

Course Syllabus

SECTION I - Basic Information - Highlands Biological Station

Mushrooms of The Carolinas

Alan Bessette, Arleen Bessette & Michael Hopping

July 22-28, 2018

This course will focus on the varied mycological diversity of North & South Carolina. Macro- and micro-morphological features will be emphasized to aid students in identifying specimens to Family, Genus & Species.

Activities will consist of lectures on topics such as: Key Identification Features, Major Groups of Fungi, Ecology, Edibility and Toxicity; field work (forays); and laboratory identification/study during which students will improve their skills in the use of field keys and microscopy, as well as photographic techniques as a means of documentation. Participants will also gather and record a field collection showcasing the rich diversity of fleshy fungi found in the Carolinas.

If opportunity allows, there will be the chance to sample simple preparations of edible species collected during the week.

Designed for the beginner who wants a solid introduction to mycology and the fleshy mushrooms of the Southern Appalachian Mountains, as well as for those participants looking for the opportunity to pursue their personal mycological interests, this seminar allows for individual guidance in a relaxed group setting with fellow mycophiles.

Daily meeting times generally run from 8:30 am to 12:00 noon, and from 1:00 pm to 5:00 pm, with a 1-hour lunch break. Time for optional evening programs, presentations and independent study will be available from 7:00 pm onward.

Alan E. Bessette is a professional mycologist and distinguished emeritus professor of biology at Utica College of Syracuse University. He has published numerous papers in the field of mycology and has authored or coauthored more than twenty-five books, including: *Edible Wild Mushrooms of North America*, *Mushrooms of Northeastern North America*, *Ascomycete Fungi of North America*, and *Boletes of Eastern North America*. His latest book is *A Field Guide to Mushrooms of the Carolinas*. Alan served as a consultant for the New York State Poison Control Center and was the scientific adviser to the Mid-York Mycological Society for more than twenty years. He has been the principal mycologist at national and regional forays, and was the recipient of the 1987 Mycological Foray Service Award and of the 1992 North American Mycological Association Award for Contributions to Amateur Mycology.

Arleen R. Bessette is a mycologist and botanical photographer who has been collecting and studying wild mushrooms for more than fifty years. She has published several papers in the field

of mycology and has authored or coauthored more than fifteen books, including: *The Rainbow Beneath My Feet: A Mushroom Dyer's Field Guide, Common Edible and Poisonous Mushrooms of New York*, and *Boletes of Eastern North America*. Her latest book is *A Field Guide to Mushrooms of the Carolinas*. Arleen has won several awards in the North American Mycological Association's annual photo competition, including top honors in both the documentary and the pictorial divisions. She presents courses on both national and regional levels in mycology, dyeing with mushrooms and the culinary aspects of mycophagy.

Michael W. Hopping, is a mycologist and photographer from Asheville, NC. He has been a member of the Asheville Mushroom Club for several years, where he served as their foray committee chairperson, chief mushroom identifier, and foray and walk leader for club members and visitors. Michael is a regular contributor of photographs and species descriptions to the Asheville Mushroom Club's e-bulletin. In January 2013, Michael released his study, "Notes on Possible Mycorrhizal Associations of the American Chestnut in Western North Carolina". He is coauthor of *A Field Guide to Mushrooms of the Carolinas*.

Class limit – 12 participants

SECTION II - Tentative schedule for the week

Sunday, July 22

12:00 noon onward: Arrival and check-in.

Monday, July 23

Morning

8:30-9:00: Introductions; defining participants' interests, knowledge levels, and expectations for the workshop.

9:00-10:00: Presentation (Mike Hopping): *Mushrooming 101*

10:15-11:45: On-site Foray

12:00: LUNCH

Afternoon

1:00-2:00: Presentation (Alan Bessette): *The Major Groups of Fungi: Recognizing Their Defining Characteristics*

2:00-2:30: Explanation & use of the Field Key to Major Groups of Fungi

2:30-4:00: Classroom/lab work: class exercise sorting specimens into Major Groups; making spore prints; individual and group identification of unknown fungi.

