Retiboletus ornatipes

Galerina marginata

Bisporella citrina

Pictorial Field Guide to the Fungi of the Westchester Wilderness Walk/ Zofnass Family Preserve

by

Zaac Chaves, Caroline Carollo Matos, Michael Rothman & Scott Alan Mori

Submitted Friday, January 11, 2019

How to cite: Chaves, Z., C. Carollo Matos, M. Rothman & S.A Mori. 11 January 2019 onward. Fungi in S. A. Mori & R. F. Naczi, Westchester Wilderness Walk. Fungi and Plants. The New York Botanical Garden. (http://sweetgum.nybg.org/science/projects/wlt/portfolio/fungi/).

Introduction

The purpose of this pictorial guide is to give visitors to the Preserve an opportunity to learn about the fungi they encounter. The guide is based on the collections and images made by the authors and those who collected with them. The results of our inventory of the flowering plants and fungi can be accessed here: (http://sweetgum.nybg.org/science/projects/wlt/). The only group not included is the algae, one of the least known groups in the Northeastern United States.

Hawksworth (1991) estimated that there are six species of fungi for each flowering plant species on the planet. Using a conservative estimation of 250,000 as the worldwide number of flowering plants, he hypothesized that there are 1,500,000 species of fungi on the planet. Only 74,000 species of fungi have been provided with scientific names. That represents merely 3.5% of the estimated total number of published species of fungi in the world (Hawksworth, 2011).

Over the last five years, we collected and photographed 300 species of flowering plants in the Preserve (Naczi et al. 2015); thus, we expect there to be as many as 1,800 species of fungi in the Preserve. To date only 110 species of fungi have been recorded in our checklist so it is clear that there are many more species of fungi in the Preserve that have not yet been documented. Although 2,189 species were published in 2017, this is a small number compared to the ca.1.5 million species that still need to be described by mycologists (Royal Botanic Gardens Kew, 2018b).

Fungal Classification

We organized the Pictorial Guide based on data from Index Fungorum (Royal Botanic Gardens Kew, 2018a). Two other groups, the International Mycological Association (2018) and Landcare Research (2018), were also consulted. There are two major factors, however, that make if particularly difficult to classify fungi. In the first place, there are many species of fungi known as new species but without scientific names. In the second place, published species are sometimes reclassified; meaning that past work requires time-consuming changes to Index Fungorum. New classifications that replace old classifications eventually colonize other databases such as KE Emu used at The New York Botanical Garden(NYBG).

As fungi are reexamined using morphological and molecular data it may cause changes to previous classifications. For example, two species that used to be placed in the same family (*Chlorociboria aeruginascens* and *Bisporella citrina*) are now segregated into the Chlorociboriaceae and Helotiaceae respectively (Royal Botanic Garden Kew, 2018a). The NYBG database keeps each of the species in the Helotiaceae. Another challenge is the division of a single genus into another. For example, *Boletus ornatipes* has been placed in *Retiboletus ornatipes* (Royal Botanic Garden Kew, 2018a). The genus is incorrectly treated as *Boletus ornatipes* based on data from the NYBG fungal database. In contrast. Index Fungorum correctly treats *Boletus bicolor* as a synonym of *Baorangia bicolor*.

In Appendix 1, we present an update of a list of 32 taxa from the database of the NYBG fungal database (2018 onward). The updated data comes from Index Fungorum (Royal Botanic Garden Kew, 2018a) which is considered to be the standard used by mycologists. This ensures that the correct spelling of taxa is used, authorship correctly credited, species placed in the correct family, synonymies correct, etc.

Non-Fungal Entities

We also consider a few non-fungal entities called myxomycota or slime-molds. These organisms lack cell walls as well as hyphae and are no longer considered part of the fungal kingdom. Amateur mycologists often encounter slime molds because they occur in similar habitats as fungi. We include them because they are incredibly beautiful when fertile, occasionally confused for fungi at this stage, and because we want to teach others the differences between fungi and slime molds.

Below is depicted the current classification of *Chlorociboria aeruginascens*.

