprinopsis acuminata)
- Dung roundhead (Stropharia semiglobata)

The following photos demonstrate the similarities and differences of these species compared with Liberty Caps.
Which ones are Liberty Caps?

Photo © Knarkkorven

From left to right: 4 pcs Panaeolus species, 7 pcs Stropharia semiglobata, 2 pcs Liberty Caps, 7 pcs Conocybe species (rightmost one is Conocybe tenera), 7 pcs Stropharia Conocybe species (two later ones are Panaeolus sphinctrinus).

*Panaeolina foenisecii* is very common on grass lawns. It is often misidentified as *Panaeolus cinctulus*, sometimes also with Liberty caps.

*Coprinopsis acuminata* has a similar nipple as Liberty Caps.
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Left: *Panaeolus* *Olivaceus* (which is also a photogenic species)

Right: Liberty Caps

Top row left to right: three groups of *Panaeolus* species and one (rightmost) group Liberty Caps.

Bottom row left to right: *Panaeolus olivaceus*, *Copocybe* sp, unidentified species, *Entoloma* species, *Hygrocybe* species

Photos © Knarkkorven

Left: *Panaeolus* *Olivaceus* (which is also a photogenic species)

Right: Liberty Caps
### Look for the right mushrooms.  
Look in the right time.  
Look from the right places.  
Look carefully.

#### CAP
- Conical or bell shaped (young / mature)  
  Umbrella shaped (old)  
- Shape: The nipple is present in many other mushrooms, too!!  
- Sharp nipple on top of the cap  
- Irregular, rolled in cap margins that are stained by spores.  
- Dark brown and transparent when moist, opaque and pale brown when dry.  
- Slimy film on the cap when moist.  

#### GILLS
- Skewed from the top of the cap towards the cap margin.  
- Color: Brown, gray or purple.  
- Orange or yellow.  
- Not visible from under the cap margin.  
- Visible from under the cap margin.  

#### STEM
- Thin and elastic, pale brown.  
- Dark or purple.  
- Hollow with a single, very thin vein.  
- A lot of holes in the stem.  

#### HABITAT
- Meadow, pasture or old hayfield  
  Golf course or public dog yard.  
- Forest or agricultural field.  
- Meadow with lots of flowers or herbs.
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