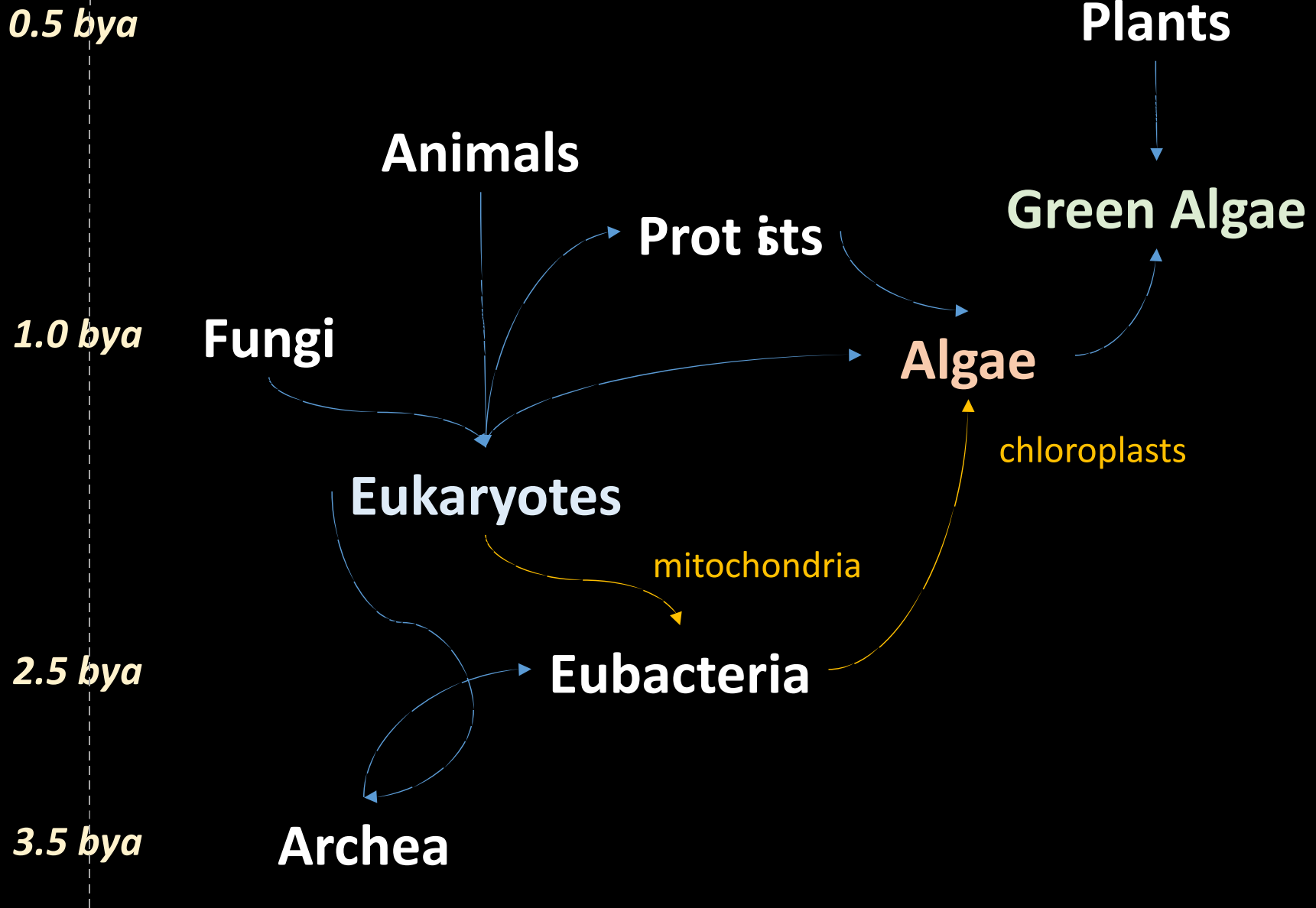


Exploring Island Mushrooms



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What are mushrooms?



Mushrooms are fungi...

