Newsletter of the North American Mycological Association

# THE MYCOPHILE

Volume 59:1 January-February 2019 www.namyco.org

# THE SHIITAKE MUSHROOM-A HISTORY IN MAGIC & FOLKLORE by Shantanu Tilak (from GoUNESCO, 27 July 2016)

In Chinese culture, the shiitake mushroom, known for its aphrodisiacal qualities, is a symbol of youthfulness and virility. The shiitake is vastly popular as a dietary choice in China and Japan. In Japan, the crème de la crème of shiitake crop is called donko. In China, it is known as shanku and dongo. The Chinese were the first to use the shiitake mushroom for nutrition and healing. According to a Chinese legend, around 5,000 years ago, a deity, Shennong, endowed the world with natural treasures including medicinal mushrooms. This laid the foundation for the conceptual framework of Chinese medicine based on super foods and acupuncture.



The Shiitake Mushroom- Image from Fresh Crop Mushrooms Online

Tapestries and Chinese manuscripts depict deities holding several species of medicinal mushroom, including the shiitake, which finds applications in Chinese culture as an aphrodisiac and a promoter of youthfulness and virility.

After the Chinese discovered the shiitake wild while scouring the extensive forest cover of the Chinese subcontinent, the Japanese developed a convenient method to cultivate mushrooms. Called the 'soak and strike' method, it involved inoculating a tree log with collected spores, and leaving them out in



Chinese Scrolls depicting deities holding medicinal mushrooms.

Photo credit: Crazy About Mushrooms

a moist atmosphere. The logs are cut from a tree and placed horizontally, followed by an injection of spores. In fact, this method was synonomous with the development of a male child into a man:



Soak and Strike Method is the most widely used technique to cultivate Shiitake Mushrooms. Photo credit: Sharondale Farm

cont. on p. 4

### **UPCOMING FORAYS & OTHER EVENTS**

The events page of *The Mycophile* publicizes forays and events of NAMA affiliated clubs which may be of interest to our members. If you would like to list your club's next big event, contact Susan Kayser, Editor: <a href="maycophile@namyco.org">mycophile@namyco.org</a>.

Include date, location, brief description, link for information, and host organization name.

#### NAMA 2019 Annual Foray

8-11 August, 2019 | Paul Smiths, New York

The next annual foray will be held in the Adirondacks, at Paul Smith's College, Paul Smiths, New York on 8-11 August, 2019. Stay tuned to this space for details and updates.

#### Wildacres Regional Foray

26-29 September 2019 } Wildacres Retreat, North Carolina

Wildacres Retreat, located just off the Blue Ridge Parkway near Little Switzerland, North Carolina, is renowned for the identification of new species to the foray each year, and to the identification of new species to the mushroom kingdom. As an attendee, you will have the opportunity to search for fungi along the creek sides of Armstrong Creek, Linville Falls, and Crab Tree Falls, in the highlands of Mount Mitchell, and in many other areas along the beautiful Blue Ridge Parkway. Dr. Brandon Matheny returns as our chief mycologist for this year.

Dr. Matheny received his PhD from the University of Washington in 2003, and is currently an associate professor at the University of Tennessee-Knoxville. He and his students have studied and explored the fungal world across the county, with a focus in the Southern Appalachians, but also have ventured to Australia and South America. To learn more about this event, click here.

Interested parties, please see <a href="http://www.wildacres.org/">http://www.wildacres.org/</a> for more information about Wildacres Retreat, or contact registrar Glenda O'Neal, by email at: <a href="mailto:glendakoneal@yahoo.com">glendakoneal@yahoo.com</a>, or by telephone at (423) 863-2742.

Registration is now open. The fee for this event is \$260 per person, and includes three nights lodging, with double occupancy, and eight meals. There are no private rooms available. The registration form may be found at <a href="https://namyco.org/docs/Wildacres\_Registration\_2019.pdf">https://namyco.org/docs/Wildacres\_Registration\_2019.pdf</a>. This foray is limited to 40 NAMA memberss and registration is expected to fill quickly. (For accounting purposes, please date your check for September 26, 2019. Checks will be deposited following the foray.)

### In this Issue

The Shiitake Mushroom	page 1
Message from the President	
McIlvaniea; Squirrels	1 0
2019 Photo Contest rules	
Book Review: How to Change Your Mind	
North American Comprehensive Catalog	
NAMA 2018 Photograpy Contest Winners	

### MESSAGE FROM THE PRESIDENT

### by Barbara Ching <a href="mailto:com">aetiporous@gmail.com</a>

Happy 2019 NAMA Mycophiles!

