

Spore Print

The Newsletter of the Connecticut Valley Mycological Society
Affiliate of the North American Mycological Association
Member Northeastern Mycological Federation

Founder: Ed Bosman
President: Bill Bynum

Vice President: Bill Yule

Treasurer: Terri Hungerford

Secretary: Ellen Bulger

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Membership: Dues per calendar year are \$15 individual; \$20 family (two or more persons at one address and requiring only one copy of club mailings). Lifetime memberships are \$200 individual and \$250 family. Make checks payable to CVMS and send to: CVMS/Karen Monger, 32A Perkins Ave., Norwich, CT 06360. CVMS members may also pay NAMA yearly membership dues by attaching a separate check for \$24 (electronic) \$30 (hard copy) payable to NAMA.

The Spore Print newsletter is published quarterly in early Winter, Spring, Summer, and Fall. It is distributed to all members of the club in good standing, and on an exchange basis to the newsletter editors of other mushroom clubs. Submissions to this newsletter can be sent to the editor. If you would like to get your copy online, send your email address to: dinahwells@hotmail.com (put "Spore Print" in subject line or your email will be deleted).

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We welcome your submissions

The Spore Print "staff" would love to have your input! Photos, poems, articles, recipes or anything of interest to the members. The next deadline for submissions is April 1. Send a link to an interesting article or an email to: dinahwells@hotmail.com.

COMING EVENTS

March 23, Sunday: March Mushroom Madness at Sessions Woods in Burlington Members and guests \$5 per person, (talk is free to public) No Raffle (door prize drawing only provided by club) Tentative schedule: 8:15 setup
9:00 Coffee, etc.

10:30 Public program with presentation by Gary Lincoff

11:45 Business meeting and election of officers

12:20 Potluck lunch: Please remember to label dishes with all ingredients used and your name. Bring plates and utensils and wait until all dishes are set out and "bell" is rung to start. See guidelines for potluck in the foray schedule/handbook

1:15 Door prize drawing

1:30 Clean-up

COMA MUSHROOM UNIVERSITY 2014 – Ascomycetes!

When: Six Saturdays: 3/8, 3/15, 3/22, 4/5, 4/12, and 4/26 from

10:00 am - 1:30 pm at Muscoot Farm, Rte 100, Katonah, NY

Join this popular COMA program taught by world renowned mycologist, [Gary Lincoff](#). The focus is ascomycetes - an

enormous taxa which includes morels, saddles, cups, cordyceps, and many other non-gilled, non-pored mushrooms. Cost: \$115

and you must be a COMA member. Potluck breakfast and lunch!

Info: <http://comafungi.org/special-events/mushroom-u/>

Dues are due!

Send dues ONLY to the Membership Secretary, Karen Monger at 32A Perkins Ave., Norwich, CT 06360 (If you send dues to someone other than Karen, your checks will not be processed as rapidly.) If you are a snail mail recipient of the newsletter and you have a **colored mailing label** on this newsletter, you owe the club dues if you want to renew. In order to receive the next newsletter and the foray schedule for 2014 you must be paid up! Email recipients will receive an alert with the digital version of the newsletter.

Slate of CVMS Officers for 2014

The following nominees will be voted on at March Mushroom Madness:

- Bill Bynum.....President
- Bill Yule.....Vice President
- Terri Hungerford.....Treasurer
- Karen Monger.....Membership Secretary
- Ellen Bulger.....Secretary

President's Message

"The slows of winter". Bill Yule recently introduced this phrase to sum up many a mycophile's funk during the long time waiting. When winter was approaching, happy mycophiles believed the shorter days and longer nights would give time to study those mushroom guides and the many great websites to be more ready than ever next spring. We might have planned to get out for walks in the woods, knowing that even in the cold we could be sure to find many fungi visibly at work. But for many (maybe most) of us, best intentions fade and distractions take over. We start getting rusty and will have to work to get up to speed when the new mushroom season finally cranks up.

Shopping for holiday groceries on the first day of winter, I saw an intriguing offering. Wrapped in cellophane and tied with a flashy silver bow was a substantial "mushroom log". It weighed about 4 pounds and the label promised a bounty of shiitake mushrooms for 10 days to have right on your holiday table. Looking through the cellophane, the "log" actually looked like compressed sawdust but it did have some promising fruiting buds. I did not buy one, but I did enjoy this pseudo-foray moment.