Kingdom: Fungi

--Division: Ascomycota

----Subdivision: Pezizmycotina

------Class: Leotiomycetes

--------Subclass: Leotiomycetidae

----------Order: Heliotales

----------Family: Chlorociboriaceae

----------Genus *Chlorociboria*

----------Species *aeruginascens*

Chlorociboriaceae

Chlorociboria aeruginascens
stains wood green
substrate: wood

How to Use the Pictorial Guide

This pictorial guide works by comparing images at two levels. The first is an index that describes and provides images for the groups of fungi. The second is a larger gallery of images belonging to the groups. One might identify a fungus by seeing it in the index and not have to consult the group gallery. On the other hand, the index may only give an idea of what group an unknown fungus may belong to. Then the gallery images of the group have to be consulted. If you are lucky, one of the gallery images could match the fungus you wish to identify.

Many times, however, none of the images match the fungus you are looking at. This happens for several reasons 1) you might have found a species that has never been collected from the Preserve, 2) species may look differently at different stages of development, For example, color may be so variable that it is not reliable for identification (e.g., you might have seen a fungus in red phase but we have imaged the same species but in its yellow phase); and 3) you do not know what features are useful for identification.

Click on Family Checklists to see a greater number of images than included in the Pictorial Field Guide(http://sweetgum.nybg.org/science/projects/wlt/portfolio/fungi/).

Literature Cited

Hawksworth, D. L. 1991 *The fungal dimension of biodiversity : magnitude, significance, and conservation.* Mycological Research 95: 641–655. 2018 accessed. (https://www.sciencedirect.com/science/article/abs/pii/S0953756209808101).

Hawksworth, D. L. 2011. *The magnitude of fungal diversity. The 1.5 million species estimate revisited.* Mycological Research 12: 1422—1432. 2018 accessed. (http://www.davidmoore.org.uk/21st_Century_Guidebook_to_Fungi_PLATINUM/REPRINT_collection/Hawksworth_magnitude_diversity2001.pdf).

R. F. Naczi, S. A. Mori, M. Rothman, C. Corolla Matos & J. Jiang. 2015 onward. F*lowering Plants in Plants and Fungi of the Westchester Wilderness Walk/Zofnass Family Preserve*. The New York Botanical Garden, New York. 2018 accessed. (http://sweetgum.nybg.org/wlt/angiosperms.php).

Royal Botanic Gardens Kew. 2018a accessed. *Index Fungorum.* (http://www.indexfungorum.org/).

Royal Botanic Gardens Kew. 2018b accessed. *State of the Worlds Fungi.* (https://stateoftheworldsfungi.org/).

International Mycological Association. 2018 accessed. MycoBankDatabase. Fungal Databases, Nomenclature & Species Banks (http://www.mycobank.org/defaultinfo.aspx?Page=Home).

Landcare Research (Manaki Whenua). 2018 accessed. New Zealand Fungarium (https://www.landcareresearch.co.nz/resources/collections/pdd).

Illustrated Index to the Gallery

Sac Fungi

Ascomycota
Sordariomycetes

page 8

Diatrypaceae

Diatrype sp.
substrate: wood

Xylariaceae

Xylaria cf. longipes
substrate: wood

Sac Fungi

Ascomycota
Leotiomycetes
Geoglossomycetes
Dothideomycetes

page 9

Helotiaceae

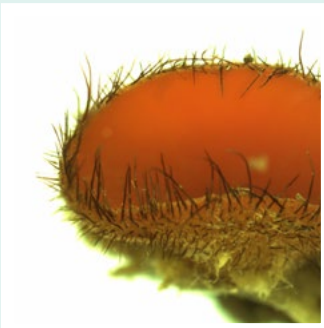
Ascocoryne sarcoides
substrate: wood

Sac Fungi

Ascomycota
Eurotiomycetes
Lecanoromycetes
Pezizomycete

page 10

Pyronemataceae



Scutellinia scutellata
margin with eyelash like hairs
substrate: wood [27613 M C]

Boletes

Basidiomycota
Boletales

page 12

Boletinellaceae

Boletinellus merulioides
associated with leafcurl ash aphid
substrate: soil near ash trees

Boletaceae

Retiboletus ornatipes
ornately reticulated stipe
substrate: soil

Agarics

Basidiomycota
Agaricales

page 14

Hymenogastraceae

Galerina marginata
substrate: wood

Marasmiaceae

Megacollybia rodmanii
substrate: wood [CM 18]

Chanterelles

Basidiomycota
Cantharellales

page 17

Cantharellaceae

Craterellus fallax
substrate: soil [CM 29]

Russulas

Basidiomycota
Russulales

page 18

Russulaceae

Russula emetica
substrate: soil

Auriscalpiaceae

Artomyces pyxidatus
substrate: wood [CM 6]