My first step as NAMA's newly-elected president is to thank David Rust for all he has done in the past 6 years to advance our organization. We wouldn't have our website with its wealth of mycological information if it weren't for his efforts. Because of his focus on the advancement of mycology, any members who want to share information about the mushrooms they find can help build the North American Mycoflora—see http:// www.northamericanmycoflora.org/ Local clubs can also seek funding for projects thanks to this initiative —and start dreaming about discovering a new species! David will be serving on the executive committee as past president, so I know we can continue to count on him to look for ways we can be at the forefront of citizen science.

Outgoing First Vice President Kathy Yerich is the force behind our fabulous promotional video check it out here (and share it far and wide): <a href="https://">https://</a> tinyurl.com/y86q9n3m. This video really captures the spirit of NAMA: we're serious about our mission to promote mycology, and as amateurs, we can also be seriously devoted to the fun and friendship that our association creates. With our combined resources and continent-spanning membership, we can find more mushrooms, and learn more about them, than any one of us alone can do. I'm going to be looking for ways to plan more regional forays in addition to our big annual foray/bash so we can explore more of North America's mycoflora. Let me or foray chair Sam Landes (samland2@earthlink.net) know if your club would be interested in hosting one--with support from NAMA of course!

Those who attend the forays know just how valuable, unforgettable, and irreplaceable the experience is. No matter how many books you read and websites you check out, there is just nothing like roaming through the mushroom identification area and walking through the woods with enthusiasts and experts. Take a look at this small sample of the feedback Sam received after our October gathering in Salem, Oregon:

New lifetime member Christian Radcliffe attended his first annual foray; he writes that he especially appreciated the environment it created for members to "share in the passion and expertise of people who have experience . . . The talks I had with different



Barbara with morel

members and watching the excitement around specimens was a treat for me this week."

Bruch Reed, who worked in the identification area, wrote to thank Sam and the foray committee for orchestrating "a wild success. It was a lovely venue; the food was AMAZING!...the [foray] locations were stunning, mushrooms appeared... Over 350 species!!!!"

I especially appreciated Oregon State University professor Seri Robinson's keynote address about spalted wood. Who knew that fungi could make such beautiful colors and patterns as they go about their rotting business? Valerie Nguyen's cooking demonstration incorporated mushrooms I never knew could be used so deliciously—reishi, for example. One of her recipes was included in the November-December 2018 issue of *The Mycophile*.

Be sure to mark your calendar for next year's annual foray at Paul Smiths College in the Adirondacks, August 9-12, 2019.

cont. on p. 4

### MESSAGE FROM THE PRESIDENT, CONT.

cont. from p. 3

Finally, if we had more clubs forming across the continent, we could be finding more fungi and making more friends. While executive secretary, I was frequently contacted for advice about how to start a club and as president, I think it would be helpful to start several clubs all at once so that we can mutually support the pioneers and build some shared knowledge about how to get new clubs up and running. Again, let me know if you want to help get this initiative going.

We have a new Executive Secretary, Bruch Reed, a member of the Illinois Mycological Association and of the New York Mycological Society. Bruch has worked as an identifier and the past 3 annual forays so many of you may have met him or caught some rays of his mushroom-loving warmth. Our new first Vice President, Salma St John, of the Missouri Mycological Society. She brings strong interest and skills in applied mycology, such as cooking with mushrooms, to us, and you'll learn more about her in the next issue of *The Mycophile*.

### THE SHIITAKE MUSHROOM, CONT.

cont. from p. 1

Logs inoculated during a child's birth would mature with him until he attained manhood, and inherited the 'fortune' in his backyard. Thus, the shiitake was a prized possession, and people went to the extent of robbing them from one another, leading to what was known as a 'shiitake war'.

It is interesting to note why the shiitake was endemic to only Asia. A scientific theory explains this by the analysis of spore dispersal of the mushroom that occurs due to directional of typhoon winds over long periods.

Recent academic inquiries in the field of medicine have deconstructed the composition of the shiitake to reveal the existence of active hexose correlated compounds, which are used in therapy and treatment for cancer patients. It is clear that the Orient deems mushrooms, in general, as storehouses of the power of healing. As compared to the depiction of the mushroom as a 'quaint fungus' in the West, what is known as the 'Orient' holds the mushroom in high esteem.

