The North American Truffler

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Improved resolution of major clades within *Tuber* and taxonomy of species within the *Tuber gibbosum* complex

[*Ed note: Just the abstract is presented here. Please see the NATS website for the full text of the paper*]

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Abstract: *Tuber gibbosum* Harkn., described from northern California, originally was thought to be a single, variable species that fruited from autumn through winter to spring. It has become popular as a culinary truffle in northwestern USA, where it is commercially harvested. Morphological studies suggested it might be a complex that includes at least two species. We conducted morphological and phylogenetic studies of the complex to determine how many species it might contain and how they differed morphologically, geographically and seasonally. We also provide the first LSU phylogeny for the genus Tuber. Phylogenetic analyses resolve nine major clades in the genus with high bootstrap support and distinguish the *Gibbosum* clade from the *Aestivum*, *Excavatum*, *Macrosporum*, *Magnatum*, *Melanosporum*, *Puberulum*, *Rufum* and *Spinoreticulatum* clades. Further analyses of ITS and LSU regions revealed four distinct species in the *Gibbosum* complex. Although morphologically similar the four species differ in spore size and shape and in peridial anatomy. These species share the synapomorphy of having suprapellis hyphae with distinctive, irregular wall swellings at maturity; we have not seen this hyphal type in any other Tuber spp. worldwide. The three new species are named and described as *T. bellisporum* Bonito & Trappe, *T. castellanoi* Bonito & Trappe and *T. oregonense* Trappe, Bonito & Rawlinson.

Inside This Issue

The Truffler is now "all-electronic"

To save on printing, production and mailing costs, *The Truffler* is now exclusively available via the internet on the NATS website. This also allows us to expand the newsletter to more than 12 pages when content dictates.

Two electronic newsletter formats will be available: Microsoft Word and PDF. We're providing the newsletter in PDF format, so you can view it on most e-book readers, like the "Kindle". If you have suggestions for other formats, let us know.

The most current newsletter and archives are posted on the NATS website at:

http://natruffling.org/news/news.htm

If you have special circumstances, and require a printed copy, please contact the newsletter editor. A printed copy will be gladly mailed to you via USPS.

Conner's Camp NATS Foray Finds, Oct 2010

Sila Shaman
Hysterangium crassirhachis
Rhizopogon subareolatus
Rhizopogon parksii

Jonathan Evenboer & Jean Ginzburg
Rhizopogon parksii
Leucophleps spnispora

Dennis Allen
Rhizopogon parksii

Allyssa Nickstrom
Rhizopogon parksii

Marilyn Hinds
Rhizopogon parksii
Rhizopogon ater
Hysterangium setchellii

Ben Kalik
Rhizopogon parksii
Rhizopogon villosulus

Oregon Trivia:

- The nation's most photographed lighthouse is the Heceta Head Lighthouse located in Lane County.
- The Tillamook Naval Air Museum is housed in the world's largest wooden clear-span building.
- The Tillamook Rock Lighthouse, built in 1880, is currently used as the site of the final resting place of up to 467,000 cremated individuals.
- Oregon White Truffles are rated as “One of the most sensuous tasting truffles in the world”

Call for Recipes

NATS is putting together a new and improved cookbook. So, if you have some tasty truffle-and mushroom-related recipes you’d like to share, please send them in!

Sylvia is editing the cookbook, so please email those recipes to her at:

sylviahdonovan@yahoo.com.

Visit the NATS Website for a full-color version of *The Truffler*!
www.natruffling.org

What does Wikipedia say about Oregon Truffles?

Not much, according to this page:

http://en.wikipedia.org/wiki/Truffle_%28fungus%29

Wikipedia is a user supported and edited online encyclopedia. This means that you, as a user can also be a contributor. You can add to the wikipedia page, and flesh it out with more information about the wonderful qualities of genuine Oregon truffles.