Bondarzewiaceae

Bondarzewia berkeleyi
substrate: soil at oak [CM 44]

Polypores

Basidiomycota
Polyporales

page 20

Ganodermataceae

Ganoderma applanatum
substrate: wood [CM 7]

Meruliaceae

Irpex lacteus
spiny(toothed) fertile surface
substrate: wood

Polypores

Basidiomycota
Hymenochaetales

page 22

Hymenochaetaceae

Coltricia cinnamomea
substrate: soil [CM 67]

Polypores

Basidiomycota
Thelephorales

page 23

Bankeraceae

Hydnellum cf spongiosipes
spiny(toothed) fertile surface
substrate: wood

Jelly Fungi

Basidiomycota
Dacrymycetales Tremellales
Sebacinales

page 24

Tremellaceae

Tremella mesenterica
substrate: wood

Sebacinaceae

Sebacina schweinitzii
substrate: soil [CM 68]

Slime Molds
Protozoa

Myxomycota
Trichiales
Stemonitales

page 26

Stemonitidaceae

Stemonitis fusca
substrate: wood [CM 60]

Arcyriaceae

Arcyria sp.
substrate: wood

Slime Molds
Protozoa

Myxomycota
Liceales

page 27

Tubiferaceae

Lycogala epidendrum
substrate: wood

Pucciniomycotina

Basidiomycota
Atractiellales

page 28

Incertae sedis

Leucogloea compressa
substrate: wood

Sac Fungi (Ascomycota - Sordariomycetes)

Click to Return to Illustrated Index

This class of fungi can be diagnosed by embedded chambers, called *perithecia*, within which ascospores are produced. The sordariomycetes consists of many inconspicuous members. Some are confused for burned wood. Together groups of perithecia interrupt the stromatic surface creating a rough texture which aid in field identification.

Hypoxylaceae

Annulohypoxylon sp.
substrate: wood

Daldinia childiae
substrate: wood

Hypoxylon fragiforme
red in KOH
substrate: wood

Hypocreaceae

Hypocrea gelatinosa
substrate: wood

Diatrypaceae

Diatrype sp.
substrate: wood

Diatrypella sp.
substrate: wood

Eutypa spinosa
substrate: wood [CM 31]

Eutypella sp.
substrate: wood

Nectriaceae

Dialonectria episphaeria
subtrate: *Diatrype sp.*

Nectria cinnabarina
substrate: wood

Xylariaceae

Kretzschmaria deusta
substrate: wood

Xylaria longipes
substrate: wood

Sac Fungi (Ascomycota - Leotiomycetes, Geoglossomycetes, Dothideomycetes)

Click to Return to Illustrated Index

A wide phylum. Many represented members of these families mature with cups, called *ascocarps*, upon which ascospores are produced. Occasionally these appear as colorful dots and closer inspection reveals the cup-like structure.

Helotiaceae

Ascocoryne sarcoides
substrate: wood

Bisporella citrina
lemon yellow, drying orange
substrate: wood

Dermateaceae

Chlorosplenium sp.
substrate: wood [CM 62]

Leotiaceae

Leotia lubrica
substrate: soil

Rhytismataceae

Lophodermium sp.
substrate: wood

Rhytisma prini
substrate: Ilex verticillata leaves. [SM 27680]

Bulgariaceae

Bulgaria inquinans
substrate: wood [CM 27]

Chlorociboriaceae

Chlorociboria aeruginascens
stains wood green
substrate: wood

See Alternate Classification

Geoglossaceae

Trichoglossum walteri
substrate: soil

Geoglossum difforme
substrate: wood [CM 85]

Incertae sedis(Dothideomycetes)

Asteromella kalmicola
with pseudothecium
substrate: mountain laurel

See Alternate Classification

Capnodiaceae

with pseudothecium
substrate: aphid exudate

Sac Fungi (Ascomycota - Eurotiomycetes, Lecanoromycetes, Pezizomycetes)

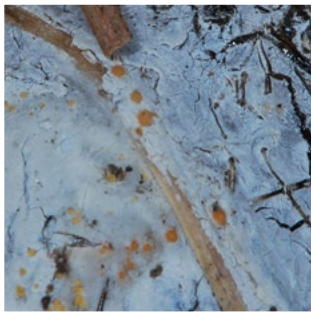
Click to Return to Illustrated Index

A wide phylum. Many represented members of these families mature with cups, called *ascocarps*, upon which ascospores are produced. Occasionally these appear as colorful dots and closer inspection reveals the cup-like structure.