Today, the shiitake is grown in several parts of the world. The United States, for instance, cultivates mushrooms in several states, including Indiana and Pennsylvania. It has been incorporated in several ways to cooking over time, and in Japanese restaurants, it

forms quite the supplement to a sushi roll or even a hot bowl of Bok Choy soup.

So the next time you feel under-nourished and in need of healing, trust the mythical power of the shiitake mushroom.



Bok Choy Shiitake Soup is a pretty healthy meal.
Photo credit: Feral Kitchen

# MCILVAINEA: VOLUMES NEW AND OLD by Laura Juszczak

Contributions to Volume 27 (2018) of the NAMA journal, *McIlvainea*, are available on the NAMA website. The volume commemorates the life of Gary Lincoff, with moving tributes from Eugenia Bone, Michael Beug and Dianna Smith. The essay, 'State of the World of Fungi' by Raymond Archambault also celebrates Gary's life. Catch the photo of the ape.

The first two parts of a four-part series exploring medicinal fungi, by Dianna Smith, are also included: 'Medicinal Fungi: Hype and Hope' and 'Ling Zhi, Ganoderma lucidum.' A wide range of related topics are woven together in this thoughtful and well-researched series on medicinal fungi. For example, the section on ling zhi sets the historical stage with a discussion of immortality elixirs—often quite the opposite—which were sought by Chinese emperors. The possible identity of ling zhi, first mentioned in the Han dynasty, is discussed, as well as its usage by ascetics. The Confucian and Taoist approach to health and medicine in China are also explored. This is a rich and complicated subject; stay tuned for the last two parts

in this series in volume 28, 2019, where topics include the use of microfungi as antibiotics and the pharmacological properties of macrofungi.

The volume is rounded out with two reports from Michael Beug on North American mushroom poisonings: one for 2017 and a twelve-year summary spanning 2006 to 2017.

Lastly, something old is new again. Volume 1, issue 1, from 1972 is available online and is searchable! If you scroll to the bottom of the *McIlvainea* volume list, you will find in volume 1/1: "The Man Who Ate Mushrooms", "The Watling Papers", "Hints on the Microscopical Examination of the Agaric Fruit Body", "Key of Northeastern Amanita", and "Key to Northwest Mushrooms (Amanitas)". Other back issues will follow.

Submissions for Volume 28 (2019) are welcome and encouraged: contact Laura Juszczak at <a href="mailto:laurajust54@gmail.com">laurajust54@gmail.com</a>. Happy hunting.

# SQUIRRELS AND AMANITAS from Brian Park

According to Dr. John Rippon, an Illinois Mycological Association member and world expert on fungal diseases, squirrels have an interesting adaptation that allows them to eat mushrooms containing deadly amanita toxins without being affected. There are three important chemicals in the amanitas. Two will knock you right off, but are destroyed in cooking. The third one is the interesting one: it consists of the second amanitin, bound tightly to a glycoprotein molecule. When we digest the mushroom, the enzymes in our gut break the bond between the toxin and the glycoprotein, leaving the toxin free to enter our bloodstream, while the glycoprotein is excreted (a glycoprotein is a mucus molecule, in case you don't know). What the squirrels have done is line their gut with a toxin-compatible glycoprotein, so that as soon as it gets split from its original glycoprotein molecule, it gets rebound to the squirrel glycoprotein, and excreted along with it. Obviously, the squirrels don't cook their food to destroy the first two molecules, but presumably those

get bound in exactly the same way. Thus, squirrels and a few other animals (guinea pigs also, I believe) can eat mushrooms that are highly toxic to other animals with no ill effects.

Brian Park works for a Californian newspaper called the Independent Coast Observer. He wonders if the squirrels eat the amanita to get a psychotropic reaction.



# 2019 ANNUAL PHOTO CONTEST RULES by John Plischke

#### Eligibility

The Photo contest is open to all mushroomers. NAMA membership is not required to enter. Images that have previously won (including honorable mention) are not eligible. Up to 15 images may be entered per person, with a maximum of 6 in the Pictorial, 6 in the Documentary and 3 in the Judges Option to make a total of up to 15 images. Closing date: All entries must be received by the Contest Director on or before June 8, 2019.

