

The North American Truffler

Journal of the North American Truffling Society

Volume 32, Issue 1

Spring 2013



Historical Biogeography and Diversification of Truffles in the *Tuberaceae* and Their Newly Identified Southern Hemisphere Sister Lineage

Gregory Bonito, Matthew E. Smith, Michael Nowak, Rosanne A. Healy, Gonzalo Guevara, Efren Cázares, Akihiko Kinoshita, Eduardo R. Nouhra, Laura S. Domínguez, Leho Tedersoo, Claude Murat, Yun Wang, Baldomero Arroyo Moreno, Donald H. Pfister, Kazuhide Nara, Alessandra Zambonelli, James M. Trappe, Rytas Vilgalys

Abstract

Truffles have evolved from epigeous (aboveground) ancestors in nearly every major lineage of fleshy fungi. Because accelerated rates of morphological evolution accompany the transition to the truffle form, closely related epigeous ancestors remain unknown for most truffle lineages. This is the case for the quintessential truffle genus *Tuber*, which includes species with socio-economic importance and esteemed culinary attributes. Ecologically, *Tuber* spp. form obligate mycorrhizal symbioses with diverse species of plant hosts including pines, oaks, poplars, orchids, and commercially important trees such as hazelnut and pecan. Unfortunately, limited geographic sampling and inconclusive phylogenetic relationships have obscured our understanding of their origin, biogeography, and diversification. To address this problem, we present a global sampling of *Tuberaceae* based on DNA sequence data from four loci for phylogenetic inference and molecular dating. Our well-resolved *Tuberaceae* phylogeny shows high levels of regional and continental endemism. We also identify a previously unknown epigeous member of the *Tuberaceae* – the South American cup-fungus *Nothojafnea thaxteri* (E.K. Cash) Gamundí.

INSIDE THIS ISSUE

- 1** Southern Hemisphere Truffles / 60 Minutes Video
- 3** Calendar of Events
- 4/8** Truffle Cheeses / Recipe: Truffle Polenta
- 9/10** Short History of Truffles / Meeting Minutes
- 12** Pavlek Scholarship Application

Phylogenetic resolution was further improved through the inclusion of a previously unrecognized Southern hemisphere sister group of the *Tuberaceae*. This morphologically diverse assemblage of species includes truffle (e.g. *Gymnohydnotrya* spp.) and non-truffle forms that are endemic to Australia and South America. Southern hemisphere taxa appear to have diverged more recently than the Northern hemisphere lineages. Our analysis of the *Tuberaceae* suggests that *Tuber* evolved from an epigeous ancestor. Molecular dating estimates *Tuberaceae* divergence in the late Jurassic (~156 million years ago), with subsequent radiations in the Cretaceous and Paleogene. Intra-continental diversification, limited long-distance dispersal, and ecological adaptations help to explain patterns of truffle evolution and biodiversity.

To see the entire publication, go to:

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0052765;sessionid=F06F8301791490C9CB9489D2416924A7>

Truffles: The Most Expensive Food in the World

July 1, 2012 European white truffles sell for as much as \$3,600 a pound, but harvests are down and a black market has emerged -- none of which has dampened the appetite for this prized fungi. Lesley Stahl reports:

<http://www.cbsnews.com/video/watch/?id=7413524n>

More CBS 60 Minutes Truffle Videos:

Truffles: Sacred? Sacrilegious? Sexy?

January 8, 2012. The church once banned truffles for their purported aphrodisiac properties, chef Patricia Wells says. The ban was lifted, but the question remains: do these fungi have amorous powers?

<http://www.cbsnews.com/video/watch/?id=7413524n>

A truffle hunter's best friend

January 8, 2012. Pigs once sniffed out truffles nestled in the soil, but now it's a dog's job to find these valuable fungi. Given the high cost of truffles, you could call these dogs "gold diggers."

<http://www.cbsnews.com/video/watch/?id=7394366n>

"60 Minutes" cooking school: Potato with truffles

January 8, 2012. "60 Minutes" cooking school: Potato with truffles It's a classic French recipe: butter, cream, more butter, a potato, and shavings of the world's most expensive food: truffles. See French chef Benjamin Bruno create a delectable dish.

<http://www.cbsnews.com/video/watch/?id=7394370n>

French truffle is the latest climate change victim

Climate change is threatening the Perigord black truffle, a delight of gourmets around the world. Swiss scientists say they have clear data that show drier summers are affecting truffle yields.

The Perigord truffle or Tuber melanosporum -- dubbed "the black diamond" on account of its color and extraordinary price -- is found in southwestern France, Spain and Italy. Legend has it that French truffle notched a harvest of 1,000 metric tons one year about a century ago.

