

# SPORE PRINT

The Alberta Mycological Society Newsletter







The 2014 Great Alberta Foray was another major success.

This year we explored the Nordegg area in the east slope of the Rockies. A transition zone between montane and boreal habitats, Nordegg offers fungi from both western and eastern North America. (In the world of mushrooms, eastern North America means east of the Rockies.) This area has a diversity of habitats and moisture profiles which make it perfect to launch a large-scale weekend foray.

For many, the adventure began by using Google maps to get to the foray venue. Google maps prompted you to drive up a deserted (except for a few other hapless foray participants) gravel road behind the town of Nordegg.

However, the map frustration was worth the trouble. Nestled near a lake, the Goldeye Centre was gorgeous: rustic cabins, great food (really), and a friendly staff. The weather even cooperated: The following weekend saw a major dump of snow in parts of Alberta's foothills.

While Alberta Mycological Society's yearly forays are based on fun and fellowship in the outdoors, the forays have a serious purpose: The forays have surveyed fungal biodiversity all over Alberta. In other years, this fungal biodiversity study has taken place at Hinton, Kananaskis, Grouard, Tsuu T'ina First Nations Reserve, Lac La Biche, Foothills Model Forest, and the Castle Mountain area of southern Alberta. In 2012, the Society provided

(Continued on page 3)



# President's Message

### Rosemarie O'Bertos

Well, you have done it again! Put another notch on your mushroom knife, knowing you experienced another action- packed season with your mushroom buddies. We had many exciting forays, our summer solstice celebration was a lot of fun, the Devonian Gardens Expo was well attended and the Great Alberta Foray was very educational. 2014 was a great success!

I savoured every chance I got to get outside this year, and I learned so much. It was really exciting to actually have picked enough morels this year to be able to preserve some. I didn't have access to a dehydrator, so I had to use my oven (which is digital) to dry my first batch of morels. It wouldn't let me set the oven temperature low enough, so I kind of "cooked" the mushrooms before they actually dried. They were so small, black and unrecognizable. I was devastated as I examined the little black deformities I created. You know what? They still taste great!

We are currently on the lookout for people who will offer to lead forays. I had been asked to lead a foray of 30 home schooled children along with some of their parents in the fall. It was difficult for me because I didn't feel qualified enough, but I was assured that they just wanted to have someone to take them out who was enthusiastic and passionate about mushrooms. We had so much fun and "I" really learned a lot. I found that by passing on any knowledge that I did have, I actually learned more. Imagine, by doing just that! They asked me to do it again next year...and I am actually looking forward to it!

I did some research on volunteering. Here is what I found (MovingWorlds.org): While there are many factors that lead to happiness, research proves that volunteering definitely makes people happier (and even healthier). Research shows that volunteering will help you live longer, and that should be cause enough to make you happy. Here are 3 leading theories as to why:

- Giving time makes you feel like you have more time; 1.
- 2. Volunteering creates social bonds which make you feel loved;
- 3. Volunteering extends empathy, and empathy leads to life satisfaction.

So the way I see it is this...come out to the AGM in February and volunteer in ways that you enjoy! It will make you feel that you have more time, you will be less stressed, you will be happier, you will be healthier, you will live longer, you will feel loved, you will make new friends and together we can bring about fundamental social change!

Hey, maybe together we can even change the world! Looking forward to seeing you at the AGM. Your happy, healthy friend and AMS President,

#### Rose O'Bertos

### 2014 Executive **Alberta Mycological Society**

President:

Rose O'Bertos

Vice President:

Richard Watts

Secretary:

Liz Watts

Treasurer:

John Holmes

Membership:

Fran Sandul

**Foray Coordinator:** 

John Samoil

**Volunteer Coordinator:** 

Vacant

**Past President:** 

Martin Osis

Directors-at-Large:

Bill Richards

Melanie Fioser

John Samoil

Robert Simpson

Ryan Armishaw

Kenzie Volkov

Barb Shworak

Michael Marchen

Regional Reps:

Peace River - Ken Dies

Calgary - Russ Green / Barb Shworak

Drayton Valley-Rose Letourneau

#### **Email Contact**

contactus@wildmushrooms.ws Submit an article to Newsletter Editor Paul Sinclair at Newslettersubmission

**MAILING ADDRESS:** 

@wildmushrooms.ws

Alberta Mycological Society P.O. Box 1921, Standard Life Bldg. 10405 Jasper Avenue

Edmonton, AB T5J 3S2

www.wildmushrooms.ws



Fall 2014 No. 4 www.wildmushrooms.ws

# **Great Alberta Foray 2014**

**Paul Sinclair** 

(Continued from page 1)

scientific support for an inventory of fungi in Elk Island National Park in cooperation with Parks Canada.