For just picking up and reading in mid-winter (or anytime), a favorite guide is David Arora's *Mushrooms Demystified*. His conversational narrative and occasional joke is engaging. You can start at the beginning or just open up to a particular family or genus. Arora even includes a Latin & Greek dictionary that can help you find meaning in a scientific name. For example *cortin* = curtain and *arius* = with or pertaining to. Thus the genus *Cortinarius* translates to "with a curtain".

Another effective way to speed up the winter slows is think events coming in 2014. Consider these:

- The 2014 NEMF Samuel Ristich Foray: the 38th Annual Foray of the Northeast Mycological Federation at Bowdoin College in Brunswick, Maine, August 7-10, 2014
- COMA's 2014 Clark Rogerson foray is at a new location: Berkshire Hills Emmanuel Camp in Copake, New York September 4-7, 2014
- Eagle Hill near Steuben Maine is a wonderful place to go for a week of nature study. Programs include:
 - Crustose Lichens of the Acadian Forest- Jun 29 - Jul 5 Stephen Clayden and Steven Selva
 - Mushroom Identification for New Mycophiles: Foraging for Edible and Medicinal Mushrooms- Jul 27 - Aug 2. Greg A. Marley and Michaeline Mulvey
 - Amanitaceae Taxonomy: Fundamentals and Microscopy to Barcodes- Aug 24 - 30. Rod Tulloss, Cristina Rodriguez Caycedo
 - Boletes, Lactarius, and other Fungi of New England- Sep 8 - 14. Alan E. Bessette and Arleen R. Bessette

Find details at <http://www.eaglehill.us/programs/nhs/nhs-calendar.shtml>

Of course, a sure tonic for the winter slows is the CVMS March Mushroom Madness meeting. This year it will be on March 23 at Sessions Woods in Burlington. Our speaker is Gary Lincoff, famed author of *The Audubon Field Guide to Mushrooms*. Gary is a most entertaining and knowledgeable mycologist. So come to March Mushroom Madness and start shaking off your winter rust. See details in this Spore Print, page 1.

Bill Bynum, CVMS President

CVMS Lending Library....an overlooked resource!

CVMS Vice President Bill Yule manages a lending library with over 30 titles in it. The titles can be seen at the CVMS Yahoo group page in the "files" section under "CVMS lending library" and in the foray book. Or you can contact Bill for details at boletebill@yahoo.com. There are many field guides, books on cultivation, cookbooks, textbooks, as well as magazines and videotapes. Bill writes, "For ALL Library loans call, write or email me a week before you want the material so I can bring it to a weekly foray or meeting. Loan time is limited to one month during the regular season although longer loans will be accommodated during the off-season or for special circumstances. To borrow during the off-season please call me so we can make special arrangements to get the materials to you. Borrowers should be willing to leave a phone number and an address so I can keep track of material. Thanks to all."

Review: NEMF Foray – August 2013, Rimouski, QC
Submitted by Joe Lenoce

The Northeast Foray in Rimouski, Quebec was an experience not to be easily forgotten. Of course, any trip I take to Canada is usually memorable. It was a long drive – 13 hours from Coventry. I went up through Maine and witnessed beautiful views of Mt. Katahdin, potato fields in bloom, and many other sights. My plans included an overnight stay in Van Buren, Maine. I could see the Canadian border from my motel. It was just my bad luck that the only bar in town was closed on Tuesdays – the day I arrived.



The next morning I crossed the border at St. Leonard, New Brunswick and made my way through beautiful countryside. Once in Quebec province, I traveled parallel to the St. Lawrence River/Seaway. Along the way there was much farmland and views of the river with hills in the background. I saw huge fields of rapeseed, or canola in bloom with stunning bright yellow flowers. There were also fields of grain, probably oats, and also vast areas with wild flowers such as the purple fireweed.