Not all fungi produce mushrooms:



Chrysomyxa ledicola rust
on *Ledum groenlandicum*



Phragmidium rust
on *Rosa nutkana*



Slimemolds are not mushrooms (or fungi):



Some local slimemolds (protists)

Mushrooms are the fruiting bodies of fungi in the groups (Subdivisions):
Ascomycota and Basidiomycota



Larger (macroscopic) fungus

Subterranean fungi
(truffles)



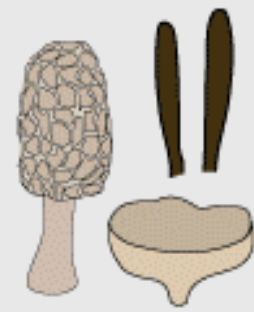
Above-ground fungi



Basidiomycetes & Ascomycetes

Basidiomycetes

**Ascomycetes
(cup & flask fungi)**



**Gasteromycetes:
puffball, bird nest,
stinkhorn, etc.**

**Polypore, crust &
Jelly fungi (on wood)**

**Coral, tooth &
club fungi, etc.**

Mushroom like fungi

**Mushrooms with tubes
(boletes)**

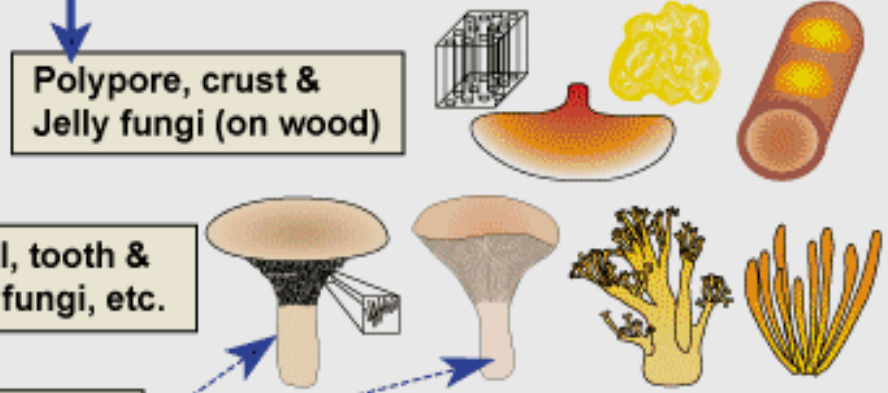
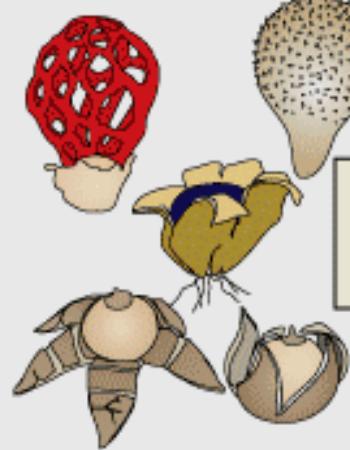


spore print

Mushrooms with gills



spore print



Local ascomycete mushrooms



Elf n saddles (*Helvella sp.*)

Xylaria (unknown *X. sp.* on left *X. hypoxylon* aka candlesnuf fon right)



Earth tongues (ascomycota)



(*Cudonia circinans*)



(*Geoglossum* sp.)



Unidentified earth tongues
(possibly *Spanthularia*)



Cup fungi (ascomycota)



Unidentified
(possibly *Plectania*)



Green stain
(*Chlorociboria aeruginascens*)



Orange peel fungus
(*Aleuria aurantia*)

Morels (order Pezizales, family Morchellaceae)



Morel (*Morchella* "esculenta")



Black morel (*Morchella* "elata")

Hypomyces, an ascomycete that parasitizes basidiomycetes



Hypomyces lateritius
on *Lactarius rubrilacteus*



Lobster mushroom
(*Hypomyces lactuflorum* on *Russula brevipes*)

