



## A Legacy of Fungi Diversity: Mushroom Picking and Surveying Past, Present, and Future at JDSF

In last month's JDSF Newsletter, [we looked at the Annual Mushroom Foray at the forest](#). In This month's edition we take a deeper dive into the history and future of mushroom picking and surveying at JDSF and the important role it plays in the forest's ecology, economy, and culture.

### The Past

Here's some interesting historical perspective from the 1980s. According to the 1986 JDSF Annual Report, the "winter of 1986/87 was the third winter during which large numbers of commercial mushroom pickers came to the forest to pick mushrooms...people have added significantly to the patrol workload by causing several problems involving (1) staying in campgrounds longer than the 2-week maximum, (2) causing road damage, (3) camping and picking mushrooms without a permit, and (4) leaving garbage cans full of garbage



*A group of Fly Agaric mushrooms (Amanita muscaria).*



*A cluster of Prince mushrooms (Agaricus augustus) fruiting on the roadside.*

during what is normally a slow period. The new mushroom picking permit system (Class 1) implemented last winter (1985/86) has proven to be successful in getting some control of the situation, but further refinements in our procedures are necessary."

In the March 1988 JDSF Newsletter, an article by JDSF Manager Forest Tilley provided some background on the refining of the permitting process: "Commercial mushroom picking on Jackson Demonstration State Forest has been regulated through a permit process since 1985. For the first three years, commercial

permits were sold on a by-the-pound basis to the purchasers, who then issued copies to their pickers. Commercial permits this year are being sold to individual pickers on an annual basis.”

The 1990s saw JDSF continuing to refine the permit process, working to educate pickers on the dangers of consuming mushrooms, while emphasizing personal accountability to keeping the forest from getting damaged or trashed unnecessarily. A 1992 JDSF Newsletter article mentions the issuing of personal permits, which at that time were free and good for one gallon/day, with the understanding that the mushrooms were for personal consumption only and not to be sold. This is also the time in which there were so few permits issued that JDSF could keep track of them on index cards. The mushroom community gave feedback when the forest experimented with dates of issue/expiration. They said starting January 1 with an expiration date of December 31<sup>st</sup> cut the mushroom season in half, creating a hassle to have to wait for another one when yellow foot and hedgehog were popping up like crazy! JDSF staff agreed and migrated the dates to align with the fiscal year, July 1 to June 30 thus allowing for continuous picking throughout the season.



*A close-up of a California King Bolete.*

### The Present

Fast forward to July 1, 2014. That’s the year in which JDSF streamlined the mushroom permit process into what it is today, when personal mushroom permits were eliminated in favor of making all individual mushroom permits commercial permits. In doing so, the fee for a commercial permit was lowered from \$100 to \$20 to make it more affordable, while also allowing for unlimited collection of mushrooms as opposed to the one gallon/day limit that was imposed on a personal permit. Unfortunately, personal permits were issued with the requirement that individuals would not exceed the imposed limitation or sell the mushrooms they had gathered, and both of those restrictions were being routinely violated. Eliminating the personal gathering permit led to increased permit compliance, which in turn improves our ability to manage JDSF’s natural resources.

One of the major reasons JDSF requires [permits](#) is education. Part of that education is the proper use of the forest, i.e., no digging (or leaf blowers, or rakes), but also to remind permit holders that mushroom hunting is not a no-risk occupation. Mushrooms can be poisonous, to people and to pets. The North American Mycological Association (NAMA) has some fantastic resources on their website, including an incident reporting feature and [a free poisonous mushrooms poster](#). Utilize caution, never eat anything you can’t identify! As Trevor V. Suslow with the Department of Plant Sciences at UC Davis said, [“There are old mushroom hunters, and bold mushroom hunters, but there are no old, bold mushroom hunters.”](#)

Another fantastic internet resource for California fungi is [MykoWeb](#), which has species accounts, photographs, dichotomous keys for a variety of fungal groups, and other information for the professional as well as the aspiring mycologist.

Ready for some statistics? 256 mushroom permits were issued in calendar year 2013 at JDSF. A decade later, and 1,016 mushroom permits were already issued in 2023 as of November 3, 2023! Why such a big increase in numbers? Well, it's complicated. First, JDSF has been good about educating the public about the need for a permit, and the outreach staff have done with various fungi clubs and the local Mendocino Coast Mushroom Club has borne fruit. Second, early rains. Third, COVID, which caused a large uptick in people looking for outdoor activities, and JDSF has many new devotees collecting fungi.

### **The Future**

What does the future hold for mushroom permits on JDSF? One possibility is working with other Demonstration Forests who have mushroom permit programs to explore the possibility of offering permits online, but that's not quite ready to be rolled out yet. With the exponential growth in mushroom gathering on JDSF, staff will also be looking at what the landscape can support and whether we need to limit numbers to ensure healthy populations. Conversely, research could show that mushrooming is sustainable with a few changes like outlawing plastic buckets and instead requiring net bags for collecting so that spore spreads. That's the fun(gi) of being a research and demonstration forest, getting the opportunity to be on the ground floor of studying the sustainability of harvesting mushrooms.

Are you a mycologist or mycology student with a research project you want to conduct on JDSF? Email us [JDSF@fire.ca.gov](mailto:JDSF@fire.ca.gov) with the details.



*JDSF led a subgroup of mycophiles into the woods in search of a diverse bounty of fungi during the Fungus Federation of Santa Cruz Albion II Foray in January 2023*