As I arrived at the UQAR campus in Rimouski, I realized my limited French was now going to be put to the test. Although I really never had problems communicating with anyone, it was a challenge to speak to French speaking people that had limited English skills. Luckily, there were usually enough bilingual people around that could interpret when necessary. The campus was quite comfortable, with the cafeteria, auditorium, exhibition room and workshop and conference rooms all in the same premises. It was difficult to choose which lectures, workshops or forays to attend, but it was structured so that some of the workshops were repeated during the weekend to give others a chance to attend. The first lecture I attended was a Myxomycetes workshop given by Marianne Meyer and Mireille Lenne, from France and Belgium respectively.



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Marianne has published a wonderful reference guide - *Les Myxomycètes* that I just had to have. It has two volumes – one of which is full of keys, both in French and English. The second volume is just photographs, mostly taken by Marianne. We were asked to identify five slime molds using microscopes and reference material. Although most of the workshop was in French, I had no problem understanding things. (*see next page*)

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The next day, I went on a marine algae walk at Pointe-à-Pouliot Park given by Stéphane Maddix Albert. He gathers seaweed and algae in the Gaspé Peninsula, where he has started a business selling wild algae to the food market. He brought us to the river at low tide to observe the sea vegetables. We saw (and tasted) several types of seaweed, as well as Sea Rocket (similar to arugula) and Sea Spinach growing as bushes on the shore. Although this was really not fungi related, it would have been a mistake to pass up the opportunity to see this natural habitat up close where the river meets the sea.



On another foray at the Point-à-Santerre peninsula, there were lookouts to the St. Lawrence as well, with trails through mixed conifer woods, with spruce, fir, birch, some cedar and maple. The aroma of fir was strong enough to make one think of Christmas!



On my way out of the woods, I discovered a bush that had a fungus growing on it. I identified it as *Gymnosporangium clavipes* growing on a hawthorn bush. Back at campus, the people recording the species were very excited, since this fungus was new to their list. In the evenings, we were entertained and informed by speakers such as Gary Lincoff, Luc Sirois, Peter Neumann, and others, followed by social events.

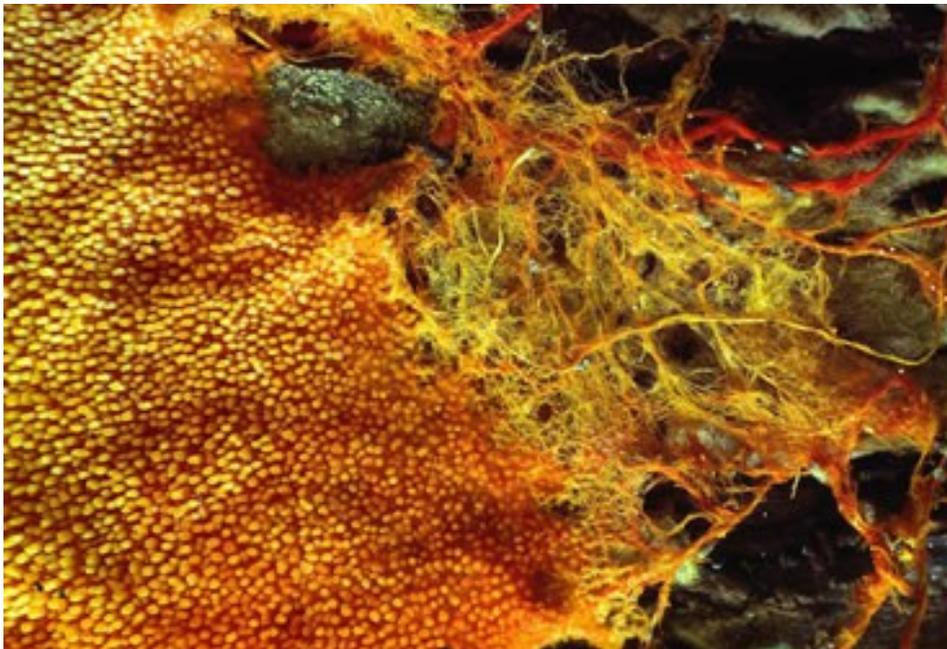
On my drive home while taking in the beautiful Canadian countryside, I couldn't help thinking how nice it would be to be able to relive the events of the past several days. These NEMF events provide a forum where both amateur and professional mycologists can share their experiences and knowledge in a casual environment, and there is always something for everyone.