Mycocaliciaceae

Phaeocalicium polyporaeum
substrate: *Trichaptum biforme*
mushroom surface

Baeomycetaceae



Sarea resinae
substrate: white pine resin
[photo by M. Rothman]

See Alternate Classification

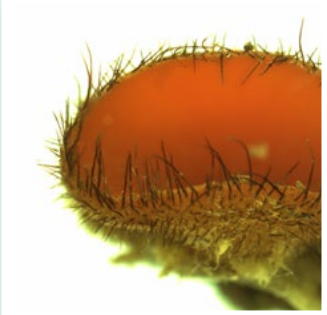
Sarcosomataceae

Galiella rufa
substrate: wood [CM 78]

Sarcoscyphaceae

Sarcoscypha occidentalis
substrate: wood [CM 37]

Pyronemataceae



Scutellinia scutellata
margin with eyelash like hairs
substrate: wood [SM 27613]

This page is intentionally left blank.

Boletes (Basidiomycota - Boletales)

Click to Return to Illustrated Index

Most members of this group of fleshy mushrooms have a cap with a conspicuous fertile surface. It consists of an elongated and often detachable pore layer within which develop fertile basidiospores. These mushrooms often arise from the ground and have a stipe, or stem-like structure, which connects to the center of the cap.

Boletaceae

Leccinum scabrum
rough projections of cystidia on stalk, called *scabers*
substrate: soil

Pseudoboletus parasiticus
substrate: *Scleroderma citrinum*

Retiboletus ornatipes
ornately reticulated stipe
substrate: soil

Sutorius luridiformis
substrate: soil [CM 46]

Boletus variipes
substrate: soil [CM 100]

Boletus subluridellus
substrate: soil [CM 47]

Boletus miniato-olivaceus
substrate: soil [CM 36]

Tylopilus felleus
substrate: soil [CM 100]

Baorangia bicolor
substrate: soil [CM 93]

Gyroporaceae	Boletinellaceae	Sclerodermataceae
		
Gyroporus castaneus substrate: soil near oak trees.	*Boletinellus merulioides* associated with leafcurl ash aphid substrate: soil near ash trees	*Scleroderma citrinum* no stem and spores that develop internally= a gasteromycete. substrate: soil near oak trees.

Agarics (Basidiomycota -Agaricales)

Click to Return to Illustrated Index

These families have a conspicuous fertile surface consisting of gills, an attached redundant blade-like structure upon each side develop basidiospores. Almost all members of these families rise from a central stipe.

Psathyrellaceae

Psathyrella sp.
substrate: wood [SM 27615]

Coprinellus micaceus
substrate: wood

Parasola auricoma
substrate: decayed wood

See Alternate Classification

Inocybaceae

Crepidotus applanatus
substrate: wood

Crepidotus mollis
substrate: wood

See Alternate Classification

Marasmiaceae

Nothopanus candidissimus
substrate: wood

See Alternate Classification

Megacollybia rodmanii
substrate: wood [CM 18]

See Alternate Classification

Hygrophoraceae

Hygrocybe sp.
substrate: soil

See Alternate Classification

Strophariaceae

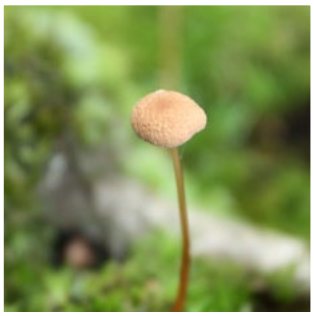
Pholiota aurivella
substrate: wood

Agrocybe sp.
substrate: soil [SM 27596]

Pleurotaceae

Pleurotus ostreatus
substrate: wood [SM 27871]

Omphalotaceae



Mycetinis sp.
substrate: soil [CM 74]

Hydnangiaceae

Laccaria laccata
substrate: soil [CM 26]

Pluteaceae

Pluteus sp.
substrate: wood

Lycoperdaceae

Apioperdon pyriforme
a gasteromycete with internal spores. substrate: wood
See Alternate Classification

Cortinariaceae

Cortinarius sp.
substrate: soil

Entolomataceae

Entoloma strictius
substrate: soil

Physalacriaceae

Cyptotrama asprata
substrate: wood
See Alternate Classification

Hymenopellis furfuracea
substrate: on subterranean beech tree root.