We made another major contribution to the **Alberta Fungal Database** project. Each year we collect, identify, and photograph mushrooms the mushrooms we find on forays, enter our specimens into our database of Alberta fungi, and finally take DNA samples of mushrooms which have not been sampled before.

Some of this year's interesting finds were *Leptonia* decolorans, a delicate indigo mushroom, *Leccinum* fibrolosum, another *Leccinum* with a deep-red cap, and *Panaeolus acidis*, a small, delicate mushroom growing on moose poo!

See you all at Grande Prairie in 2015.



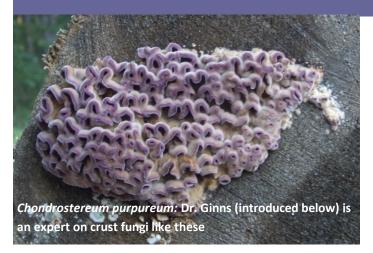
#### This Year's Experts

- **Dr. Jim Ginns**, former Curator of the Mycological Herbarium in Ottawa. Jim is known as one of the world's leading polypore experts.
- Larry Evans, of "Know your Mushrooms", the cult mushroom movie. Larry has been teaching mycology to amateurs for many years. He has been leading mycological tours of South America for years and has been a featured participant of the Telluride Mushroom Festival in Colorado for over a decade. He is from Montana.
- **Nathan Wilson**, computer scientist, avid field mycologist, and creator of Mushroom Observer. Nathan is Director of the Center for Library and Informatics at the Marine Biological Laboratory (MBL) and Director of the Biodiversity Informatics Component of the Encyclopedia of Life (EOL).



# The National Mycological Herbarium

**Paul Sinclair** 



If you google "National Mycological Herbarium Canada" you do not get a lot of hits. If you google DAOM ("Department of Agriculture, Ottawa, Mycology") you might do a bit better because that is what the scientists call our herbarium. But the muted web presence of our amazing mycological research institute is still odd when you consider the amount of important data about fungi housed in our herbarium and the persisting lack of knowledge about what mushrooms grow where in North America.

The DAOM is part of a larger plant, fungal and insect collection kept by Agriculture and Agri-Food Canada. The collection goes back a long way, and it started with bugs. In 1883 James Fletcher became and honorary entomologist in Canada's Department of Agriculture, eventually becoming Dominion Entomologist until 1897. After Fletcher donated his personal collection of insects and plants to the government in 1886, the government expanded the collection to include fungi, and the institute inherited various fungi collections along the way. The DAOM even houses the collection of John Dearness, renowned Canadian mycologist and plant pathologist active in the 1950s.

The fungal herbarium is a temperature–controlled room. If you know what button to push on the compacting shelves, you can find any one of 350,000 dried specimens which can range from a spot of rust on a leaf to some shrivelled agaric found in the Alberta foothills. The herbarium also contains 4000 types. Types are selected by

mycologists as an example of a particular species because international convention requires that a new name for a species is backed up by a type specimen in a recognized collection.

The herbarium may be more important to you than you think. Most of the members of the Alberta Mycological Society have used Helene M. E. Schalkwijk-Barendsen's *Mushrooms of Western Canada* (which was also published as *Mushrooms of Northwest North America.*) Many have been thrilled to identify Canadian mushrooms in the book not commonly found in other popular guides.

When Leni got interested in mushrooms around 1968, she realized she was finding mushrooms that she could not find names for. So in 1973 she wrote to mycologist David W. Malloch at the herbarium, and began sending specimens to the scientists working there such as Scott Redhead and former herbarium curator Jim Ginns. Many of the mushrooms featured in the guide were identified through the generous efforts of the resident mycologists. You can find Dr. Ginns' reflections on Leni's contribution to mycology here.

The moral of the story? Send an MP to Ottawa who supports basic science like the stuff that goes on at the DAOM. Who knows, it could benefit you and me.



# **Telluride Mushroom Festival 2014**

**Robert Rogers** 



The beautiful town of Telluride, Colorado hosted the 34th annual Mushroom Festival this past August.

The town is at 8000 feet and the giant King Boletes are found at elevations up to 10,000 feet amongst hundred foot aspen poplar. As usual, the festival featured incredible food, turkeytail/reishi and chaga brews, lectures, numerous forays and, of course, an amazing parade through downtown.