#### Subject Material

For Pictorial and Documentary, organisms from the *Myxomycota* (slime molds) and the classes *Basidiomycetes* and *Ascomycetes* of the Eumycota ("true fungi") are eligible. For Judge's Option, nearly anything goes, so long as the theme relates to fungi, and fungi are a key element of the photograph.

#### **Entry Divisions**

Limited or Advanced. If you won first, 2<sup>nd</sup>, or 3<sup>rd</sup> place 2 or more times before the due date, you must enter in the Advanced division, If you won less than twice before, you can enter the Limited Division.

#### **Categories**

Pictorial- This division is for single photos that illustrate the beauty and variety of fungi in form and color. Mushrooms should not be cut or turned over and should look natural. Judging criteria include consideration of both technical (focus, depth of field, exposure, lighting, color, absence of distracting elements) and artistic (composition, color, background, lighting) aspects.

Documentary- For single photographs especially suited as illustrations in a field guide of monograph, or for use in a lecture. Emphasis is placed on portrayal of key morphological characteristics such that the usefulness of the image as an identification aid is maximized. Subjects may be shot in the field, laboratory or studio and the photographer has complete freedom to cut, process, manipulate, or orient the specimen in any desired manner to achieve the goal. Close-ups of single features and photomicrographs are acceptable. Judging criteria will be the same as in the Pictorial category but they will be of secondary importance to the overall mycological utility of the photo. Accurate identification of the subject will be a consideration.

Judge's Option- For single photos or series which do not fit into the Pictorial and Documentary divisions. Examples include time-lapse series, ecological relationships of fungi (e.g. fairy rings), fungi with animals, people enjoying fungi, humor, etc.

*Awards*- First 2<sup>nd</sup> and 3<sup>rd</sup> place will be awarded in Pictorial, Documentary and Judges Option. Honorable Mentions will also be noted for some Pictorial and Documentary photos. This year, award certificates will be emailed or given to first through 3<sup>rd</sup> place winners.

#### Marking, Listing and Submitting Digitals

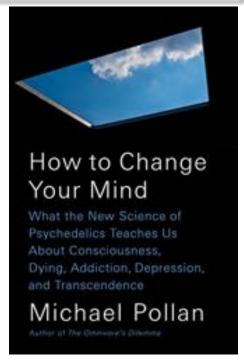
Let us know if you are entering the limited or advanced division. The digital photos file name can include 3 things: D (for Documentary) JO, (for Judges Option) or P (for Pictorial), and your (the photographer) initials, followed by the Genus and species of the fungi, or the title for the Judges Option photo. Digital images may be emailed or mailed on a CD or DVD and will not be returned. Mail images to John Plischke III, 411 Center Avenue, Greensburg, PA 15601 724-832-0271 <a href="Fungi01@aol.com">Fungi01@aol.com</a>. If emailing in images, please include your name, address and phone number. Images can also be submitted using free file mailing programs such as <a href="http://www.mailbigfile.com/">http://www.mailbigfile.com/</a> or Dropbox, etc.

# **BOOK REVIEW: "HOW TO CHANGE YOUR MIND" BY MICHAEL POLLAN** reviewed by Barbara Ching

I've been reading Michael Pollan since he published his first book, Second Nature: A Gardener's Education, in 1991. He writes textbook-model exposition and non-fiction narrative, and his signature technique of juxtaposing the scientific knowledge he is conveying with his everyday life testing of this knowledge served him well in his first book and most of his others, including The Omnivore's Dilemma: A Natural History of Four Meals (2006) and Cooked: A Natural History of Transformation (2013). In these books, I especially enjoyed Pollan's personalized takes on the topics at hand. His latest book, How to Change Your Mind: What the New Science of Psychedelics Teaches Us About Consciousness, Dying, Addiction, Depression, and Transcendence (2018.) is no different in structure from Pollan's earlier "natural histories." Alternating between what he calls "telling the story of psychedelic research, past and present" and "travelogues", Pollan recounts his "trips" on various psychedelics. This time, though, I found the expository parts of the book more interesting than Pollan's account of his psychedelic experiences—even though his "trips" range from hunting for Psilocybe azurescens with Paul Stamets and then eating his find several months later, to holotropic breathing, to inhaling smoked toad venom (aka 5-MeO-DMT).