Clavariaceae

Clavaria fumosa
substrate: soil [CM 99]

Hymenogastraceae

Galerina marginata
substrate: wood
See Alternate Classification

Hypholoma lateritium
substrate: soil [SM 27866]
See Alternate Classification

Gymnopilus sp.
substrate: soil [SM 27610]
See Alternate Classification

Mycenaceae See Alternate Classification

Mycena haematopus var. marginata substrate: wood

Mycena semivestipes
substrate: wood

Panellus serotinus
substrate: wood

Panellus stipticus
substrate: wood

Mycenaceae

Mycena galericulata
substrate: soil [CM 23]

Tricholomataceae

Delicatula integrella
substrate: soil

Clitocybe sp
substrate: soil [CM 104]

Hymenopellis furfuracea
substrate: soil; rooting.

See Alternate Classification

Amanitaceae See Alternate Classification

Amanita citrina
substrate: soil [CM 54]

Amanita flavoconia
substrate: soil [CM 98]

Amanita onusta
substrate: soil [CM 80]

Amanita vaginata
substrate: soil [CM 39]

Chanterelles (Basidiomycota -Cantharellales)

Click to Return to Illustrated Index

These families have a conspicuous fertile surface consisting of ridges with cross viewing and are often funnel shaped.

Cantharellaceae

Craterellus fallax
substrate: soil [CM 29]

Cantharellus cinnabarinus
substrate: soil [CM 90]

Russulas (Basidiomycota - Russulales)

Click to Return to Illustrated Index

These families have a conspicuous fertile surface consisting of gills, an attached redundant blade-like structure upon each side develop basidiospores. Almost all members of these families rise from a central stipe.

Russulaceae

Lactarius affinis
substrate: soil

Lactarius griseus
substrate: soil

Lactarius volemus
substrate: soil

Russula emetica
substrate: soil

Russula aeruginea
substrate: soil [CM 94]

Russula crustosa
substrate: soil [CM 96]

Russula claroflava
substrate: soil [CM 97]

Russula mariae
substrate: soil [CM 76]

Lactarius deceptivus
substrate: soil [CM 64]

Lactarius camphoratus
substrate: soil [CM 70]

Russula compacta
substrate: soil [CM 92]

Auriscalpiaceae

Artomyces pyxidatus
substrate: wood [CM 6]

Bondarzewiaceae

Bondarzewia berkeleyi
substrate: soil at oak [CM 44]

Stereaceae

Stereum hirsutum
smooth corticoid fungi
substrate: wood

Stereum striatum
smooth corticoid fungi
substrate: wood

Stereum complicatum
smooth corticoid fungi
substrate: wood

Stereum ostrea
substrate: wood [SM 27601]

Xylobolus frustulatus
smooth cracked surface
substrate: wood

Polypores (Basidiomycota - Polyporales)

Click to Return to Illustrated Index

Most of members of these families form either thick(shelf-like) or thin(parchment-like) structures on wood. Their bodies are often hardened by the presence of skeletal hyphae. Basidiospores are produced within a rigid, embedded tube layer comprising the fertile surface. Some species form this layer flat upon an under surface so that the mushroom is entirely a reproductive surface.

Polyporaceae

Daedaleopsis confragosa
substrate: wood

Lenzites betulinus
substrate: wood
See Alternate Classification

Neofavolus alveolaris
substrate: wood

Pycnoporus cinnabarinus
substrate: wood [SM 27673]

Picipes melanopus
substrate: wood
See Alternate Classification

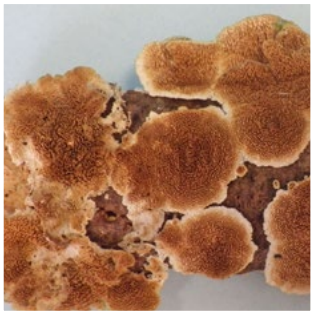
Cerioporus varius
substrate: wood
See Alternate Classification

Trametes pubescens
substrate: wood

Trametes versicolor
substrate: wood

Tyromyces chioneus
substrate: wood

Cerioporus squamosus
substrate: wood [CM 8]



Cerrena unicolor
substrate: wood [CM 38]

Fomes fomentarius
substrate: wood

See Alternate Classification

Polyporaceae

Trametes gibbosa
substrate: wood [SM 28111]