Winter Calendar of Events

NATS Jan. Foray

Place: Paul Bishop's Tree Farm
Date/Time: Saturday, January 8, 2011 10:00 AM

From Hwy 213, about 4.5 miles south of Oregon City and 4.5 miles north of Mulino, turn east on Leland road at the traffic signal, go three blocks to a right turn on Dans Ave., go to the end and look for a driveway by the Jones Creek Tree Farm sign. This is Paul's driveway; drive on in and park toward the back.

NATS Jan. Meeting

Place: Corvallis Multicultural Literacy Center
Date/Time: Tuesday, Jan 11 7:30PM

The speaker will be Dr. Britt Bunyard, editor of FUNGI magazine. He will present "From maitake to morels, a regional look at the edible mushrooms of North America.

Oregon Truffle Festival

Place: Eugene Oregon
Time: Jan 28-30, 2001
FMI: http://www.oregontrufflefestival.com/

NATS Feb. Meeting

Place: Corvallis Multicultural Literacy Center
Time: Tue. Feb 8 7:30PM
Speaker: The February speaker will be Randy Molina, speaking on "Concepts of host specificity in ectomycorrhizal symbioses" . He will talk about aspects of the diversity of relationships between plants and fungi, and how our forests function as a consequence of those relationships in space and time, including lots of truffle examples. The meeting will be held at the Corvallis Multicutural Literacy Center at 128 SW 9th street in Corvallis (the big yellow house). There is parking on 9th street and in the dirt lot at the SW corner of 9th and Monroe.

NATS Feb. Foray

Place: Dunn Forest, off Tampico Road north of Corvallis.
Time: Sat. Feb. 5 10:00AM

Reminder: Please Remember to Renew Your Membership for 2011.

A membership renewal form can be found on the NATS website. Please renew now for 2011: a renewal form is included in this newsletter. The sooner the better!

Editor's Comments

Stay tuned for the spring newsletter, which is scheduled for mid-spring 2011. As always, please keep those newsletter submissions coming!

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, after, or in transit to/from a NATS event. Be responsible and use common sense.

By attending a NATS sponsored function, you are indicating that you read and understand the above disclaimer.

SHOO, ROO!—Animals and Truffles in Southeastern Australian Woodlands, Part 1

By Jim Trappe, NATS Science Advisor

Kangaroos on my truffle plots: what next? During the Australian winters (June through October) of 2008, 2009 and 2010, I've been evaluating the diversity and productivity of truffles in the Mulligans Flat and Goorooyarroo Nature Reserves in the Australian Capital Territory (ACT) in the continent's southeast. The truffle sampling is part of a large, study, "Active management and enhancement of endangered temperate woodlands." Participating organizations include the CSIRO (Commonwealth Scientific and Industrial Organization) Division of Sustainable Ecosystems, Australian National University, and ACT National Parks.

Beginning in the early 19th century, hundreds of millions of acres of Australian forests and woodlands have been cleared for pastures and croplands. The ecological consequences of this vast forest removal are now recognized as harmful, upsetting the continent's ecosystems and water balance, damaging or eliminating habitats of many native animals, increasing the incidence and severity of dust storms, and accelerating salinization of once productive soils. The study focuses on woodlands, i.e. dry, open stands of eucalypts and acacias, a kind of ecosystem that has been a particular target of clearing in the past.

Mulligans Flat and Goorooyarroo are on the north edge of Canberra, Australia's National Capital. They are gently hilly with a mosaic of relatively young eucalypt forest with occasional large, old trees, open woodland and savannah, and natural and cleared grasslands. Canberra suburbs are being built right up to the boundary. Both nature reserves are important parts of Canberra's Nature Park system and open to the public. They had been partially cleared, grazed and logged in private ownership for well more than a century prior to acquisition by the Australian Capital Territory. The woodland management experiment is designed to find ways to hasten their return to healthy ecosystems.

One indicator of their health would be robust populations of their native fauna. However, the introduction of foxes and domestic cats to Australia in the 19th century together with habitat degradation spelled doom to many of the small mammals, birds and reptiles native to the area. In 2009 the ACT completed a high-tech, electrified, predator-proof fence around most of Mulligans Flat to enclose about 700 hectares . A fox control program has been aggressively pursued and feral cats are eliminated when seen (few seem to have been in the area, perhaps because of stringent regulation of domestic cats in adjacent suburbs). ACT plans to reintroduce some once-native animals into the fenced area.