4:00-5:00: Review of the day's collections; discussion.

Tuesday, July 24

Morning

8:30-11:30: Foray

11:30-12:00: Sorting specimens into Major Groups

12:00: LUNCH

Afternoon

1:00-2:00: Presentation (Arleen Bessette): *Introduction to the Boletes*

2:00-2:30: Classroom/lab work: examination of spore prints

2:30-4:00: Macrochemical testing; individual exercise in writing mushroom descriptions; group and individual mushroom identification using field guides.

4:00-5:00: Review of the day's collections; discussion.

Wednesday, July 25

Morning

8:30-11:30: Foray

11:30-12:00 Sorting specimens into Major Groups

12:00: LUNCH

Afternoon

1:00-2:00: Presentation (Mike Hopping): Learning Your Way Around Amanitaville

2:00-4:00: Classroom/lab work: identification using field guides; optional introduction to Microscopy.

4:00-5:00: Review of the day's collections; discussion.

Thursday, July 26

Morning

8:30-2:00: Foray (bring a bag lunch)

Afternoon

2:00-2:30: Mushroom sorting to major groups

2:30-4:00: Classroom/lab work; Identification using field guides

4:00-5:00: Review of the day's collections

Friday, July 27

Morning

8:30-11:30: Foray

11:30-12:00 Mushroom sorting into Major Groups

1:00-3:00: Mushroom identification
3:00-4:00: Review of the day's collections
4:00-5:00: Clean-up

Saturday, July 28

Morning

8:30-10:00: Presentation (Alan Bessette): Surviving into the Future
10:00-12:00: Open discussion & course evaluations
12:00: Departure

SECTION III – Resources you may wish to bring to this workshop

A Field Guide to Mushrooms of the Carolinas by Alan E. Bessette, Arleen R. Bessette &

Michael W. Hopping

Ascomycete Fungi of North America by Michael W. Beug, Alan E. Bessette & Arleen R. Bessette

Boletes of Eastern North America by Alan E. Bessette, William C. Roody & Arleen R. Bessette

Milk Mushrooms of North America: A Field Identification Guide to the Genus Lactarius by Alan E. Bessette, David B. Harris & Arleen R. Bessette

Mushrooms of Northeastern North America by Alan E. Bessette, Arleen R. Bessette & David W. Fischer

Mushrooms of the Midwest by Michael Kuo & Andrew S. Methven

Mushrooms of the Northeastern United States and Eastern Canada by Timothy J. Baroni

Mushrooms of West Virginia and the Central Appalachians by William C. Roody

National Audubon Society Field Guide to Mushrooms by Gary H. Lincoff

Waxcap Mushrooms of Eastern North America by Alan E. Bessette, William C. Roody, Walter E. Sturgeon & Arleen R. Bessette

Related websites:

Groups

- Asheville Mushroom Club: <http://www.ashevillermushroomclub.com/>
- Cumberland Mycological Society: <http://cumberlandmycology.com/>
- Mushroom Club of Georgia: <http://www.gamushroomclub.org/>
- North American Mycological Association: <http://www.namyco.org/>

- South Carolina Upstate Mycological Society:
<http://www.scumsonline.com/About/index.asp>

Mushroom Identification and taxonomic issues

- Index Fungorum: www.indexfungorum.org/names/names.asp
- The Bolete Filter <http://boletes.wpamushroomclub.org/WP/>
- Messiah College key to fungi growing on wood:
https://www.messiah.edu/oakes/fungi_on_wood/introduction%20page/introduction.htm
- MushroomExpert.com: <http://www.mushroomexpert.com/index.html>
- Mushroom Observer: mushroomobserver.org

SECTION IV – Equipment & Materials

Laptop computer

Collecting equipment (a basket, sharp knife, wax paper, brown paper/wax sandwich bags, a ruler, notebook, pencil/pen)

Camera & Related Photography Equipment

Hand lens