In the 1960s, truffle yields were still 200 to 300 metric tons annually. This has fallen to 25 metric tons in recent years, pushing retail prices as high as €2,000 (\$2,500) a kilogram.

In a letter to the journal Nature Climate Change, scientists said drier summers affected oak and hazelnut trees on which the symbiotic fungus grows.

Although the black truffle harvest occurs between November and February, the yield depends on summer weather, explained Ulf Buentgen and Simon Egli from the Swiss Federal Research Institute. Truffles thrive in wet and cold conditions and hate dryness and heat.

"Given the symbiotic fungi-host association, we postulate that competition for summer soil moisture ... might be a critical factor for truffle fruit body production, particularly in semi-arid environments," they said. Their theory, they added, is borne out by research in Spain, which found that oak tree growth overwhelmingly depends on rain between May and July.

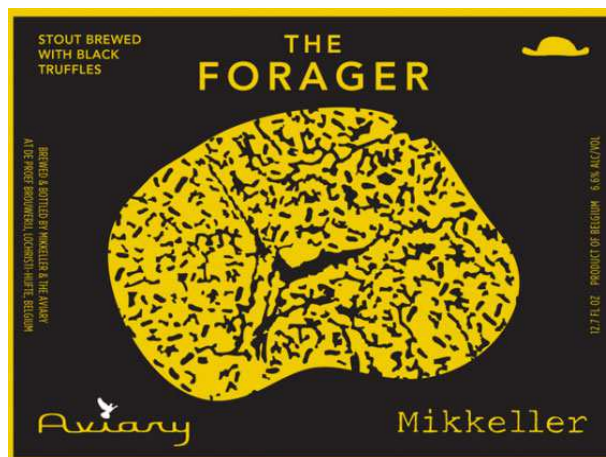
The team found that harvests in France's Perigord and in Spain's Aragon region fell at roughly the same pace from 1970 to 2006, in line with an overall decline in summer rainfall. Harvests in northern Italy's Piedmont and Umbria also retreated.

The letter suggests that the future for the black truffle may lie in Germany and Switzerland if temperatures in southern Europe climb by at least 2 degrees Celsius (3.6 degrees Fahrenheit) this century, as many climate simulations predict. The prediction coincides with a remarkable surge in fungi in Switzerland and Germany, including the paler and less perfumed Burgundy truffle (Agence France-Presse, Nov. 27).

Truffles in Beer??!!

Yes, it's true. Watch the below YouTube video from more information:

<http://www.youtube.com/watch?v=jy3-7AdEq0w&feature=youtu.be>



WINTER/SPRING 2013

CALENDAR OF EVENTS

NATS FEB MEETING

PLACE: CORVALLIS MULTICULTURAL CTR: 128 SW 9TH ST.

TIME: TUE., FEB. 5, 7:30 PM

SPEAKER: FRANK EVANS: "FUN AND FOOD AND FALL AND ITALY - A FEW SLIDES OF A FALL TIME IN TUSCANY". FRANK WILL RECOUNT HIS EXPERIENCES HUNTING TRUFFLES WITH DOGS IN THE HEART OF EUROPEAN TRUFFLE COUNTRY AND MUNCHING THROUGH A TOUR OF AMAZING LOCAL FOODS.

NATS FEB FORAY

PLACE: STARKER FORESTS SOUTH OF PHILOMATH

TIME: SAT., FEB 9, 2013

WE'LL MEET AT 10AM AT THE RAY'S GROCERY AT 1740 MAIN IN PHILOMATH.

Full details will be available at www.natruffling.org.

NATS FEB TRUFFLE DOG TRAINING

PLACE: PEAVY ARBORETUM

TIME: SAT., FEB 23, 2012 9AM

Full details available at www.natruffling.org.

NATS MARCH MEETING

PLACE: CORVALLIS MULTICULTURAL CTR: 128 SW 9TH ST.

TIME: TUE., MAR. 5, 7:30 PM

SPEAKER: TBA

NATS MARCH FORAY

PLACE: TBA

TIME: SAT., MAR 2, 2013 10AM

Full details will be available at www.natruffling.org

NATS MARCH MEETING

PLACE: CORVALLIS MULTICULTURAL CTR: 128 SW 9TH ST.

TIME: TUE., MAR. 5, 7:30 PM

SPEAKER: TBA

Reminder: Please Remember to Renew Your Membership for 2013.

A membership renewal form is included in this newsletter and can also be found on the NATS website. Please renew now.



Editor's Comments

From the word on the street, this truffle season seems to be coming along just fine. Let's hope it continues to be decent. And, keep your fingers crossed for the upcoming Morel season!