Some Favorite Finds of 2013
by Terry Stoleson

You'll see interesting fungi at every foray! ... if you look closely at all that's brought to the collection tables, that is. Even when there's little other than familiar species, the latter sometimes turn out to be bigger or more beautiful than we've ever seen them. Or they might be oddly formed, or a small mushroom may be growing physically attached to a bigger one's cap in an odd way. But what appeals most to the detective in me, is seeing and solving the identity of those which I think are new or rare on our CVMS 'life' list.

After first discovering this striking species when foraging at Southford Falls last year, I was tickled to find it again this past July in Meshomasic SF. In June 2012, looking for anything fungal, I turned over the umpteenth decaying log and was amazed to find a resupinate [*lying flat on substrate; without a stalk or well-defined cap*] (*Arora*) fungus with bright orange-yellow teeth covering a large area on the wood's undersurface. It had yellow fibers on the margin of the patch but faded to white at its very edges. Back at the collection tables, Walt called it "spectacular", but none of us could recall ever seeing it before. At home, later that day, I was very happy to find it in Gary Lincoff's Audubon Field Guide where it had the common name of "Spreading Yellow Tooth", aka *Phanerochaete chrysorhiza*. (photo by Dianna Smith reprinted with permission) Well, when I found it this year, I knew instantly what it was. I didn't remember its name, but I did remember exactly where to find

that information. Since then, I've been turning over logs and branches much more because they frequently reveal beautiful and unusual species that love dark moist habitats.



In September, while exploring some of the Great Mountain Forest in northwestern CT with Connie and Ellen B., I collected some vinaceous-gray mushrooms growing under Japanese fir. With their close decurrent gills, they looked like they probably belonged in the genus *Clitocybe*, but what was so unusual about these was their bright pink spores. *Clitocybes* generally have white, cream, light yellow or light pink

spores. The key in *Arora's Mushrooms Demystified* solved that puzzle for me. It turned out to be *Clitocybe martiorum*. I hadn't recognized it but there was something familiar about those specimens. I then remembered that we had first collected this same species twice in October 2011.

From the same forest, I also collected what looked like an *Inocybe*, but with a 3-inch wide cap. That's much larger than any of the genus I'd ever seen in our state. Members of this one are quite difficult to identify to species without a microscope because they're mostly small, brown-spored, medium-brown mushrooms. They frequently have a fibrous or scaly umbonate cap, the reason they're commonly called Fiber Heads. After considerable time spent researching, and with the help of the key in the *Bessettes and Fischer's Mushrooms of Northeastern North America*, I concluded that my find was *I. rimosa*, aka *I. fastigiata*. All characteristics and the photo were a match.

The same book allowed me to identify another smaller *Inocybe* with distinguishing characteristics found by a member at one of our forays. It looked similar but with a very dark brown umbo and fibers over the cap and a god-awful smell. I decided that it had to be *I. fuscodisca*, the Black Nipple Fiber Head which, the book states, smells 'spermatic'? (see **Note at bottom of article next page*)

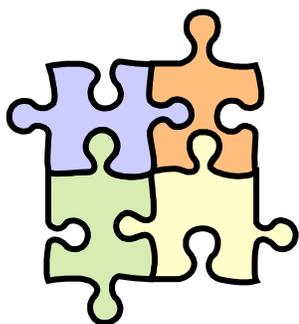
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For the display tables at the Hurd SP Tailgate foray, a new member brought us several white mushrooms with 2 to 3-inch wide caps which puzzled those of us who were identifying. The fungi had been found growing on dead wood, smelled somewhat like Oysters, but were much smaller with crowded gills and an off-center stem. They were mature specimens with white gills indicating that the spores were white. Once home, the hunt for an identification finally had me checking Arora's key to *Pleurotus*, looking for any species which wasn't familiar to me. There, I found *Pleurotus lignatilis*, aka *Clitocybe lignatilis* which fit our mystery mushrooms to a 'T'. On the internet, I found that it's currently named *Ossicaulis lignatilis*. (Oh! those darned taxonomists!) In Roger Phillips' *Mushrooms and other Fungi Of Great Britain & Europe*, the author states "Habitat on dead deciduous wood, especially inside the hollow trunks of beech and elm."