How to Change Your Mind tells a fascinating story about the current state of research into therapeutic applications for psychedelics. While Pollan recounts the stories of familiar, countercultural figures in the "science of psychedelics" such as Aldous Huxley and Timothy Leary, he introduces many less flashy but equally fascinating figures in the "second wave" of research, such as Bob Jesse, educated as a computer scientist/electrical engineer, who now works to move the use of psychedelics into American culture not only as a way to treat psychological distress but also to facilitate "the betterment of well people". Likewise, we learn of Al Hubbard, "the Johnny Appleseed of LSD" who introduced the practice of Shamanism to treat alcoholism in the 1950s—often relying on his own financial resources to provide the treatment. Pollan segues into the institutional difficulties that face this type of research by underscoring the differences between the individual, guided therapies that Hubbard and others employ, versus the control groups (including those given placebos) that characterize conventional pharmacological research. Similarly, he returns frequently to the importance of "set and setting" in the use of psychedelics, elements that inevitably introduce variables.

While an individual's state of mind and environment will affect the psychedelic experience he or she undergoes, Pollan insufficiently recognizes how these factors shape his own experiences. He brings fairly limited concerns to them—an interest in navigating his approaching old age and vague hopes of transcending the ego. He has access to an expense account, contacts, guides, and substances that most readers won't have. These



differences seemed less striking in his books about cooking and eating; moreover, these pursuits don't pose immediate legal issues. Even without these obstacles, if you had only his account to go on, you might not be especially interested in his "travelogue." Pollan experiments with a tiresome doggedness and measures his "results" against a checklist. After his experiment with "the toad", he scores 61 points on the Revised Mystical Experience Questionnaire, "one point over the threshold for a complete' mystical experience". No matter how much he talks about transcending the ego, he wants to measure up to the psychonauts who preceded him, even as he undermines the very notion of transcendence with this impulse.

Pollan addresses the diffic-ulties he found in writing about his experiences in a *New York Times* essay published on December 24, 2018. In "How Does a Writer Put a Drug Trip into Words," he claims that he found two models for this task: Aldous

### **NORTH AMERICAN COMPREHENSIVE CHECKLIST**

### by Andrew Miller

CHAMPAIGN, Ill. — Some fungi are smelly and coated in mucus. Others have gills that glow in the dark. Some are delicious; others, poisonous. Some spur euphoria when ingested. Some produce antibiotics.

All of these fungi—and hundreds of thousands, if not millions, more—occur in North America. Of those that are known to science, 44,488 appear in a new checklist of North American fungi, published this month in the journal *Mycologia*.



Coprinus micaceus grows on decaying wood. Photo by Daniel Raudabaugh

"This checklist provides the basis for understanding our national mycoflora, which is timely since there is renewed interest in cataloging all North American fungi," said <u>Illinois Natural History Survey</u> mycologist <u>Andrew Miller</u>, who led the effort to compile the data. "Hundreds of citizen scientists are interested in helping with this project."



The Rhodotus palmatus mushroom is sometimes called "rosy veincap" or "wrinkled peach." Photo by Daniel Raudabaugh



Illinois Natural History Survey mycologist Andrew Miller and his colleagues created the first comprehensive checklist of North American fungi. In his right hand, Miller holds the Western giant puffball (Calvatia booniana), and in the other hand, chicken of the woods (Laetiporus sulphureus). Photo by L. Brian Stauffer

By conservative estimates, scientists have so far documented less than one-third of all fungi thought to exist in North America, said Miller, who also is an affiliate of the department of plant biology at the University of Illinois at Urbana-Champaign, where the INHS is based. Collaborators on the checklist include Scott Bates, of Purdue University Northwest, and the Macrofungi and Microfungi Collections Consortia.



A black, slimy icing of spores on the cap of *Dictyophora duplicata* smells like rotting meat, attracting flies, which disperse the spores to new sites. Photo by Daniel Raudabaugh

While thousands of species of fungi were first identified and described from Europe, many North American fungi have evolved and diversified. Others are unique to the continent, Miller said.

### NORTH AMERICAN CATALOG, CONT.

cont. from p. 8
"Many fungi in North America have European names, and while they may be related to their European counterparts, they often are genetically distinct," Miller said. "About half of the 44,488 fungi in the new checklist are type specimens, which means they are valid North American taxa."

To compile the checklist, the team searched over 2.2 million records using the Mycology Collections Portal, which includes data from numerous universities, botanical gardens and other institutions.