As always, please keep those newsletter submissions coming. Foray pictures are always appreciated.

Jon Kenneke, *Truffler* Editor - jon@kenneke.com



Disclaimer

The information contained in *The Truffler* is to be used at your own risk. NATS Inc., its officers, editors, and members are not responsible for the use or misuse of information contained in the newsletter. If you are unsure of mushroom identification or safety, please consult an expert. It's better to be safe than sorry!

In addition, attending and participating in a NATS event is entirely at your own risk. No person associated with NATS is either directly or indirectly responsible for anything that occurs during, or in transit to/from, a NATS event. Be responsible.



A Survey of Truffle Cheeses and Other Truffle Goodies

J. Kenneke/J. Bianco

There are several commercially available truffle cheeses on the market. We scoured specialty markets and online to get our hands on as many different varieties of cheeses possible. In our research, we also found some other types of truffle-containing food, so we are including our opinions of those as well.

On each item, our notes are presented first, with a link to the web, and then a copy of description that is on the web site follows.

Cheeses

Boschetto al Tartufo



Made in Firenze, Italy with cow and sheep milk. It contains tuber albidum. This cheese is not very truffly. The flavor of cheese overpowers truffle.

<http://www.zabars.com/il-boschetto-al-tartufo/5110098.default.pd.html>

“Cow's and sheep's milk are combined with truffle, and aged for just a few months. The cheese and the truffle complement each other beautifully: sweet, savory, pleasantly briny cheese, and woodsy, garlicky truffle, with neither overpowering the other. Its semi-soft, pleasantly toothsome texture will bring about a sigh of relief and an exclamation of, "Ah, nice!" upon tasting.”

Pecorino di Tartufo



Widely available at Market Of Choice, Whole Foods, etc. Made from sheep milk and contains “black summer truffle”. This cheese is semi-hard and has very truffly flavor. This is a very good, somewhat common truffle cheese. We recommend this cheese.

<http://www.artisanalcheese.com/prodinfo.asp?number=10384#.UQMafLueSo>

“Pecorino Tartufo is an old style of Umbrian pressed sheep milk cheese. The cheese's buttery nutty flavor is enhanced with the addition of aromatic black truffles giving it a unique signature. The smooth toothsome texture gives the Pecorino Tartufo a long shelf life. However the cheese is particularly addictive so it's usually consumed rather quickly. The cheese is a versatile pairing partner for many wines, from tart light whites to the bigger jammy reds.”

Salt Spring Island Truffle Cheese



This wonderful chevre-type cheese is made on Salt Spring Island. It is very good with a full truffle flavor. It's made from goat milk and very soft. On the label, it says it's made with “white truffles and mushrooms”. This cheese is available at some Washington state Whole Foods outlets. We recommend this cheese.

<http://www.saltspringcheese.com/howtobuy.html>.

“Our truffle chèvre is made with a mixture of white truffle, some other mushrooms, and garlic imported from Italy. The natural oil in the truffles helps to infuse the taste of the truffles throughout the cheese. It has a rich and earthy flavour that goes well with a red wine. In fact, a good bottle of red wine, two glasses (and only two glasses), a white truffle chèvre, and some quality bread or crackers is often all that is needed for a truly fantastic lunch.”

Tartufino Speziato



This cheese is covered in extra virgin olive oil and spices like nutmeg and cinnamon. There is very little if any truffle flavor in this cheese. A Semi-soft white cheese made from cows milk cheese. This is merely an acceptable truffle cheese.

<http://www.igourmet.com/shoppe/Tartufino-Speziato.asp>

“From the artisan cheese makers who created Brillo di Treviso comes Tartufino Speziato. It is a soft-textured cheese whose surface is coated with a treatment of extra virgin olive oil, natural black truffle flavoring and many spices, especially cinnamon and nutmeg. Its aromatic characteristics and delectable flavor make it an excellent cheese for entertaining.”

Piemonte Tomini with Italian Truffles



The label says it contains Tuber Aestivum. It is packed in oil. This is very good soft cows milk cheese and has a good full truffle flavor. A very affordable truffle cheese. It's generally available at Market of Choice in Corvallis, and we recommend this cheese.

<http://www.isolaimports.com/product.php?productid=310>

“Tomini are made with pasteurized milk and formed into rounds about 2 inches in diameter and less than an inch in height. The fresh disks are brined briefly then packed in sunflower oil with truffles. Sunflower oil is used since olive oil would cause these fragile young cheeses to break down. This cheese has a pleasant tang that becomes more tangy and yeasty as it ages. The pleasant, almost sweet tang is a beautiful complement to the earthiness of the truffles.”