Fomitopsidaceae

Fomitopsis betulina
substrate: wood [SM 28114]
See Alternate Classification

Ischnoderma resinosum
substrate: wood
See Alternate Classification

Laetiporus sulphureus
substrate: wood
See Alternate Classification

Postia caesia
substrate: wood

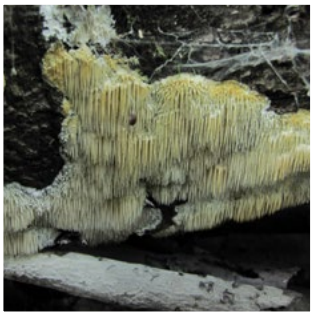
Daedalea quercina
substrate: wood

Ganodermataceae

Ganoderma applanatum
substrate: wood [CM 7]

Meruliaceae

Gelatoporia dichroa
substrate: wood
See Alternate Classification



Radulodon copelandii
substrate: wood
spiny(toothed) fertile surface
See Alternate Classification

Irpex lacteus
spiny(toothed) fertile surface
substrate: wood
See Alternate Classification

Polypores (Basidiomycota - Hymenochaetales)

Click to Return to Illustrated Index

Most of members of these families form either thick(shelf-like) or thin(parchment-like) structures on wood. Their bodies are often hardened by the presence of skeletal hyphae. Basidiospores are produced within a rigid, embedded tube layer comprising the fertile surface. Some species form this layer flat upon an under surface so that the mushroom is entirely a reproductive surface.

Hymenochaetaceae

Hymenochaetopsis olivacea
spiny(toothed) fertile surface
substrate: wood

Hymenochaete rubiginosa
substrate: wood

Phellinus viticola
substrate: wood

Phellinus gilvus
substrate: wood

Coltricia cinnamomea
substrate: soil [CM 67]

Incertae sedis(Atractiellales)

Trichaptum biforme
spiny(toothed) fertile surface
substrate: wood

See Alternate Classification

Polypores (Basidiomycota - Thelephorales)

Click to Return to Illustrated Index

Most of members of these families form either thick(shelf-like) or thin(parchment-like) structures on wood. Their bodies are often hardened by the presence of skeletal hyphae. Basidiospores are produced within a rigid, embedded tube layer comprising the fertile surface. Some species form this layer flat upon an under surface so that the mushroom is entirely a reproductive surface.

Bankeraceae

Hydnellum spongiosipes
spiny(toothed) fertile surface
substrate: wood

Jelly Fungi (Basidiomycota - Dacrymycetales, Tremellales, Sebacinales)

Click to Return to Illustrated Index

These families includes gelatinous mushrooms which produce basidiospores. Most grow on wood.

Dacrymycetaceae

Calocera cornea
substrate: wood

Heterotextus sp.
substrate: wood [CM 17]

Tremellaceae

Tremella mesenterica
substrate: wood

Phaeotremella foliacea
substrate: wood [CM 24]

Sebacinaceae

Sebacina schweinitzii
substrate: soil [CM 68]

See Alternate Classification

This page is intentionally left blank.

Slime Molds (Protozoa, Myxomycota - Trichiales, Stemonitiida)

Click to Return to Illustrated Index

Members of these families live as independent cells throughout the larger part of their lives. Eventually they will coalesce into masses of protoplasm (=slime) finally produce fertile bodies from which their spores are produced. Represented in the field are these most-visible, final, reproductive forms.

Arcyriaceae

Arcyria sp.
substrate: wood

Arcyria incarnata
substrate: wood [CM 56]

Trichiaceae

Hemitrichia serpula
substrate: wood

Hemitrichia calyculata
substrate: wood [CM 55]

Stemonitidaceae

Stemonitis fusca
substrate: wood [CM 60]

Stemonitis splendens
substrate: wood [CM 41]

Diachea leucopodia
substrate: wood [SM 27614]

Physaraceae

Physarum nucleatum
substrate: wood [CM 57]

Fuligo septica var. septica
substrate: wood [CM 95]

Slime Molds (Protozoa, Myxomycota - Liceales, Protostelida)

Click to Return to Illustrated Index

Members of these families live as independent cells throughout the larger part of their lives. Eventually they will coalesce into masses of protoplasm (=slime) finally produce fertile bodies from which their spores are produced. Represented in the field are these most-visible, final, reproductive forms.