Hericium is a genus of edible mushroom that grows on decaying wood. Photo by Colleen Lappe

About 20,000 of the fungi in the checklist are mushrooms; the rest are barely visible with the naked eve and are thus classified as "microfungi," Miller said. These include molds, mildews and rusts, along with species that break down organic matter in the soil.



The honey mushroom (Armillaria mellea) is a common root pathogen in North America. Photo by Daniel Raudabaugh

Some of the microfungi are pathogens, others are useful. Penicillium is best known for the production of penicillin. Microfungi also include yeasts that aid in breadmaking and alcohol production, along with those that contribute to infections like athlete's foot and yeast infections.

The macrofungi can range in size from the barely visible to the colossal, Miller said. "One of the largest living organisms on the planet is a honey mushroom, Armillaria solidipes," Miller said. "It lives in the Malheur National Forest in eastern Oregon, where it grows—mostly hidden—underground. It stretches 3.5 miles across, covers an area larger than 1,665 football fields and is believed to be more than 2,400 years old."

Another fungus, the giant puffball, Calvatia gigantea, may contain as many as 7 trillion spores, "If every spore actually germinated and grew into a puffball, the puffballs produced would weigh more than the Earth," commented Miller.

Fungi have co-evolved with plants for millions of years and were instrumental in helping plants transition from aquatic environments onto land, Miller said. They are essential to the cycle of life, breaking down organic matter and converting it back to its fundamental components.



Mushrooms of the genus Morchella, also known as morels, are delicious. Photo by Anna Weyers, USFWS

"Although an estimated 1.5-5.1 million species of fungi are believed to exist on Earth, only about 120,000 have been discovered and described," Miller said. "Obviously, we have a lot of work to do to fill in the gaps of our knowledge, but this checklist is a first step to getting our arms around North America's fungi."

The INHS is a division of the Prairie Research Institute at the U. of I. cont.on p. 10

#### 2019 PHOTO CONTEST RULES, CONT.

cont. from p. 6

#### Reproduction

Entry in the contest constitutes the consent of the photographer to allow NAMA to reproduce copies of each winning image (including Honorable Mention etc.) for circulation or use by NAMA Committees, among the membership, NAMA brochures, signs, advertising and affiliated societies. NAMA also reserves the right to post images of the winning images on the NAMA website and in *the Mycophile* and to be used by the marketing committee. All copyrights remain with the photographer.

#### Photo of You

If possible, please include a photo of yourself, so we can use it to introduce the photographers. This is not a requirement and the photo of yourself is not counted as an entry. It has also been requested that we start to collect data on where the mushroom photo was taken. We don't need GPS coordinates, but it would be helpful to have a city/county/park/state name—something basic to post on the site for future reference.

### BOOK REVIEW, CONT.

cont. from p. 7

Huxley's *The Doors of Perception* (1954) and the less well-known French writer Henri Michaux's *Miserable Miracle* (1991). Huxley, he argues, is too literary and polished to be authentic and Michaux's authenticity makes his account too incomprehensible. Pollan explains that he settled on an approach that speaks to the reader from the visionary perspective of the trip and. in a more pragmatic, pedagogical voice, reminds his audience that one of the features of psychedelia is the ineffable, the superseding of what language can express. He reminded many times.

I suspect the dullness of Pollan's trip stories springs from his by now well-worn non-fiction structure and his unimaginative sense of set and setting. While it's not surprising that most of the researchers (and literary models) that Pollan reports on are white men, in his sections about the psychedelic experience, surely he could have focused more on experiences of a more diversified group of experimenters in addition to, or instead of, himself. Similarly, Pollan makes no effort to grapple with the question of how his experiences can apply

to others. In contrast, in *Mycophilia* (2011), Eugenia Bone describes her experience with mushrooms more widely. Near the end of her first trip, she decides to take a bath and shares one revelation "with my lady readers of a certain age": "While in the bathtub, I stopped feeling guilty about growing older and regretful about losing my looks, and then I realized my body was a vessel, like a ship that was taking me through life, and it functions well, and that made it beautiful, and I felt grateful. It was a tremendous relief that I still feel today". She found the words to share this experience by transcending her ego, by recognizing that her "set and setting" can be connected to the concerns of many other people.

I don't regret reading *How to Change Your Mind*. It's especially interesting to encounter people connected to NAMA in these pages: Michael Beug, who spoke about his experiences with psilocybin mushrooms at the NAMA 2017 foray, and frequent speaker and supporter Paul Stamets. Most importantly, the book passes the test announced in its title by convincing me that psychedelics do teach us much about the topics listed in the subtitle, that they can help us in our existential struggles and amplify some life's joys.