Rebecca Fyffe orchestrated a fabulous line-up of speakers: Dr. John Holliday gave a fascinating talk on cordyceps. Tradd Cotter did several hands-on demonstrations of growing mushrooms from various substrates. His new book, Organic Mushroom Cultivation and Mycoremediation, was the hit of this year's festival, and it is a great addition to this interesting field.

Maggie Klinedinst, senior research program supervisor, at John Hopkins reported on the latest studies with psilocin for various conditions of anxiety, depression, PTSD, addictions and such.

Lawrence Millman was in fine form and gave a great presentation on ethnomycology, and was part of a panel with yours truly, John Holliday, Paul Kroeger and Daniel Winkler on the subject. Alissa Allen presented a fungal dye workshop.

Langdon Cook made a wonderful presentation based on his book The Mushroom Hunters. Taylor Lockwood presented the premiere of his new film that included bioluminescent mushrooms of the Amazon. Other speakers were Alan Rockefeller, Gary Lincoff, Eric Cerecedes, Larry Evans, Noah

Siegel, Christian Schwarz, Jordan Weiss, Peter McCoy and others from Radical Mycology tour. I gave a talk on the Twenty Myths of Medicinal Mushrooms, which will be written up for a future issue of Fungi magazine. **Next year's dates are August 13-16, 2015!!** 



Robert Dale Rogers is author of The Fungal Pharmacy: A Complete Guide to Medicinal Mushrooms and Lichens of North America. He is past Vice President of the Alberta Mycological Society and is on the editorial board of The International Journal of Medicinal Mushrooms. You can contact him at scents@telusplanet.net.

Fall 2014 No. 4 www.wildmushrooms.ws

# Mycoparasitism of the Shaggy Mane

Ken Dies, Peace Foray Coordinator



The genus Psathyrella contains over 400 species but only one is parasitic to other mushrooms. This rare mushroom, Psathyrella epimyces, is found primarily in the northern parts of Europe and North America where it makes use of Coprinus comatus as a host. Unlike most other mycoparasites commonly seen in Alberta such as Hypomyces luteovirens, which forms a powdery like covering over their host, P. epimyces produces a fruiting body complete with cap, gills and stalk. It starts by invading a fledgling Coprinus comatus turning it into a large coiled, tubular brown mass from which the fruiting bodies of P. epymyces arise. This psathyrella is characterized by its dingy white cap with veil remnants and close narrow off-white attached gills, which turn blackish brown with age. It produces black spores. Although the actual fruiting body has no distinct odor, the large

parasitic mass which once was C. comatus smells like rotting meat when cut. Photo below shows a longitudinal view of this cut mass with a fruiting body of P. epymyces, showing dark brown gills.



# Sicamous Fungi Festival 2013

**Denise O'Reilly** 



In September of 2013, my husband Jeff, my 19-year-old daughter Yara and I headed down to Sicamous for the annual Fungi Festival (September 20-22, 2013).

The interior of BC boasts some of the best mushroom hunting for the Pine Mushroom (*Tricholoma magnivelare*), the Lobster mushroom (commonly
parasitizing unpalatable Lactarius and Russula spp.
into *Hypomyces lactifluorum*), the White Chantarelle (*Cantharellus cibarius*) and even the wonderful Gypsy (*Rozites caperata*). These gourmet
delights can be found throughout the BC interior,
in the Kootenays, the Okanagan Valley, the Salmon Arm Area and extensively on the Coast from
early September until into October, depending on
the year. Sicamous was a good place to be.

We arrived on a Friday with the activities already in full swing. Live entertainment, food, as well as themed talks overflowed during the festival.

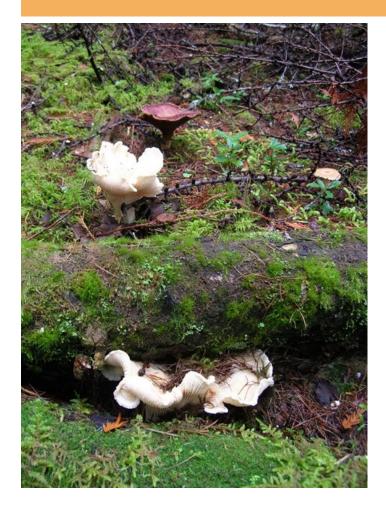


This event is hosted by long-time Sicamous residents Ellen and Peter of Narrows Village and staff, as well as mycologists Paul Kroeger, Dan Winkler and friends. Attendants can partake in short guided mushroom walks within the town limits, or full day excursions up into the mountainous areas of the surrounding hills. Seasoned veterans and keen mycologists readily share knowledge about the finds, specimens' taxonomy and where to find the fungi in question. Locations are strictly guarded until the last minute which prevents over-picking. Not all finds are edible, but collections are made to categorize and identify finds in the area, just like we do at any foray.



