Amateur Mycology Communities

Shane Araujo, Class of 2023

Mycology, the study of fungi, has grown to become one of the largest amateur scientific communities where "amateurs" often possess more knowledge and experience with mushrooms than professional scientists. Amateur mycology is important because it resists categorization into purely scientific, traditional, or humanistic practices, making it poorly understood by the general public. The work of the amateur gains power as they combine scientific, traditional, and interpretive practices that many scientific communities fail to incorporate. Their familiarity with and wisdom of the land contributes to their knowledge towards fungi, connectivity, and community. Through my research with the New York Mycological Society, I explore the expansive knowledge amateur mycologists possess and the ways in which this resistance to categorization has highlighted the importance of community science.

Through interviews, participant observation, and literature reviews, it became evident that mushrooms possess some of the most unique and powerful abilities to potentially counter ecological crises. Despite difficulties fungi present to professional scientists, amateur mycology communities have pioneered the field of mycology purely through their passion for fungi. Mushrooms present difficulties within the lab, and scientific inquiry towards fungi is often limited to the field. According to the president of the NYMS, only 5% of fungal species have been discovered. Through her experiences with the organization, which is completely volunteer-run, the NYMS has contributed new discoveries to the field through amateur contributions and knowledge of New York ecology. Their familiarity with the species present in our environment grants them the ability to distinguish and identify most fungi. Citizen scientists within the organization often conduct their own genetic testing at home to contribute to fungal DNA databases.

Foraging communities also strengthened over the course of the pandemic. Many participants recall first becoming introduced to mushrooms through popular film and literature, and the increase in leisure time, for some over the height of the pandemic, allowed them to explore mycology and its ability to often grapple and deal with toxicities in unique ways. Many people state that the pandemic hindered their ability to be involved with the NYMS, but platforms like Zoom allowed them to maintain some sense of community through ID events and lectures. Besides their intellectual contributions to the field, spending time with mycologists highlighted the diverse nature of the group and the interdisciplinary approaches each of them bring to the field. Each member had unique reasons to join the group. Mycology attracts a wide range of members from computer scientists, hotel managers, accountants, senior citizens, consultants, herbalists, and professors, to name a few.

The most clear characteristic of the community is their significant role as citizen scientists. Their optimism and connection to the land allows the community to focus heavily on sharing knowledge that otherwise is not accessible to the general public as well as focusing on strengthening their identification skills. Over the pandemic, many expert mycologists passed away and therefore carrying on their legacy and increasing visibility and outreach has become increasingly important. Elevating the voices of those in this community is important if we want to expand our knowledge on fungi and the ways they can contribute to bigger-picture discussions involving bioremediation and our ecological crisis.

Faculty advisor: Shreyas Sreenath
Funded by the Hughes Family Summer Research Fellowship