And so, the serious mushroomer needs to explore cracks and hollows in stumps, overturn downed branches and even take apart rotten wood to make new discoveries. Ask CVMS's Cordyceps queen Emily, who has already figured that out. It's also obvious that one needs more than one book to help chase down a fungus' identity. We do hope that Santa brought you some.

*Note: If, like me, you've long been confused by the descriptions of odors in field guides, you'll love what Mushroom Expert Michael Kuo writes on his website page for *Inocybe rimosa*. Do scroll down to below the description to read this bit titled 'Hey, That Mushroom Smells Like . . .'
http://www.mushroomexpert.com/inocybe_rimosa.html



Bits & Pieces



Professors, former student discover three new species of edible mushrooms (reprinted with permission from the newsletter of the University of Wisconsin at La Crosse)

Mushroom connoisseurs' mouths should be watering. A UW-La Crosse biology professor and his former student have discovered three new species of edible mushrooms in Hixon Forest in La Crosse. Matthew Foltz, *right*, a 2011 graduate of UW-L's Biology Graduate School Program, with Tom Volk and Assistant Biology Professor Kathryn Perez, co-authored a paper documenting the discovery. "A lot of people have been searching the tropical rainforest for new species. While there are a lot of new species there, a lot of new species are here too," says Biology Professor Tom Volk.

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The news was published in the March-April 2013 edition of *Mycologia*, one of the top mycology journals in America. The article describes the three new species of mushrooms previously all masquerading under the blanket classification of Chanterelle or *Cantharellus cibarius*. All three are large, orange-yellow edible mushrooms, which grow in association with hardwood trees, particularly oaks.

“I never thought going into this program I would walk away with three new species attached to my name,” admits Foltz, who took his first mycology class from Volk in 2008. “To come this far in that amount of time, I feel like I had a great opportunity. I thank Tom for that opportunity.” Volk says the discovery of a new species within a class of mushrooms folks have foraged for years is symbolic of the little work that has been done in North America to distinguish mushroom species. *Cantharellus phasmatis* (*top two photos at left*) (*phasmatis* means ghostly) is named for its ghostly white-colored stem. “If new discoveries are being made with these large, conspicuous, edible mushrooms — you can only imagine what is happening with the more obscure species,” explains Volk. “To have these three new species growing within such a small area is pretty remarkable.”

Scientists are uncovering new species of plants and animals at higher rates across North America as methods to extract and sequence DNA have gotten significantly faster and less expensive in the last 20 years, says Perez. Other examples of mushroom species recently differentiated from a parent grouping include honey mushrooms, split into nine species in North America; chicken of the woods or sulfur shelf, five species; and morels, 19 species.

Cantharellus flavus, (*bottom three photos at left*) is named for its overall yellow color (*flavus* means yellow). Volk says this is a sign that many more mushroom discoveries are yet to be made. About 75,000 species of fungi have been described, and experts estimate nearly 1.5 million exist. Volk and Foltz found the three species within 20 meters of one another in Hixon Forest in La Crosse.

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They first noticed striking physical differences among the chanterelles — primarily in coloring.

Foltz continued to research these apparent differences as his graduate thesis project at UW-L. With help from Perez, Foltz extracted regions of DNA from the mushroom and compared it to closely related chanterelle

mushrooms to compare similarities and differences at the molecular level. “I was training Matt in techniques I use every day in my own work identifying different species of snails,” explains Perez. “I think it is really cool that we’ve found new species in our own backyard where people walk every day.”



Cantharellus spectaculus, (three photos at left), (spectaculus means spectacular) is simply spectacular because the contrast of its orange and salmon/purple coloring. The DNA sequencing and analysis gave the researchers the confidence to split the color variants into different species, Volk explained. Volk and Foltz named the new species based on their appearance. *Cantharellus phasmatis* (phasmatis means ghostly) is named for its ghostly white colored stem. *Cantharellus flavus* (flavus means yellow) is named for its overall yellow color. *Cantharellus spectaculus* (spectaculus means spectacular) is simply spectacular because the contrast of its orange and salmon/purple coloring,” says Volk.