Three species will be the first introduced: the brown tree creeper, a bird that includes fungi in its diet, plus the Tasmanian bettong, a small member of the kangaroo family, and New Holland mouse, one of Australia's native true rodents. The bettong and mouse prefer truffles to most other foods. That's where I come in: the woodland management consortium invited me to assess the diversity and productivity of truffles in the nature reserves as a guide to what populations of truffle eaters might be sustainable. In 2008 and 2009 I sampled 109 plots of 500 sq. meters each in a time-constraint design: each sampling consisted of 50 person minutes of raking. All mushrooms on the plots were sampled as well. Because this kind of habitat had been only scantily explored for truffles before, species new to science were routinely uncovered. This is great fun! Fruit-bodies were counted and weighed for biomass estimates.

One of the many pleasures of the project has been to figuratively rub elbows with the large numbers of gray kangaroos resident in the area. They are generally shy, but sometimes they were reluctant to leave a shady plot where they were enjoying a roo nap in the afternoon. Australia is famed for the diversity of its snakes, but I have yet to see any, mostly because they tend to be shy and, it being winter, were torpid. Once in a while when raking for truffles I'd uncover a fringed lizard or a shingle-back lizard sleeping under the leaf litter. Birds there were aplenty, but not all were pleasant companions. The sulphur-crested cockatoos, large white parrots with bright yellow crests that congregate in big flocks, are the alarmists of the Australian bush, and when I'd approach a flock while making my rounds they would fill the air with such god-awful squawking and screeching that I'd have to put my hands over my ears.

The ongoing drought in southeastern Australia restricted the truffle fruiting season in 2008 and 2009. Nonetheless, truffle diversity was good. Some of the generic names would be familiar to NATS members: *Arcangeliella, Gymnomyces, Cystangium, Hysterangium, Hymenogaster, Thaxterogaster,* for example. Most, however, would sound novel: *Castoreum, Mesophellia, Hydnoplicata, Labyrinthomyces, Descomyces.* Stay tuned for Part 2!

Truffler Recipes

Babette's Cailles en Sarcophage

1 pound frozen puff pastry, defrosted 20 minutes at room temperature
4 quails, boned
1 1/2 teaspoons salt
Freshly ground white pepper to taste
12 ounces foie gras, of which is cut across in 8 slices, the rest cut into 2/3- inch cubes
1 1-ounce black truffle, sliced as thinly as possible, at least 12 slices
1 tablespoon unsalted butter
1 cup white wine
1/2 cup chicken stock
1/2 cup demi-glace (see note)
16 black figs, quartered

1. Preheat the oven to 400 degrees. Cut 4 5-inch rounds from the pastry. Make a 3-inch circle in the center of each round, being careful not to cut to the bottom of the dough. Bake on a parchment-lined baking sheet for 22 minutes, or until puffed and golden. Carefully lift out the 3-inch round from the center to create a nest with a top. Set aside to cool.
2. Raise the oven to 450 degrees. Season the inside of the quails with 1/2 teaspoon of salt and a few grinds of pepper. Lay 1 slice of foie gras in each quail cavity followed by 3 truffle slices and top with the remaining foie gras. Truss the quails. Season the outsides with 1/2 teaspoon of salt and a few grinds of pepper. Melt the butter in an ovenproof skillet over high heat. Sear the quails, 20 to 30 seconds per side. Place the pan in the oven and roast for 10 minutes. Turn the quails and roast for 5 minutes more. Remove and keep warm in a covered dish.
3. Place the skillet over high heat on top of the stove. Pour in the wine and bring to a boil, scraping up any browned bits on the bottom of the pan with a wooden spoon. Simmer for 1 minute. Pour in the stock and demi-glace and simmer for 3 minutes. Stir in the figs and simmer for 1 minute. Stir in the 1/4- inch cubes of foie gras and simmer, stirring, for 1 to 2 minutes, until the sauce is reduced to 2/3 cup. Season with 1/4 teaspoon of salt and pepper to taste.
4. To serve, put each quail in a pastry nest. Drizzle with sauce, top with the pastry round and surround with the figs. YIELD: 4 Servings

Autumn Truffled Potatoes

Serves 6 as a side dish

An attractive and delicious way to serve baked potatoes.