Moliterno Black Truffle Pecorino



This semi-hard sheep's-milk cheese contains Tuber Aestivum. It has a subtle truffle flavor, since the fairly strong cheese masks the truffle a bit. We think it's very good.

<http://www.igourmet.com/shoppe/Moliterno-Black-Truffle-Pecorino.asp>

“From the Italian island of Sardinia comes this raw sheep's milk cheese with black truffles. Unlike most truffled cheeses, the truffle paste is infused after Moliterno has been aged so that the cheese develops its own character before the truffles are injected. Though the truffles are only visible in the "veins," the truffle flavor permeates throughout the entire paste of this amazing cheese. During the aging process, oil and vinegar are applied to the cheese's rind to prevent weight loss. Once cut, the dark paste oozes out of the

crevices of the cheese like trickles of water from a craggy cliff. Both delicious and intriguing visually, this cheese is a show-stopper. Enjoy this pecorino with a big, earthy Italian red with enough muscle to stand up to the truffles.”

Bianco Sottobosco



This is a firm, lightly truffle flavored cow and goat's milk cheese. The taste is average and it contains Tuber Aestivum.

<http://www.zabars.com/bianco-sottobosco-8oz/51100LF.default.pd.html>

“An Italian, "sottobosco" means "under the forest", and perhaps by this they mean truffles, which are found just beneath the forest floor. This rustic cow and goat's milk cheese is laced with black truffle, and upon taking one bite, you'll know it! Intensely truffle, it has a creamy mouthfeel, nutty and savory notes, and a garlicky finish. It's pale, flaky white paste looks lovely with flecks of black truffle. Very elegant. Made in Cuneo, Italy.”

Tuma Trifulera



This soft cow and sheep's milk cheese is a bit pungent with very mild truffle flavor. The cheese is decent but somewhat expensive. It contains Tuber Aestum.

<http://denvertruffle.com/artisan-cheese/sheeps-milk-cheeses#T>

"A soft sheep and cow's milk cheese from Piedmont, Italy. Creamy and luscious with a bit of sour tang and an earthy truffle flavor."

Brillat-Savarin with Truffles



This is a white crusted cow's milk cheese. It is very soft and very good. This cheese has a good flavor and is usually very truffly. It's available at Market of Choice. I've been told that this cheese is made in-house at various outlets like Whole Foods. So, I'd expect a wide variation in quality, depending on what the type and quality of the Brie and truffles are. It's traditionally made from a triple crème base.

http://en.wikipedia.org/wiki/Brillat-Savarin_cheese

"Brillat Savarin, French philosopher, famous for his 'Physiologie du goût' written in 1825 was the first food and wine matcher, advising Graves wine with Poulard de Bresse and old Sauternes with oysters, insisting on changing wines with every course. What a wise man. He also has a delicious cheese named after him. Brillat Savarin is a fresh, creamy cow's milk cheese from Normandy and Burgundy. Our local 'fromager' Pierre Rollet Gerard, in the covered market in Libourne, prepares this cheese by slicing it in the middle and stuffing it with truffles. It is so delicious that just this one cheese suffices on the cheese board – no need for a selection. It is also perfect match with an older Pomerol – well known for the development of truffle aromas as they age."

Truffle Condiments

There is a surprising array of truffle-based condiments out there, from oils, to salt, to spreads. With the exception of most oils, the truffle infused treats are worthwhile.

When shopping for oils (and, really, anything that is supposed to contain truffles) it's important to read the label. Many products list "aroma" or "flavoring". This is often an artificial truffle flavoring.

Barolo e Tartufo Vinegar



This wine and truffle vinegar is surprisingly excellent. There is a sweetness mixed with the earthiness of the Barolo wine and truffles. It makes an excellent oil and vinegar salad dressing. It's very much recommended. This vinegar contains Tuber Aestivum and it available at Oil & Vinegar in Portland.

<http://oilvinegar.co.uk/index.php/oilsvinegars/barolo-e-tartufo.html>

"A mix of two beautiful flavours of Barolo wine and truffle. Barolo is an exclusive red wine from Piemonte, Italy. The nickname of the Barolo in 1860 was; "Wine of kings and the king of the wines." This unique product is made from Barolo wine and summer truffles. The consistency is thick like a fine, aged syrupy balsamic with the true essence of fragrant truffles. A few drops of this unique delicacy that will enhance the flavor of any gourmet meal from risotto and vegetables to sauces, meat and fruit."