Documenting the new species, their locations, and physical differences including taste, will be of interest to the culinary industry, says Volk. It also has benefits for the scientific community because documenting biodiversity is a critical part of ecology and the long-term sustainability of a species. Like any good study, it also generates more questions such as where else in North America or the world these species will be identified, notes Volk. This study was an offshoot of another study that collected and documented mushrooms and other fungi from Hixon Forest, where more than 450 species have been documented so far.



Cantharellus phasmatis and *Cantharellus flavus* are documented so far throughout the Midwest and into the northeastern United States. *Cantharellus spectaculus* has only been identified in La Crosse thus far. The three species appear primarily in July and August in Wisconsin. Volk has discovered two other species of mushroom, *Armillaria nabsnona* or honey mushroom No. 9 and one of the morel species, *Morchella importuna*. He has renamed many others.

Left: Biology Professor Tom Volk teaches a mycology class in Hixon Forest.

Mycophagy

Shiitake Tea and Ginger Tea *from Ellen Bulger*

This is not so much a recipe as a suggestion that you go out and get yourself an ice cube tray, one of those silicone jobs that makes only six cubes, but BIG cubes. Even if you have a freezer with an ice maker, a big cube tray comes in handy.

I find that beverages, in the winter, are something of a challenge. I love coffee, good coffee, and I drink it black. But I have no business drinking anywhere the amount of coffee that hydration dictates. In the summer, I am happy enough with water as I have access to a good well. But in the cold weather I want heat.

Aside from the occasional cup of lapsang souchong to cure those unfathomable creosote cravings, I'm not a big tea drinker. And I don't like herbal teas. I wish I did, but they either taste of leaf litter and floor sweepings or of bulk potpourri from the dollar store. My mother is constantly bringing home boxes of herbal tea, lured by the charming graphics and the promises of delicious ingredients. She brews the first cup with great anticipation, forces herself to drink the second out of either determination or guilt, and never finishes the third cup. She could build a fortress from all the boxes of stale herbal tea in the pantry.

The manufacturers know their products are wanting in the flavor arena, so they promise all manner of miracle cures, not only for ills of the body, but also for ills of the mind and spirit. Drink this and, the packaging copy seems to imply, you will find serenity or enlightenment itself. The efficaciousness of these remedies doubtless hinges on a willingness to believe. Me? I wouldn't even clap my hands to revive Tinkerbell. If you want me to drink tea, it had better taste good.

I do like beverages made from fresh shiitake or ginger but you could have soup for all the the effort their preparation requires. No Martha Stewart moi, I'm looking for a delicious and practical beverage. So I make fresh tea in batches and freeze servings in big half-cup cubes. Then it is easy enough to pull one out of the freezer and throw it in a mug, which I top off with water and heat for two minutes in the microwave. And thus I am both content and hydrated...

Shiitake tea: when I'm using the caps in cooking, I save the stems in a bag in the freezer. When I have a about four big handfuls, I throw those in a sauce pan with a couple of quarts of water, a slice of ginger, a clove of garlic and a couple of pinches of salt. This I simmer for about twenty minutes, then strain, cool and freeze.

Ginger tea takes a bit more work than the mushroom tea, but it is my favorite. I buy a couple of big hands of ginger root at the market, bring them home, peel them, cut them into matchsticks and put this into two quarts of water. I simmer it all on a very low heat for about twenty minutes before removing the solids. Then I'll stir in about a half cup of honey. I just like a hint of sweetness with the burn. Sometimes I throw in a little dried powdered red pepper and, once it is cool, a bit of lemon juice. Cool. Freeze in big cubes. I don't know that it cures anything, but it sure makes me feel good to drink it.



DIY project for macrophotography



Bill Yule brought our attention to this cool way to use your smartphone as a macroscopic camera. From the website Instructables.com comes instructions to assemble this gadget out of inexpensive parts devised by a user named Yoshinok. At the link, there is a parts list and instructional video. Yoshinok writes, "This instructable will show you how to build a stand for about \$10 that will transform your smartphone into a powerful digital microscope....this setup also produces stunning macro photography." To increase magnification, you can add inexpensive acrylic magnifying lenses to the setup. For the info: www.instructables.com/file/FY4TBHSHMMFBB4V



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