- 6 russet potatoes
- 1/2 to 1 ounce Oregon White truffles, grated
- 2 tablespoons heavy cream or half and half
- 2 tablespoons butter, melted
- Salt and pepper to taste

Peel the potatoes. Using a zester, "rib" the outside of each potato; cut the bottom so it stands upright. Wrap in aluminum foil and bake in a preheated 350º oven until tender, about 45 minutes. Unwrap and let stand until cool enough to handle.

Cut a cap from the top of the potatoes. Scoop out the pulp, leaving enough of a wall to support the stuffing. Mix the potato pulp with the grated truffles, cream, salt, and pepper. Place the mixture in a pastry bag and pipe it into the cavity of each potato shell. Replace the cap; brush each potato with butter.

Place on a baking sheet. Bake in a preheated 400º oven for 20 minutes or until heated through and golden brown.

--Sharon Polster, Edible Art

Truffle heaven in Umbria yields secrets from muddy lumps to epicurious delights

Associated Press

AMELIA, ITALY Zara made sure we had a sumptuous dinner that night. Zara the dog, that is.

The cocker spaniel was our purveyor extraordinaire of black truffles.

Have them shaven over your dinner with a silver slicer by a coat-tailed waiter at any Michelin-starred restaurant, and you are in for a very expensive meal. But Zara just dug them up from the dark damp earth, carried them gently in her mouth and dropped them in her master's hand whenever Fausto Ostili shouted "porta."

Then Zara became the unwitting victim of one of the most lopsided economic transactions in history. She delivered the prized "tartufo" that went for 600 euros a kilo (almost $1,000 for 2.2 lbs) in a nearby shop and all she got in return was the tiniest portion of an industrial hotdog sausage.

Yet her tail didn't stop wagging and Fausto's smile was one of deep-seated contentment during the two-hour hunt through the Mediterranean oak trees and mossy rocks dotting the verdant hills.

Happiness in Umbria is what looks at first like a clump of dirt and smells like wet earth.

And unlike that other luxurious gastronomic pleasure, foie gras, this one comes without a side order of guilt. Even better, it turns you into a vegetarian. If only momentarily.

In Umbria, all you need is fresh pasta, the virgin olive oil from the same hills that yield the truffles, some onion and garlic to glaze. Mix it all, sprinkle it with age-hardened Parmigiano-Reggiano and have some local dry white Orvieto ready to wash it down. It might not have been the ideal food-wine pairing, but "tartufo" was king that evening.

The experience takes some discipline though — including rising in time to hit the woods at 9 a.m. In summer, it is easy — it is even good to beat the midday heat. But when the hunt is on for the black Norcia truffle from December to March, getting out of bed requires more discipline. For white truffles, the most expensive and highly prized of Italy's truffles, the hunt takes place in northern Piedmont, September through December.

But even with a double dose of Lavazza espresso, there was no way to replicate the joy of two dogs jumping out of a four-wheel drive, the twisting of their truncated tails matching the pitch of their feverish breathing.

The dogs were sisters, but they could not have been more different. Zara did all the work, sniffing each patch of damp moss, scratching under stone after stone. Cita, meanwhile, specialized in playing with whatever scurried through the undergrowth.

Zara came up with her first black truffle right in between the farmhouse where we were spending our vacation and the adjacent swimming pool. Basically every morning we were treading on black gold.

A big swath of the farm was surrounded by wire fencing to keep out boar and other creatures that know a good thing when they smell it. At one point, Fausto also found a porcupine quill under a tree next to a freshly dug hole, another sign truffles are special to man and beast alike.

Still, there were plenty left. Now, what to do with a black lump, sticky with mud?