Ceratiomyxidae

Ceratiomyxa fruticulosa var. fruticulosa
substrate: wood [SM 27609]

Tubiferaceae

Lycogala epidendrum
substrate: wood

Pucciniomycotina (Basidiomycota - Atractiellales)

Click to Return to Illustrated Index

This subclass comprises a diverse range of fungi including plant pathogens, insect pathogens, smuts, and dimorphic yeasts.

Incertae sedis

Leucogloea compressa
substrate: wood

This page is intentionally left blank.

Appendix

Updates to the NYBG's Fungal Database

The specimens, images, and data included in this project are archived in the NYBG's herbarium and managed by the Electronic Museum Management System (EMu) at NYBG. In general, we accept the names and hierarchy of taxa based on Index Fungorum (Royal Botanic Gardens Kew, 2018a). For the most part, the data in EMu at NYBG follow Index Fungorum's classification. The 32 taxa that do not follow the classification of Index Fungorum are provided in this Appendix.

Amanitaceae

The *Amanita* genus has been moved to Amanitaceae instead of Pluteaceae.

Auriscalpiaceae

Clavicorona pyxidata has been changed to *Artomyces pyxidatus*.

Baeomycetaceae

Sarea resinae has been placed in Baeomycetaceae instead of Dermateaceae.

Chloroboriaceae

Chloroboria aeruginascens has been placed in Chloroboriaceae instead of Helotiaceae.

Fomitopsidaceae

Ischnoderma resinosum has been placed in Fomitopsidaceae instead of Hapalopilaceae.
Laetiporus sulphureus has been placed in Fomitopsidaceae instead of Polyporaceae.
Piptoporus betulinus has been changed to *Fomitopsis betulina*.

Hygrophoraceae

The *Hygrocybe* genus has been moved to Hygrophoraceae instead of Tricholomataceae.

Hymenogastraceae

Galerina marginata has been moved to Hymenogastraceae instead of Cortinariaceae.
The *Gymnopilus* genus has been moved to Hymenogastraceae instead of Cortinariaceae.
Hypholoma sublateritium has been changed to *Hypholoma lateritium* which is placed in Hymenogastraceae instead of Strophariaceae.

Incertae sedis - Dothideomycetes - Ascomycota

Asteromella kalmicola has been placed in Incertae sedis instead of Anamorphic fungi.

Incertae sedis - Atractiellales - Basidiomycota

Trichaptum biforme has been placed in Incertae sedis instead of Polyporaceae.

Inocybaceae

The *Crepidotus* genus has been moved to Inocybaceae instead of Cortinariaceae.

Lycoperdaceae
Lycoperdon pyriforme has been changed to *Apioperdon pyriforme*.

Marasmiaceae
Megacollybia rodmanii has been placed in Marasmiaceae instead of Tricholomataceae.
Nothopanus candidissimus has been placed in Marasmiaceae instead of Tricholomataceae.

Meruliaceae
Polyporus dichrous has been changed to *Gelatoporia dichroa*.
Irpex lacteus has been placed in Meruliaceae instead of Steccherinaceae.

Mycenaceae
Mycena haematopus has been changed to *Mycena semivestipe*s which is placed in Mycenaceae instead of Tricholomataceae.
The *Panellus* genus has been moved to Mycenaceae instead of Tricholomataceae.

Physalacriaceae
Cyptotrama asprata has been placed in Physalacriaceae instead of Marasmiaceae.

Physalacriaceae
Hymenopellis furfuracea has been placed in Tricholomataceae instead of Physalacriaceae.

Physaraceae
Fuligo septica has been changed to *Fuligo septica var. septica*.

Polyporaceae
Favolus alveolaris has been changed to *Neofavolus alveolaris.*
Lenzites betulina has been changed to *Lenzites betulinus*.
Polyporus melanopus has been changed to *Picipes melanopus.*
Polyporus squamosus has been changed to *Cerioporus squamosus.*
Polyporus varius has been changed to *Cerioporus varius.*