Alba White Truffle Oil



This mediocre truffle oil does not have a very pungent truffle taste, even though the odor is there. This base oil is extra virgin olive oil, and it tasted a bit oxidized. It's available at Pastaworks, and other locations. Alba White is a very average oil which appears to contain non-natural truffle "aroma". It's a product of Italy that is infused with Tuber Magnatum Pico.

http://gourmet-delights.com/store/white_truffle_oil.html

"This white truffle extra virgin olive oil is both aromatic and finely balanced. Each bottle, using top quality extra virgin olive oil, contains actual pieces of white truffle (Tuber magnatum pico). Spectacular in casseroles, vegetable and potato dishes, soups, gravies, meat sauces/entrées.... this is truly a chef's companion. On popcorn, it's perfect!"

Black Truffle EVOO BV

This oil is available at the Oil & Vinegar store near Portland, and has the right balance of flavor and freshness. There is no ingredient label, so no data as to what species the truffle is. But, it's good.

Watch for part 2 of this food tasting series in the next newsletter.



Pictures from the 2013 Oregon Truffle Festival



The View from the NATS Table



Oregon Whites



Perigord Truffles



Smells Good

Truffler Recipes

Creamy Polenta with Truffles and Poached Eggs

Patricia Wells/60 Minutes/CBS

A creamy dish of warming, fragrant polenta is a standby in our home in the winter months. Sometimes we top it with a fiery tomato sauce or, as here, embellish with fresh black truffles and a truffle-infused poached egg.

See the video at: http://www.cbsnews.com/8301-504803_162-57354680-10391709/reporters-find-an-easy-truffles-recipe/

Equipment: A mandoline or a very sharp chef's knife; 4 warmed, shallow soup bowls; 4 ramekins.



1 fresh black truffle (about 1 ounce; 30 g), cleaned
2 cups (500 ml) whole milk
2 cups (500 ml) light cream
1 teaspoon fine sea salt
1/2 teaspoon freshly grated nutmeg
3/4 cup (135 g) quick-cooking Italian polenta
1 cup (100 g) freshly grated Parmigiano-Reggiano cheese
1 tablespoon distilled white vinegar
1/2 teaspoon fine sea salt
4 large, ultra-fresh eggs, at room temperature (See note)
Truffle salt

1. Preheat the oven to 250F (120C).
2. With a vegetable peeler, peel the truffle. Mince the truffle peelings, place in a small jar, and tighten the lid. With the mandoline or very sharp knife, cut the truffle into thin slices. Place the slices in another small jar and tighten the lid.
3. In a large saucepan, bring the milk, cream, teaspoon of salt, and nutmeg to a simmer over medium heat. (Watch carefully, for milk will boil over quickly.) Add the polenta in a steady stream and, stirring constantly with a wooden spoon, cook until the mixture begins to thicken, about 3 minutes.
4. Remove from the heat. Stir in the cheese and the minced truffle peelings, stirring to blend thoroughly. The polenta should be very creamy and pourable. Spoon into the warmed soup bowls. Place the bowls in the oven to keep warm.
5. In a large, deep skillet, bring 2 inches (5 cm) of water to a boil. Reduce the heat to maintain a simmer and add the vinegar and the 1/2 teaspoon of salt. Break the eggs into ramekins and, one by one, carefully lower the lip of the ramekin 1/2 inch (1.5 cm) into the water. Let the eggs flow out. Immediately cover the skillet, still maintaining a low simmer. Poach the eggs until the whites are firm but the yolks are still runny and are covered with a thin translucent layer of white, about 3 minutes for medium-firm yolks and 5 minutes for firm yolks. With a slotted spoon, carefully lift the eggs from the water, drain, and place on each serving of polenta. Shower with truffle slices and season with the truffle salt. Serve immediately.

4 servings

Note: To infuse the eggs with truffle aroma and flavor, store a whole, fresh truffle and the eggs in their shells in an airtight container in the refrigerator for 2 to 3 days.

Variation: No truffles? Morel mushrooms cooked in cream are delicious with the polenta and poached egg.



THE HISTORY OF TRUFFLES

Susan Rice Alexander <http://thetrufflediva.com/>, Nov. 5, 2012

Discoverer of the “Black Jewel” Revealed

The truffle is a paradoxical thing. On the one hand, it is a humble fungal growth associated with pigs and peasants. On the other, it is a delicacy that graces the chandelier-lit dinners of potentates and popes.

When was the truffle first “discovered”? The first known mention of it comes not from the Romans and the ancient Greeks—but the Sumerians.

In a Sumerian myth, *The Marriage of Martu*, a desert nomad called Martu wants to marry Adjar-Kidug, the daughter of a city god, but one of her girlfriends is not impressed by the nomad who, she says, “is clothed in sack-leather,” cannot “properly recite prayers,” “lives in the mountains,” “eats raw flesh” and—the most devastating put-down of the lot—“digs up truffles in the foothills.”

