

OTZI THE ICE MAN

AND HIS 5,000 YEAR OLD POSSESSIONS



GRASS MAT CAPE



BEARSKIN CAP



GOAT HIDE COAT



LEGGINGS



LOINCLOTH



GRASS NETTING & DEERSKIN SHOES

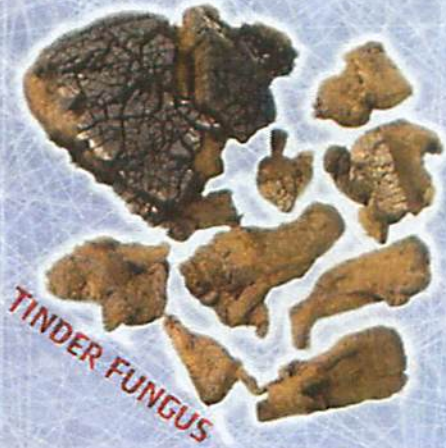


KNIFE & SHEATH

TOOLBELT



BIRCH POLYPORE FUNGUS



TINDER FUNGUS

OTZI'S STORY

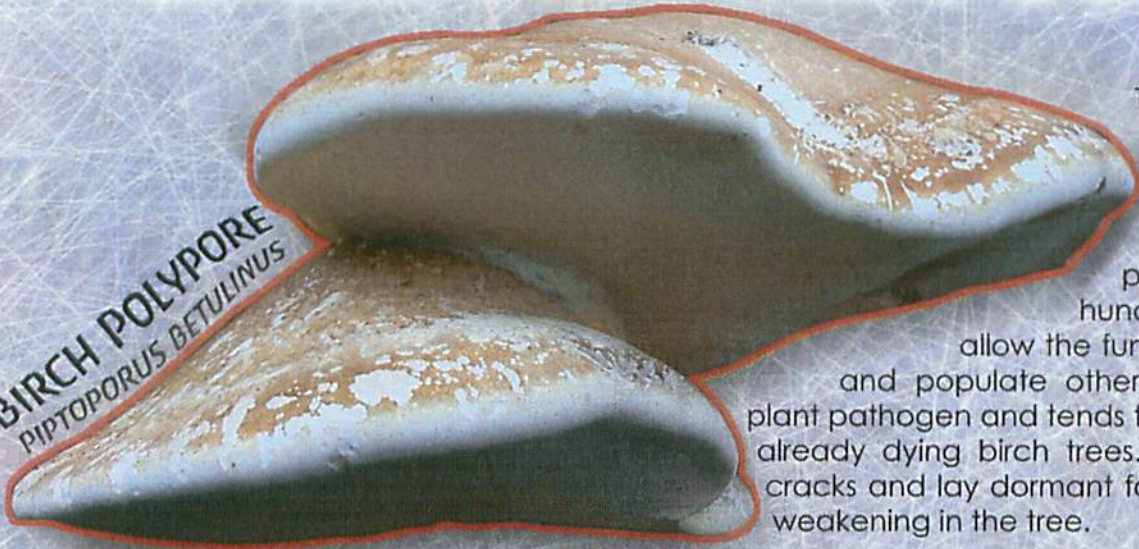
In September of 1991 two German hikers made an extraordinary discovery. When they first saw a bony human corpse poking out through the ice of the Eastern ridge of the Alps the tourists believed they had stumbled upon the gruesome remains of a fellow mountaineer. What they didn't realise was that this particular corpse had been laying there for over 3,000 years.

The man, now known as 'Otzi' (after the region of mountains in which he was discovered), turned out to be the mummified corpse of a man living in the copper ages. Otzi was approximately 45 years old when he died. X-rays of the body showed he was hit in the shoulder with a flint arrowhead and wounds on the hands suggest he was engaged in hand to hand combat mere hours before his death. It seems Otzi was murdered.

Aside from the excitement of finding a 3,000 year old mummy, the clothing and equipment that was mummified along with Otzi offers us a never before seen insight into the toolkit of a copper age man.

OTZI'S FUNGAL TOOLKIT

BIRCH POLYPORE
PIPTOPORUS BETULINUS



The birch polypore, as expected by the name, grows almost entirely on birch trees. The polypore part refers to the hundreds of pores which allow the fungal spores to escape and populate other areas. It is a weak plant pathogen and tends to only rot broken and already dying birch trees. It can invade small cracks and lay dormant for years, waiting for a weakening in the tree.

Its medicinal properties have long been known and it has been used to treat a variety of conditions through the ages. The fungus has a styptic effect (it can stop bleeding) and can help to prevent infections of wounds due to its antiseptic nature. In Otzi's time when antibiotics were not available, infection was a huge cause of death so it's unsurprising that this mushroom was important enough to be featured twice in his toolkit. More recently than Otzi, the mushroom has been added to tea to act as a laxative in order to clear parasitic worms in the stomach. In Otzi's autopsy he was found to suffer from this exact condition. Is it possible that the people of 3,000 BC knew about these properties and Otzi was using the mushroom for this purpose?

In the modern era the mushroom is perhaps best known for its use as a blade sharpener. The leathery upper surface provides a perfect material for a tool known as a blade strop which helps to realign parts of a blade bent out of shape. The mycologist (someone who studies fungi) Paul Stamets believes the fungus has unknown potential and has filed patents for its use as a tool against cowpox, avian influenza, yellow fever and the West Nile virus.

Another fungus that grows on trees, *fomes fomentarius*, is, unlike the birch polypore, a strong plant pathogen. It infects trees through broken bark and causes the tree to rot. Any tree infected immediately loses its value as timber. The fungus' main use is as a fire starting material due to the fact it is easily flammable. In ancient times the process of firestarting was tedious and difficult so the embers of a fire would try to be preserved as often as possible. The tinder fungus could be used to transport embers amongst camps. After chemical tests of the samples found on Otzi it was concluded this is what he carried it for.

TINDER FUNGUS
FOMES FOMENTARIUS



AN AMADOU FLY DRYER

The fungus also has medicinal properties and can, like the birch polypore, stop bleeding of wounds. Through a process of wetting, beating and stretching the fungus can be converted into a substance known as amadou. This conversion improves the material's use as tinder and can be used to make various clothing such as hats and gloves. Amadou is also useful due to the fact it is extremely effective at absorbing water. This has been exploited by dentists during surgery and is used to this day for fly fishers who use the amadou to dry the flies.