A toothbrush was the answer. We went up to the local alimentari to buy one so we wouldn't have to use the ones we brought with us. Before cleaning the truffles, we briefly put them in the fridge. Anyone doubting their origins only needed to open the fridge door half an hour later. That divine smell of wet earth immediately wafted right into your nostrils.

Since we didn't have a truffle mandolin, it came down to slicing it as thin as possible with a mere potato knife. When the shavings on top of the steaming pasta gave dinner its luxurious lustre, anticipation was high.

My wife Reine's version was excellent — yet something intangible was missing. It didn't quite match those memories of the truffles we had the year before at Dimicla, a humble pizzeria in Tuscany's Loro Ciuffenna, where the smell under the awning every balmy night immediately drew you toward that part of the menu.

It didn't dampen the magic of the day: Something straight from nature, wild from a dog's mouth, highlighted a dinner at night. Still, over the next few days, the question lingered — why didn't we get that full opulence a truffle deserves?

With all the riches in and around Umbria, it was easy enough to get distracted. Rome, with over two millennia of history, was a short day-trip away. Orvieto, Cortona, Perugia with its medieval relics were also within striking distance.

The question came back one night illuminated by a full moon over Lago Trasimeno, when we were having one of the best dinners of our vacation in the eagle's nest of Castiglione del Lago. At the Ristorante Monna Lisa, our daughter Clara had picked a cheese-stuffed ravioli topped with "tartufo" and, suddenly, the absolutely right smell hit us.

This time we had to know. We called over owner Maurizio Bracci.

Yes, Maurizio said, we were right not to cook the truffles from the start, but no, just putting them on top was not good enough either.

"Saltare. Saltare," he said of the Italian word that roughly translates to leap and jump. Realizing he faced some linguistically challenged tourists, he put his hands together and started swaying like you do with a pan carefully flipping pancakes. That way pasta and tartufo mix perfectly.

"The pasta has to get drunk with the tartufo," he said, explaining the process should not take more than 30 seconds and not involve additional heat.

"The tartufo has to feel the heat. Just a little heat."

Point taken. On to our next quandary: Such was the excess of the hunt, that we were not going to eat them all but wanted to take some home up north.

Deep freezing seemed too cruel a fate for such a noble tuber and too complicated to take home on a 1,600-kilometre trip. Olive oil provided the solution. Reine shaved the truffles thin, put them in glass and filled it up with fine oil to the rim. Close it up with a lid, look at it, and you think you caught the Italian sun in a jar.

Now that little bit of summer warmth and memories stands in our kitchen cabinet, waiting for the dead of winter. We hope to use it for a risotto with duck's breast or a mix with dried funghi porcini we had brought from a previous trip.

And if it doesn't work out, we'll have to get back. Perhaps in time for the NeroNorcia truffle festival in the Umbrian medieval town of Norcia, traditionally held the last weekend of February and early March.

MINUTES OF THE NORTH AMERICAN TRUFFLING SOCIETY DECEMBER 4, 2010

On December 4, 2010, the North American Truffling Society held their annual potluck at the Corvallis Senior Center.

The business meeting was brought to order by Marilyn Hinds, President. She welcomed all those who were in attendance. After that she announced that anyone who wanted to re-new or join NATS could do that at the membership table. NATS t-shirts, sweatshirts and books were out for sale as well. A raffle, and auction of seasonal centerpiece and mushroom prints by the North Cascades National Park artist-in-residence Angela Neely (donated by Jim Trappe) was held to raise funds for the Pavelek scholarship fund.

Minutes from the November meeting were on the tables for review, it was motioned and seconded to accept them as is, and those in attendance voted to accept them. Zelda Carter, Treasurer, gave the financial report. Paper copies were available for review. The NATS checking account beginning balance on January 1, 2010 was $4100.45 and ending balance as of December 4, 2010 was $4,149.19.