The truffle that grew in Sumeria would have been the desert truffle, which is different from the gourmet truffles of Europe. (And the desert truffle compared with the gourmet truffle is, so to speak, as the mountain-dwelling nomad to the city slicker. But, it should be added, Martu did win over the daughter of the city God in the end.)

These desert truffles are mentioned in a number of Sumerian sources—clay tablets with cuneiform texts. About 4,000 years ago, for example, one ruler is recorded as complaining to one of his governors: “You have sent me bad truffles!”

The Greek philosopher Theophrastus (371–287 BCE) noted that truffles could be found in the area now known as Libya. The author and naturalist Pliny the Elder (23–79 CE) wrote that the most highly valued truffles came from “Africa” (meaning the area of Africa along the Mediterranean).

Truffles Laden on 30 Camels

The great Arabic traveler Ibn Battuta (1304–c.1368 CE), recounting a journey through the west African Sahara, noted the abundance of truffles in the region. In the early 1500s, an Italian traveler wrote of seeing 25 to 30 camels laden with truffles arriving in Damascus and being sold over three or four days.

There’s a wonderful description of the truffle in the *Description of Africa* by another Arab, the diplomat Leo Africanus. The English translation of a Latin translation of the original Italian is particularly highly flavored:

“Terfez [the African truffle] is to be called rather by the name of a root than of a fruit, and is like unto a mushroom or toad-stool, but that it is somewhat bigger. It is enclosed with a white rinde and groweth in hot and sandy places Some of them are as bigge as a walnut, and others as a limon. The phisicians, which call it Camha, affirme it to be a refrigeratiue or cooling fruit ... the Arabians take as great delight in eating of the same as in eating of sugar. This fruit being stued upon the coles, and afterward made cleane, and sodden in fat broth they esteeme for great dainties.”

Fresh Black Truffles for Sale

In Europe, after the fall of the Roman Empire, little appears about the truffle until the 14th century. Up to the 19th century, truffles were “hunted” but, in 1810, a French peasant, Joseph Talon, from the Vaucluse area, planted acorns on his small plot of land. A few years later, he noticed that black truffles were growing in the soil around the young oak trees. He bought up land, planted it with oak trees—and ended up making a big profit from selling fresh truffles.

He was the first to make the connection between the fungus and the oak ... and the first to actively cultivate truffles.

Over the centuries, many famous people have been associated with truffles. Pope Gregory IV partook of a feast of truffles before battling the Saracens. The poet Lord Byron kept the powerful fungus on his desk to inspire his imagination.

White Truffle for Marilyn Monroe

The best white truffles supposedly come from Alba in Italy's Piedmont region. In 1949, a restaurateur from Alba, Giacomo Morra, had the marketing brainwave of presenting a famous person with a prized white truffle. He began with Rita Hayworth. Recipients since then include Presidents Truman, Eisenhower, Kennedy, and Reagan, Winston Churchill, Mikhail Gorbachev, Marilyn Monroe, Alfred Hitchcock, Sophia Loren, Luciano Pavarotti, Joe DiMaggio, Pope John Paul II, and Valentino.

Discovery of the Truffle

We now know the names of some famous people who have savored the magic fungus. But who was the first person to discover and devour it?

We'll never know. It is more than probable that the first people to eat truffles lived back in the Stone Age, if not well before that.

As for actually discovering it, it was not a person at all. Male boars produce a sexual hormone, androsterone, in their salivary glands that attracts females. This hormone is found as well in the sweat glands of humans—and, yes, it's also produced by the truffle.

So the truffle was, almost certainly, first discovered by a pig—more exactly, a mate-seeking wild female boar.



NATS Potluck and Annual Meeting December 1st 2012

The meeting was called to order by President Marilyn Hinds. She welcomed NATS members and guests to the annual potluck and meeting. Close to 50 people enjoyed the good food and fellowship. Entertainment provided by Marshall Adams added to the evening's enjoyment.

The minutes for the November 2012 meeting were approved. Zelda Carter gave the treasurer's report and the financial report for 2012 to date. A copy is attached.

Marilyn read a letter from Carolyn Rawles-Heister, Library Director for the Corvallis Public Library, thanking NATS for the donation of books to the library in memory of Welles Bushnell. A copy of the letter is attached. Marilyn announced that six books had been donated to the Salem Public Library: two field guides, two cookbooks, and two *Trees, Truffles, and Beasts, How Forests Function*, by Chris Maser, Andrew Claridge, and James M. Trappe.