### NORTH AMERICAN CATALOG, CONT. https://news.illinois.edu/view/6367/722471#image-4

cont. from p. 9

This project was made possible by the National Science Foundation's Advancing Digitization of Biological Collections program, which supports the Macrofungi Collections Consortium and the Microfungi Collections Consortium.

Editor's notes: To reach Andrew Miller, call 217-244-0439; email amiller @illinois.edu.

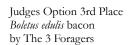
The paper "The protochecklist of North American nonlichenized fungi" is available <u>online</u> and from the U. of I. News Bureau.

# NAMA 2018 PHOTO CONTEST WINNERS – JUDGES OPTION by John Plischke



Judges Option 1st Place *Fistulina hepatica* sushi by the 3 Foragers

Judges Option 2nd Place Purple millipedes on mushroom by Daniel Winkler









Judges Option Honorable Mention Stereogram by Carmela Khourie

# NAMA 2018 PHOTO CONTEST WINNERS – LIMITED DOCUMENTARY by John Plischke



Limited Documentary 1st Place Laccaria bicolor by Richard Tehan



Limited Documentary 3rd Place Hygrocybe flavescens by Richard Tehan



Limited Documentary 2nd Place Pseudoomphalina angelesians by Richard Tehan



Limited Documentary Honorable Mention *Tricholoma magnivelare* by Richard Tehan

# NAMA 2018 PHOTO CONTEST WINNERS — LIMITED PICTORIAL by John Plischke



Limited Pictorial 1st Place Aureoboletus mirabilis by Richard Tehan



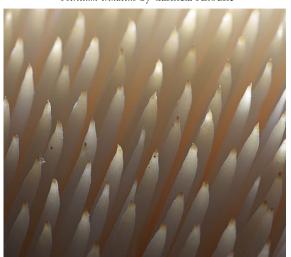
Limited Pictorial 3rd Place Mycena haematopus. Spinellus fusiger by Marjie Carr-Oxley



Limited Pictorial 2nd Place *Pluteus aurantiorugosus* by Marjie Carr-Oxley



Limited Pictorial Honorable Mention Hericium erinaceus by Carmela Khourie



Limited Pictorial Honorable Mention Asterophora lycoperdoides by Marjie Carr-Oxley



The Mycophile, January-February 2019

- 13 -

# NAMA 2018 PHOTO CONTEST WINNERS — OPEN DOCUMENTARY by John Plischke



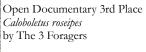
Open Documentary 1st Place Ascopolyporus philodendri by Daniel Winkler



Open Documentary 2nd Place Tricholomopsis sulfureoides by Drew Henderson



Open Documentary Honorable Mention





The Mycophile, January-February 2019



- 14 -

# NAMA 2018 PHOTO CONTEST WINNERS — OPEN PICTORIAL by John Plischke



Open Pictorial 1st Place Marasmius tageticolor gills by Daniel Winkler



Open Pictorial 3rd Place Lycoperdon perlatum by The 3 Foragers

Open Pictorial Honorable Mention Pseudohydnum gelatinosum by Daniel Winkler



Open Pictorial 2nd Place Mycena chlorophos by Daniel Winkler





Open Pictorial Honorable Mention Rhodotus palmatus by Mark Bower



The Mycophile, January-February 2019

#### North American Mycological Association

Barbara Ching 2019 Ashmore Drive Ames, IA 50014-7208

Change Service Requested

## THE COPHILE

### **Mushroom of the Issue**



Leratiomyces ceres



Leratiomyces ceres or the "Red Spy" is a beautiful and widespread member of the Strophariaceae. Thought to originate in Australia, it has been introduced around the world. In America this species often appears in wood chip beds. It has spread extensively on the west coast, but can also be found in eastern NA and south into Mexico. Its moist, brilliantly red or orange cap can show whitish veil remnants. Its white stipe stains orange, and its white gills soon turn purple-brown with spore drop; pluck one and you will see copious, coarse white mycelia, weaving through the wood chips. With its eye-catching coloration, the "Red Spy" sometimes serves to direct your eye to a highly coveted but quite drab companion mushroom: Psilocybes! Here in the San Francisco Bay Area, both Psilocybe cyanescens and P. allenii are often found in conjunction with Leratiomyces ceres.

by Debbie Viess