Marilyn presented the annual report:

In 2010 NATS held; 8 **forays,** 8 **meetings** with speakers and 4 **informational tables at**: the Oregon Truffle Festival, OMS, Yachats and Mt Pisgah Mushroom shows. She thanked the volunteers who manned the booth: Adrian Beyerle, Sylvia Donovan, Mysti Weber, Betty Orner, Helen Yahuki, Sarah Uebel, Jonathan Evenboer, Zelda Carter, Pat Rawlinson, and Christy Tye. Marilyn also extended a special thank you to Mysti Weber for her additional work in preparing Truffled Cream Cheese for the shows.

Donations:
In 2009 NATS gave a $500 grant to the Oregon State University Herbarium Mycological Collections. That grant was designated to go towards funding work-study students to help with accessions and the database of the collections. The work-study program matched those funds 3 to 1, so the small grant provided a lot of leverage to get work done. During the latter half of the 2009-10 academic year, the team of students working on organizing and cataloging fungal specimens sorted and entered roughly 10,000 specimens into the storage cabinets and accessioned over 1,500 that were new to the Herbarium catalogue. This year we gave $1,000.

New activities that we held in 2010:

- Sustainable harvesting paper
- To promote sustainable harvesting, we have been working with Jean Rand, dog trainer from Eugene, to offered Truffle Dog Training Classes
- Held two Basic Truffle Dog Training classes
- Next Basic class sometime in late February and an advanced class sometime after that.
- We have adjusted our fee structure to be more in line with “dog training classes”. Facts: FEE: Basic:$200 / $125, Advanced: $225 / $150. Jean: $600 per class + 50% of revenue after expenses.
- Thanks to Dan Luoma, we have cut expenses by holding the class at the Forestry Club building at Peavey Arboretum,.

Marilyn shared that Paul Bishop had been re-diagnosed with cancer. Marilyn sent him a card and the Trees, Truffles and Beasts book on behalf of the group. Marilyn has his address for those who would like to send him a card. She acknowledged him for his generosity in hosting forays at his tree farm for several years.

Elections:
Sarah Uebel resigned from being the Exhibit Chair and Loren McMahill resigned as NATS librarian. Jonathan Evenboer volunteered and was nominated to fill both positions for 2011. For all of the rest of the board positions the people presently serving as officers in 2010 stayed in their positions. At this time Marilyn asked for the election of officers. Pat Rawlinson motioned to accept the slate of officers for 2011 and Zelda Carter seconded. Those members in attendance unanimously elected the 2011 board.

Jim Trappe announced that $1500 will be given out this year to the Pavelek Scholarship recipient, Alija Bajro Mujic. Alija is a doctorate student, Mycological Collections Curator in Botany and Plant Pathology Department at Oregon State University.

Marilyn told those in attendance to take a brief break and make their final bids on the centerpieces which benefit the Pavelek Scholarship Fund.

Todd Elliott presented "Insect Fungal Pathogens, Where Insects and Fungi Meet". Todd spoke about the little known world of fungi that parasitize insects and their associations and relevance to the environment and human culture. His talk was illustrated with his prize winning photos of these fascinating and bizarre fungi from various parts of world.

Radioactive boars on the rise in Germany

by VERENA SCHMITT-ROSCHMANN, Associated Press Writer

BERLIN (AP) — It was a big shot. A big hog. And a big disappointment. When Georg van Bebber hauled back his wild boar from Ebersberg forest near Munich after a day of hunting, he was exhilarated about his impressive prey. But before he could take it home, a Geiger counter showed a problem: The boar's meat was radioactive to an extent considered potentially dangerous for consumption. It needed to be thrown out and burnt. "I really would have liked to have this boar," van Bebber said when he recounted the incident in a telephone interview from Bavaria.

Almost a quarter century after the 1986 Chernobyl nuclear meltdown in Ukraine, its fallout is still a hot topic in some German regions, where thousands of boars shot by hunters still turn up with excessive levels of radioactivity. In fact, the numbers are higher than ever before.

The total compensation the German government paid last year for the discarded contaminated meat shot up to a record sum of euro425,000 (about $558,000), from only about euro25,000 ten years ago, according to the Federal Environment Ministry in Berlin.