Mysti Weber gave the Membership report. There are 194 members for 2012 for a total of \$2647.95. 21 members have renewed or joined so far for 2013. This number does not include those who renewed or joined at the potluck.

Matt Trappe gave the foray report for 24 November to Alleman's Tree Farm at Hoskins, Oregon. 28 people attended the foray. *Rhizopogon vinicolor*, *Hymenogaster subalpinus*, and *Tuber oregonense* species were found. There will not be a foray in January, and the February 2013 foray site is to be announced.

Sylvia Donovan reported the new design for NATS tee shirts is ready to go. There will not be any sweatshirts ordered this time.

Dan Luoma reported on the Truffle Dog Training held on 10 November 2012, led by Jeannine May and her truffle dog, Isis. There were nine participants, five with dogs and four audits. The fee is \$200 for members, \$215 for non-members; this includes a one year membership for non-members. Audits are \$100 or \$115 if participants want a membership. Dan gives an orientation to give attendees a better understanding of the relationship of forest and all parts of forest ecology. A TDT class is planned for February, but the date depends on availability of the Forestry Club Cabin.

Pat Rawlinson presented the slate of officers and committee chairpersons for 2013. Everett Carter made a motion to accept the slate as presented and Larry Schramm seconded the motion. Marilyn Hinds called for a vote of those in favor, the motion passed. The slate reads as follows: President, Marilyn Hinds; Vice President, Joyce Eberhart; Secretary, Pat Rawlinson; Treasurer, Zelda Carter; Membership, Mysti Weber; Hospitality, Sylvia Donovan; Librarian, Jonathan Evenboer; Newsletter Editor, Jon Kenneke; Trufflemaster, Matt Trappe; Scientific Advisor, James Trappe; Board Member at Large, Frank Evans.

Seven people responded to a plea for volunteers to work at the Oregon Truffle Festival at the end of January 2013: Mysti Weber, Sylvia Donovan, Betty Orner, Vicki and Ted Baker, Chris Melotti and Molly Widmer. Marilyn thanked all volunteers who helped out at the Mushroom Shows in October.

Adrian Beyerle has asked for help at the Oregon Mycological Society Mushroom Show in October. He has been doing this show on his own for several years.

Guest speaker was Dr. Matt Trappe, speaking on "Wild Edible Mushrooms after Fukushima: Are They Safe to Eat." Following Matt's presentation, Marilyn Hinds presented Matt with a **Life Membership** for his many years of service to NATS as Trufflemaster and in other capacities for which he has volunteered.

The evening ended with the silent auction of the centerpieces, proceeds went to the Henry Pavelek Memorial Scholarship Fund. \$500 was raised from donations and the sale of the centerpieces. Marilyn Hinds thanked those who donated the centerpieces, and to those who helped to set up and take down the tables for the potluck. She also thanked Hospitality chairperson, Sylvia Donovan, for organizing this year's potluck.

NATS Meeting January 8th, 2013

The meeting was called to order by president Marilyn Hinds. Introductions were made around the room. Eleven people attended the meeting.

Zelda Carter gave the treasurer's report: \$5572.10. All moneys from the Bushnell fund have been used. Membership report: 78 new and renewed members for 2013 for a total of \$996.

Foray details for February are on the NATS website.

Marilyn gave a report from Newsletter Editor, Jon Kenneke. He said work on the electronic cookbook is taking longer than planned. He is asking for articles for the next newsletter at this time.

Pat Rawlinson read the slate of officers for 2013: President, Marilyn Hinds; Vice president, Joyce Eberhart; Secretary, Pat Rawlinson; Treasurer, Zelda Carter; Membership, Mysti Weber; Hospitality, Sylvia Donovan; Librarian, Jonathan Evenboer; Newsletter Editor, Jon Kenneke; Truffle Master, Matt Trappe; Scientific Advisor, Jim Trappe; Member at Large, Frank Evans.

Pat Rawlinson gave a brief report on the recent Scholarship changes; a full report will be given at the next month's meeting. A scholarship application has been drawn up by the committee and will be presented for approval soon.

Sylvia Donovan reported that the tee shirt order has been made, but no further word on the order at this time. Zelda Carter donated new tee shirts, to be given to anyone interested in having them for a donation to NATS.

Jim Trappe reported that he has a dozen or so "Go on Truffling" tee shirts designed by Greg Bonito for sale for \$7.50 each. They are mostly size small.

Volunteers for the Oregon Truffle Festival at the end of January are: Sylvia Donovan, Betty Orner, Mysti Weber, Ted and Vicki Baker, and Mollie Widmer and Chris Melotti from CMS will help out as needed. OTF pays for the first two volunteers; NATS will pick up the tab for the remaining volunteers, except for Mollie and Chris. They are officially at OTF representing CMS.