Until you get the eye for them, it is like the chantarelles and lobsters don't exist. They grow right out of the thick moss and hide most of the time; I probably stepped on quite a few before I even saw one. The first chanterelle was pointed out to me by professional fungi hunter and biologist Tyson Ehlers of the Kootenay area. And once you find one, you find many, and more and more. I scanned the area more closely and found no less than 20 beautiful specimens. Everyone else went on to the next spot, and soon I was alone, happily filling my basket to overflowing. We also found Hericium by the pound and shared it among those who did not know what a choice edible it can be.

# ...Prairie Hunter's Heaven



The Kootenays are known as the commercial picker capital of BC, and several temporary 'tenttowns' are set up during fungi season. It is not uncommon for mushroom pickers in the Kootenays to make several thousands of dollars per season, picking the elusive *Tricholoma magnivelare* to sell to the mushroom buyers set up with signs in key areas along the Kootenay network of Highways. Here the picker gets top dollar early in the season for just emergent button Pines (as they are called) that are worm free, and the buyers then ship to the Vancouver auctions where they are eagerly snapped up by Japanese purchasing groups. Top price is around \$28 per pound.

Amazingly, most of the locals in the area would bypass the Lobsters for the Chantarelles, refusing to pick any of the 'stinky' mushrooms. They treat them like footballs! But lobsters are delicious. Lobster clusters can easily be a half pound each, and in most cases, dense and meaty, with excellent mushroom flavor and intense orange coloring. The older specimens are deep red just like a lobster! And they smell like the sea creature when picked, getting stronger as they age.

Lobsters are growing right out of the dirt most times, or deep in the moss, and hence are often covered in dirt with it ingrained in the top folds of the mushroom (as you can see in the photo on the previous page). Experts in the area are quick to pull out their mushroom knives and brushes which they use to scrape, brush or whack off large sections of the mushroom to remove the dirt, keeping their baskets clean along the way. We quickly found out how smart this is, because although you can wash them later, lobsters are best not washed as they go kind of slimy if not cooked right away or dehydrated quickly. They dry beautifully.

The White Chantarelles were plentiful in the deep duff areas under open under-stories of large Douglas Fir and White Pine. Once you started finding them all you had to do was look around and you would find more. They are typically just poking through the moss or found by locating the 'humps' under the moss.

So now you know what lies beyond those hills. Happy hunting everyone!!



Fall 2014 No. 4 <u>www.wildmushrooms.ws</u>

## **Silent Auction: We Need Your Donation!**

**Melanie Fjoser** 

As you may know, each year during our President's Dinner (to be held Feb. 28), we hold a Silent Auction. This is one of the rare fundraising events that the AMS holds – with most of our events (The Great Alberta Mushroom Foray, President's Dinner, etc.) we charge members just enough to cover the actual expenses.

With that in mind, and giving you a few months to think about this, we'd like you to consider donating a quality item to our Silent Auction. Perhaps your employer or a business you frequent might have an article, or you yourself may have something to donate. Your contribution will assist us financially with bringing in great speakers and mycologists to our events, paying for DNA sequencing, as well as general programming costs. Of course, we will always accept cash, cheque, and credit card donations as well!

Once you have found the item(s) you wish to donate, please contactus@wildmushrooms.ws , and we will arrange drop-off / pickup when we get closer to the event. As well, Calgary members will have the opportunity to get their contributions to our Calgary director, Barb Shworak. Those of you who are attending the President's Dinner may bring their item to that event, but please email us with details anyway so that we know how many items we will have. On all items, please attach the donor's name and address, a brief description of the item, and the approximate value of the item. If you need a letter to solicit from businesses, please contactus@wildmushrooms.ws and we will email you a form that you can print out. As The AMS is not a charitable organization; we regret that we cannot provide income tax receipts for donations.

#### **Fungal Factoid**

Are you a mycophagist? (Do you eat mush-rooms?) Do you like a glass of wine with your mushrooms? You have to be cautious.

Coprinopsis atramentarius, a common inky cap, is a nice edible for most people unless they drink alcohol with it. And that does not just mean having drinks with mushroom dinners: It means having any alcohol within a few days of ingestion of atramentarius.

If you react to atramentarius, here is what is in store for you: "disulfiram syndrome". In other words, facial reddening, nausea, vomiting, malaise, agitation, palpitations and tingling in the limbs. Sound good to you?