"The reason is that there are more and more boars in Germany, and more are being shot and hunted, that is why more contaminated meat turns up," spokesman Thomas Hagbeck told The Associated Press.

"But this also shows how long radioactive fallout remains a problem in the environment," he said. Boars are among the species most susceptible to long-term consequences of the nuclear catastrophe 24 years ago. Unlike other wild game, boars often feed on mushrooms and truffles which tend to store radioactivity and they plow through the contaminated soil with their snouts, experts say.

However, boars are actually the beneficiaries of another ecological crisis — climate change. Central Europe is turning into a land of plenty for the animals, as warmer weather causes beech and oak trees to overproduce seeds and farmers to grow more crops the boars like to feast on such as corn or rape, said Torsten Reinwald of the German Hunting Federation. "The number of boars in Germany has quadrupled or quintupled over the last years, as has the number of boars shot," Reinwald said, adding that other countries like France and Poland are seeing a similar proliferation of boars.

Last season, hunters brought home a record 640,000, and following that trend, the amount of contaminated meat also went off the charts. Judging from the total compensation paid out in 2009, about 2,000 to 4,000 boars were found to have levels above the 600 becquerel of radioactivity per kilogram allowed for human consumption.

That compares to about 125 to 250 a decade ago. "The impact of the Chernobyl fallout in Germany, in general, has decreased," said Florian Emrich, spokesman of the Federal Office for Radiation Protection. For example, radiation has ceased to be a problem on fields cultivated with commercial crops, he said.

But forest soil in specific regions that were hit hardest after Chernobyl — parts of Bavaria and Baden-Wuerttemberg in southern Germany — still harbors high amounts of radioactive Cesium-137 which has a half life of roughly 30 years, Emrich said.

In fact, the Cesium from the Chernobyl fallout is moving further into the ground and has now reached exactly the layer where the boars' favorite truffles grow, the Hunting Association's Reinwald said. Therefore, the season for such truffles — a variety not eaten by humans — usually means a rising number of radioactive boars.

Experts so far have no evidence that the animals suffer from the relatively low levels of radioactivity accumulating in their bodies. Still authorities are striving to make sure no tainted meat enters the human food chain.

Hunters and authorities go out of their way assuring consumers that none of the problematic meat will end up on their tables. "We can guarantee that there is no contaminated meat on the market," said Ulrich Baade, spokesman for the regional hunters association in Baden-Wuerttemberg. "In problematic regions, every single hunted boar will be tested for radioactivity before being sold."

Bavaria and Baden-Wuerttemberg have dozens of testing stations, many of which are run by hunters, and the compensation promised by the German Atomic Energy Law gives them a financial incentive to hand over radioactive meat.

"For a young boar you get 100 Euros from the government, for a larger boar 200," Guenther Baumer, a veterinarian running a testing station in Bavaria, said. "That fully covers the damage." In fact, it might sometimes be even more lucrative to sell to the state than to commercial outlets. Hunter van Bebber said that with the gigantic numbers of boars pushing onto the market prices sometimes hit lows of only euro1 per kilogram (about $1.30 for 2.2 pounds) while probably averaging at around euro2.50. For an average 35 kilograms of meat per animal that would mean only about euro90.

Therefore, not everybody is as unhappy as van Bebber. "The disappointment (when radioactivity is found in meat) is usually rather limited," said vet Baumer.

The Associated Press

A Collage of Oregon Truffle Pictures

By Tobiah Orin [Ed note: Tobiah is a Chef/Photographer based in Eugene, Oregon) (http://www.facebook.com/pages/Tobiah-Orin-Photography/128214617239930)

NATS Invites You to Renew Your Membership for 2011!

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

You can help ensure that 2011 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):_____

Would you like to receive your NATS News letter electronically? yes____

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+.

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Location_____
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T/R/S or
County_____ 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_____
_____
T/R/S or
County_____ Lat/Long_____

Elev_____ Aspect: N NE E SE S SW W NW

Growing On/In: Moss Mineral Rotten Needle
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_____