

USEFUL PLANTS AND FUNGI

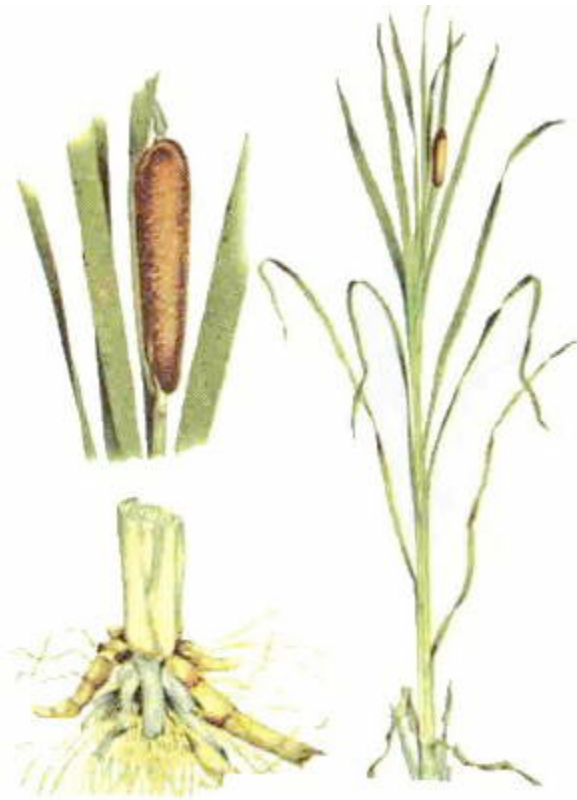
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My project for this canoe trip is about useful plants and how they can be used to help us have less of an impact on the Earth. I have mostly been studying the plants that grow around northern Minnesota, these include wild edible plants, herbs and fungi that aren't actually a plant, a lot of these plants grow elsewhere in the country too. One of the most useful things I've learned, in terms of helping the Earth, is how we can use mycelium to clean up the environment.

A study done by Paul Stamets and some other people, in which they turned a pile of dirt saturated with diesel into “an oasis of life”(Paul Stamets), showed that mycelium can be used to absorb and break down oils, thus cleansing the land. Paul Stamets created burlap sacks filled with bunker spawn, this means he basically filled the burlap sacks with debris and mycelium. These sacks can be placed downstream from farms or factories that have a lot of chemical runoff, they then catch the runoff and act as a filter, catching it then breaking it down and helping to clean up the environment. I think that this could help a lot with the runoff problems in the Mississippi watershed, we could use these bunker spawn sacks around the farms, power plants, factories and any thing else that is producing harmful runoff. By cleaning up the northern Mississippi it would help to make the rest of the river cleaner and safer. Ideally we would use this method all along the Mississippi, but I think for now we should start closer to the head waters and work our way downstream from there. Here is a link to a presentation Paul Stamets gave on six ways to save the earth with mycelium, and an article about Paul Stamets and the fungal diesel detox experiment, I highly recommend taking a look at both of them.

http://www.ted.com/talks/paul_stamets_on_6_ways_mushrooms_can_save_the_world.html

<http://www.resurgence.org/magazine/article554-mushroom-magic.html>



A vary interesting plant I've been learning about is the cattail, most of it is edible and it also has a lot of medicinal uses. The roots of the cattail can be harvested long after all other plants have gone to seed and died, thus making it a valuable plant in a survival situation. In the spring the young shoots can be harvested, once peeled the white core can be eaten raw or cooked like a vegetable. The roots and pollen can be made into flour for cooking with, also the flour made from the root can be boiled for tea to help with diarrhea. You can use the root on poison ivy, burns and bee stings too. Part of the leaf can be used on cuts and scrapes, it helps to relieve pain and works as a antiseptic and coagulant. Another neat thing to do with the cattail is to take the fluffy top and burn it around your campsite, the smoke will deter insects like mosquitoes. Instead of destroying swamps for more farm land we could use the swamps as cattail farms. Unlike most wild foods, cattail tastes pretty good, so I've herd.

http://www.countrybed.com/furniture/furn_documents/rush.htm



A lot fungi have medicinal properties as well as being used to clean up the environment and being used food. The Chaga fungus, or sometimes called True Tinder Fungus, has many medicinal uses. It can be used to help boost the immune system, prevent cancers including breast, liver, uterine, and gastric, it also helps with diabetes. These are just a few of the medicinal uses that Chaga can be used for. Chaga mostly grows on birch trees, it's hard and black on the outside, brown and corky on the inside, it is often confused with the False Tinder Fungus which also grows on birch trees. You use the inside part for tea, just crumble it up and boil it for about ten to fifteen minutes, it then turns red in color. In northern Russia some people drink it like we drink coffee, and they have a vary low cancer rate which is most likely because of the Chaga tea they drink. The reason it is called True Tinder Fungus is because it is the best natural tinder you can find out in the woods. All you have to do to use Chaga as tinder is to dry it, were as with most other tinder's you have to dry and then char them. Chaga holds a spark vary well, if you put a spark on the dried inside part and keep it in a mostly

Chaga or True Tinder Fungus
http://www.ont-woodlot-assoc.org/sw_mushrooms_3.html



False Tinder Fungus

<http://www.forestryimages.org/search/action.cfm?q=bodies&Start=1&results=1369>

airtight container it can hold that spark for around a week or so, maybe up to two.