Truffle Dog Training takes place on 23 February 2013 at the Forestry Club Cabin at Peavy Arboretum, 9:00 A.M. to 5:00 P.M. There have been four inquiries and one paid participant to date. Discussion followed on when to put out advertisement for the TDT, before OTF of the day after the festival ends. If OTF has a full schedule for classes, NATS can advertise earlier; if not, NATS will wait until after the festival to advertise. The training session will be put on the NATS website and in the FYI column in the Corvallis Gazette Times.

Under Other Business: Zelda Carter made the motion to pay Tate McMillan \$100 in appreciation for volunteering to design new tee shirts for NATS. Motion was seconded by Pat Rawlinson, motion passed. Sylvia Donovan will check with Tate to see if he would also like to have one of the tee shirts when they are ready.

Speaker for the evening was Dr. Jim Trappe. He presented "Pioneer Trufflers of the West." The meeting was adjourned. Refreshments provided by Sylvia Donovan and enjoyed by all.



NORTH AMERICAN TRUFFLING SOCIETY, INC.

PAVELEK MEMORIAL SCHOLARSHIP APPLICATION FORM
P. O. Box 296, Corvallis, Oregon 97339

Instructions: Candidates should be graduate students or outstanding undergraduates conducting designed research on physiology, taxonomy, phylogeny, ecology, animal interactions, commercial harvest, or culinary attributes and use of hypogeous fungi. The scholarship for 2013 is in the amount of \$1500.00.

Print clearly or type the following information:

PERSONAL INFORMATION:

Applicant's Name:

Permanent Address:

Telephones: Home: Work: Cell:

E-Mail Address:

ACADEMIC INFORMATION:

Higher educational institutions, years attended, and majors:

Degree you are currently pursuing:

Concisely describe the items below to no more than one single-spaced page altogether:

Your study plan

Your progress to date

Your professional goals

Attach letters of recommendation from:

1. Your present academic supervisor
2. 1-3 other letters of recommendation from any source

Submit your application to the Chair of the Scholarship Committee, preferably electronically, *no later than October 1, 2013* to be considered. The winner will be announced at the December Potluck, first Saturday in December.

Pat Rawlinson, Scholarship Committee Chair, P. O. Box 296, Corvallis, OR 97339
Phone: 541-752-2243 E-mail: rawlinsonpat@gmail.com

NATS Invites You to Join or Renew Your Membership for 2013!

The officers and board members of NATS greatly appreciate the enthusiasm that our members have shown for our society.

You can help ensure that 2013 is another banner truffle year!



We are seeking more volunteer help with officer and committee chairperson activities (secretary, foray leader, booth staffing, etc.) If you would like to be more involved, please contact us. Thanks! For those of you who have not yet renewed your membership, you can do so by mailing in your dues to the address below. If any of your contact information (address, phone, email) has changed, please let us know so we can stay in touch.

THE NORTH AMERICAN TRUFFLING SOCIETY, INC.
P.O. Box 296
Corvallis, Oregon 97339
www.natruffling.org

Name(s): _____ Phone: _____

Address: _____

City: _____ State: _____ Zip: _____
(Province) (Postal code)

Country: _____ (if other than USA)

Email address(es): _____

The NATS newsletter is now delivered electronically via www.natruffling.org.

Annual membership fees: \$15 first family member, \$10 each additional family member in the same household. Businesses: \$15. Individuals/Businesses from other countries: \$20. **Payable in US funds.**

Annual contribution categories: Donor: \$15-\$49; Contributor: \$50-\$499; Sustaining: \$500+.

North American Truffling Society (NATS)
P.O. Box 296
Corvallis, OR 97339
www.natruffling.org

**NON PROFIT ORG
U.S. POSTAGE
PAID
CORVALLIS, OR.
PERMIT No. 104**

Field Data \Truffle ID Cards:

Collector _____ Date _____
Location _____

County _____ T/R/S or Lat/Long _____
Elev _____ Aspect: N NE E SE S SW W NW
Growing On/In: Moss Mineral Rotten Needle
(Circle one or more) Soil Wood Litter
Other/Notes _____
Overstory Trees _____
Understory Shrubs _____
Fresh Notes (color, odor, etc.): _____

Collector _____ Date _____
Location _____

County _____ T/R/S or Lat/Long _____
Elev _____ Aspect: N NE E SE S SW W NW
Growing On/In: Moss Mineral Rotten Needle
(Circle one or more) Soil Wood Litter
Other/Notes _____
Overstory Trees _____
Understory Shrubs _____
Fresh Notes (color, odor, etc.): _____