Symptoms generally subside within a couple of hours, and recovery is generally smoother if the victim is told over and over, "It's just the mushrooms."

In extreme cases, disulfiram can cause cardiac arrest.



# **AMS Annual General Meeting Notice**

Date: Saturday, February 28, 2015

**Time:** 9:30 AM to 4:00 PM **Place:** NAIT – Classroom #101
11762 – 106 Street, Edmonton, Alberta

**2015** marks the **28**<sup>th</sup> year for our Society. Our first event of the year will be the **Annual General Meeting**. As usual this is not a typical business meeting but focuses more on education and enjoying a weekend in the off season dedicated to the celebration of mushrooms. In that regard, we are thrilled to have Mushroom Guru **David Arora** as our guest speaker. **David** is an American mycologist, naturalist, and writer. He is the author of two popular books on mushroom identification, <u>Mushrooms Demystified</u> and <u>All That the Rain Promises and More...</u>.

David Arora first developed an interest in wild mushrooms while growing up in Pasadena, California and organized his first mushroom collecting group while in high school. Later, an idea to start a mushroom club came about, and in 1984, David Arora founded The Fungus Federation of Santa Cruz. He began teaching about wild mushrooms in the early 1970s while living in Santa Cruz, California. Arora has traveled extensively throughout North America and the world, photographing and hunting mushrooms and learning about the mushroom gathering traditions and economies of different cultures.

This promises to be an enlightening, educational and entertaining lecture – you won't want to miss it!

David will also be giving a talk at the President's Dinner as keynote speaker.

**Take notice:** In early January, you will receive by mail a renewal membership package!

- \* The President's Dinner, at Ernest's will follow the AGM. Doors to Ernest's (located straight down the hall from the AGM at NAIT) will open @ 6 pm. Be prepared for a superb dining experience!
- \* Renew your membership before February 1, 2015 for an entry into a special draw at the AGM you must be present to win. Remember that to have a vote at the AGM, you will require a current AMS membership.
- \* **Check out** our website: <a href="www.wildmushrooms.ws">www.wildmushrooms.ws</a> to register for the President's Dinner and for instant membership renewal!

### Looking forward to seeing you there!

# **Agenda: Annual General Meeting 2015**

### Saturday, February 28, 2015

NAIT - 11762 - 106 Street, Room# 101, Edmonton, Alberta

#### **Schedule:**

- 09:15 **Registration**, renew memberships, coffee, meet & greet.
- 09:30 Annual General Meeting

Minutes of Last AGM.

President's report.

Foray report.

Membership report.

Treasury Reports - 2014 Report - Auditor's report - 2015 budget.

- 10:15 Nominations for Officers and Directors of the Society Rick Watts
- 10:30 Coffee break
- 10:45 Guest Speaker: David Arora you don't want to miss this!
- 12:00 **Lunch** Provided @ Ernest's (Donations are much appreciated).
- 13:00 Elections and appointments:

Election of Officers and other members of the Board of Directors Discussion of Committees and Committee activity reports: Database, Education, Citizen Science, Forays, Fundraising, Culinary, Photo Library, Archives, etc.

13:30 **2015** proposed schedule of activities:

Launch of New Programs - Forays

Open forum – Members, please bring your thoughts, ideas, comments about the proposed schedule & any other concerns.

- 14:30 Coffee break.
- 14:45 Mushroom Photos:

A presentation of beautiful Alberta mushrooms.

15:30 Wrap up and final comments

See you at the President's Dinner (pre-registration is required) Cocktails at 6:00 pm, 4 course Dinner at 6:30 pm.

### **AMS Events for 2015**

### **February**

Annual General Meeting Alberta Mycological Society NAIT, 11762 - 106 St.

Edmonton Starts at: 09:15

July 31-August 3

Great Alberta Mushroom

Foray

28

Grande Prairie

\*Plan now to attend this

President's Dinner Ernest's Restaurant

Starts at: 18:00

NAIT, 11762 - 106 St.

"fungal immersion weekend"! Details available in the new

year.

Edmonton

28

# July

15

Pre-EXPO Foray

#### 16

WILD Mushroom EXPO - "City of Champignons" at Devonian Botanic Garden

### **August**

\*Paid-up members receive detailed info on AMS activities by email . "Foray in Your Neighbourhood"—weekly evening forays—will be held every Wednesday evening in Edmonton, and Thursday evenings in Calgary, from May to September. Members, watch your email for locations. Many more events will be added in the New Year. Check our website regularly for updates.