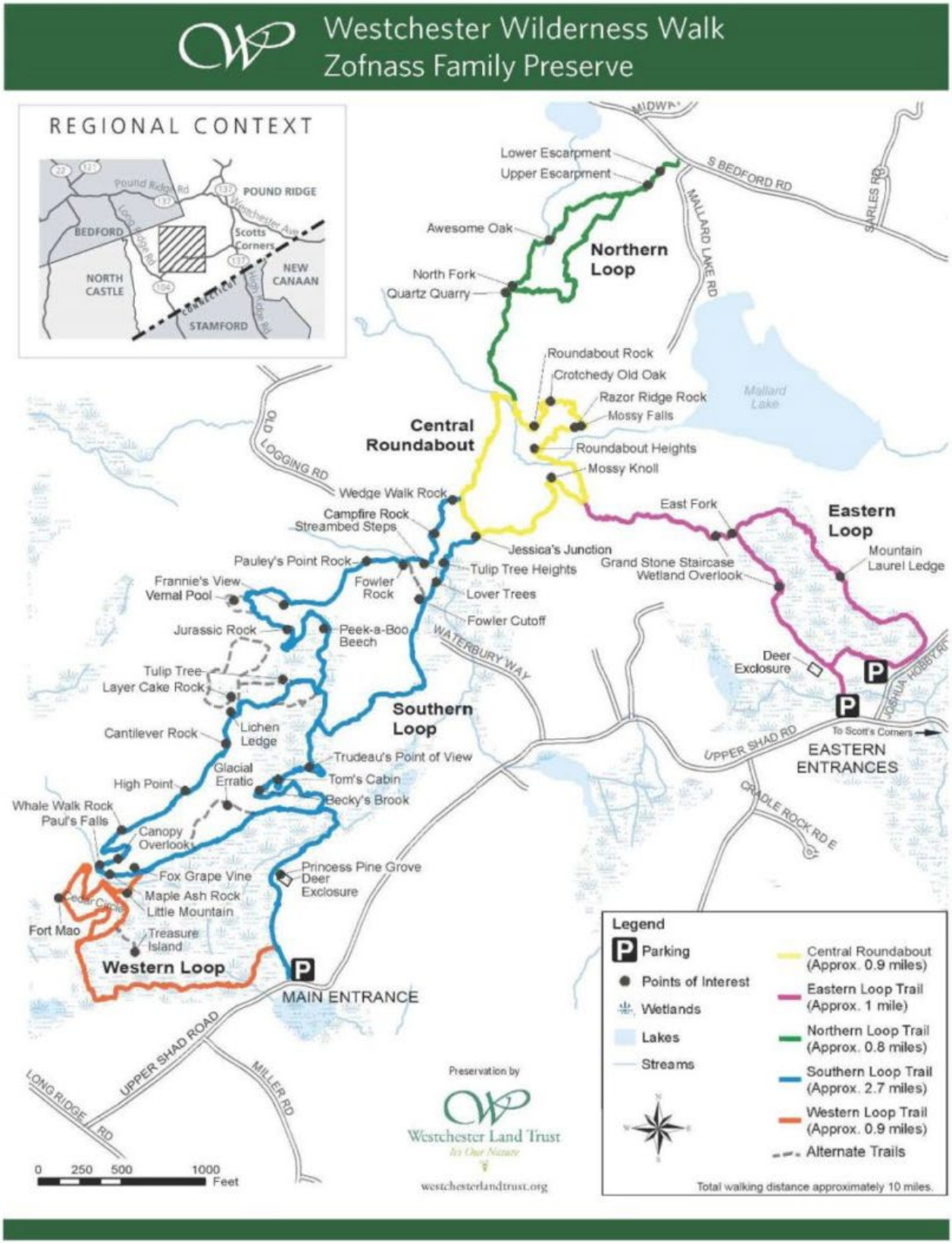
Physaraceae
Parasola auricomus has been changed to *Parasola auricoma*.

Pterulaceae
Radulomyces copelandii has been changed to *Radulodon copelandii* which is placed in Pterulaceae instead of Thelephoraceae.

Sebacinaceae
Tremellodendron schweinitzii has been changed to *Sebacina schweinitzii* which is placed in Sebacinaceae instead of Exidiaceae.

Field Tools

Use these tools to best record measurements of fungi fresh in the field: an english ruler(left), or, if you prefer, a metric ruler(right), as well as a map of the property(below).



Acknowledgments

We thank Paul and Joan Zofnass for establishing the Westchester Wilderness Walk/Zofnass Family Preserve. We also thank the Westchester Land Trust for managing the Preserve and for allowing us to inventory the fungi and plants of the Preserve. We are grateful to Dr. Roy Halling for help in the identification of our collections and to Laura Biscoe for archiving our collections in the Herbarium of The New York Botanical Garden.