Some local basidiomycete mushroom groups

Russulaceae	Paxillaceae & Tapinellaceae
Hygrophoraceae	Gomphidiaceae
Tricholomataceae	Boletaceae
Entolomataceae	Polypores
Amanitaceae	Hydnaceae
Lepiotaceae	Clubs and coral
Agaricaceae	Cantharellaceae
Coprinoids	Jelly Fungi
Strophariaceae	Puffballs and earthstars
Cortinariaceae	

Russulaceae: Russulas and milkcaps

Brittle

Classic mushroom shape

No ring, cup, veil

Milkcaps ooze when broken

Mycorrhizal



Russula xerampelina (shrimp russula)



Russula rosacea and *R. emetica* (rosy russula and emetic russula)



Russula brevipes (short stemmed russula)
& lobster mushroom (*R. brevipes* infected with
Hypomyces lactuarius)



Lactarius rubrilacteus (bleeding milkcap)
& *L. deliciosus* (saf fon milkcap)



Hygrophoraceae (waxy caps)



Gliophorus psittacinus
(parrot mushroom)

Tricholomataceae

Many new families recently moved
Pale spored



Leucopaxillus sp.



Tricholoma f. bivovirens

Tricholoma magnivelare
(matsutake, pine mushroom)



Clitocybe nuda (*Lepista nuda*)
(Blewit)



Dendrocollybia racemosa
(branched shanklet)



Hydnangiaceae (formerly in Tricholomataceae)



Laccaria amethysteo-occidentalis
(western amethyst laccaria)



Laccaria laccata



Marasmiaceae (formerly in Tricholomataceae)



Connopus acervatus

Pleurotaceae (formerly in Tricholomataceae)

Pleurotus "ostreatus" (oyster mushroom)



Amanitaceae

White spored

Buttons encased in a universal veil

Mycorrhizal



Amanita smithii & *A. silvicola*



Amanita pachycolea & *A. vaginata*
(grisettes)



Amanita muscaria (fly agaric)



Amanita porphyria



Lepiotaceae



Chlorophyllum olivieri
(shaggy lepiota)



small *Lepiota*
(possibly *L. magnispora*)

Agaricaceae

Chocolate brown spores
No volva (cup)
Saprophytic



Agaricus praeclaresquamosus
Flat topped agaricus



Agaricus augustus
Prince



Phaeolepiota aurea
Golden bootleg



Coprinoids



Strophariaceae



Stropharia ambigua
(questionable stropharia)



Pholiota sp.

Cortinaraceae

Rusty red spores
Cobwebby veil (cortina)
Mycorrhizal



Cortinarius croceofolius
(aka Dermocybe croceofolius, saf fon webcap)



Paxillaceae, Tapinellaceae & Hygrophoropsidaceae



Tapinella atrotomentosa
(velvet pax)



Hygrophoropsis aurantiaca
(false chanterelle)

Gomphidiaceae

Sooty grey spores

Decurrent gills (run down the stem)

Gomphs have slime veil & most have yellow "feet"

Mycorrhizal



Gomphidius oreganensis, *G. smithii*, and *G. subroseus*
(insidious gomphidius, Smith's gomphidius, and rosy gophidius)



Chroogomphus rutilans
(pine spike)



Boletaceae

Pores instead of gills



Jacks (*Suillus* sp.)



Suillus tomoentosus
(poor man's
slippery jack)



Suillus brevipes
(short stemmed
slippery jack)





*Xerocomellus
chrysenteron*
(cracked cap bolete)



Xerocomellus zelleri
(Zeller's bolete)



Phylloporus rhodoxanthus
(gilled bolete)

Cantharellaceae



Cantharellus formosus
(golden chanterelle)



Cantharellus subalbidus
(white chanterelle)



Craterellus neotubaeformis
(yellowfoot)

Gomphus f bccosus
(scaly chanterelle)



Jelly Fungi



Dacrymyces chrysospermus
(yellow jelly)



Guepinia helvelloides
(apricot jelly fungus)



Pseudohydnum gelatinosum
(white jelly fungus)



Tremella mesenterica
(witch's butter)

Puffballs and earthstars



Lycoperdon sp.

Geastrum sp.





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