Regulation and Commercialization of Mycological Resources in the USA

David Pilz June 12, 2011

International Conference on Silvicultural Management for Forests Producers of Edible Mushrooms

FINAL SEMINAR OF THE EUROPEAN PROJECT www.micosylva.com

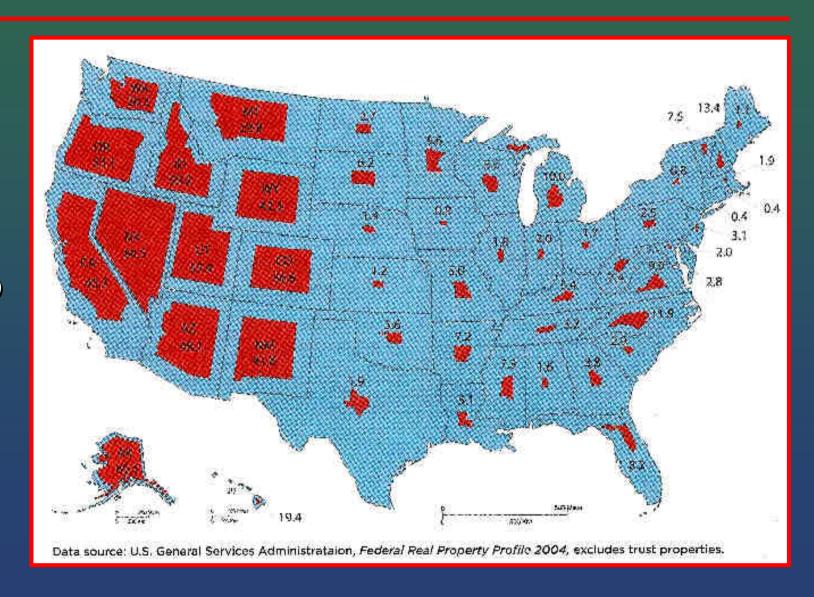
Consejería de Medio Ambiente de la Junta de Castilla y León, Valladolid, Spain

Outline of Presentation

- 1. Context
 - a. Land Ownership Patterns
 - b. Mushroom Markets
- 2. Mushroom Popularity
- 3. Commercialization
 - a. Eastern US
 - b. Western International competition
 - c. Western New demand and markets
 - d. Mycotourism 2 examples
 - e. Cultivation
- 4. Regulations
 - a. Federal Harvesting
 - b. State Commerce
- 5. Public/Private Partnerships
- 6. Conclusions European Models

Context of Commercial Harvesting and Regulation in the US Eastern versus Western Land Ownership Patterns

Percent of Federal Land Ownership (in Red) by State



Context of Commercial Harvesting and Regulation in the US Eastern versus Western Mushroom Markets

Mostly morels in the East

Many commercial species in the West



Trends in Mushroom Popularity in the US

- Anglo-Saxon immigrants mycophobic
- Slavic, Russian, Asian, African and Mexican immigrants mycophilic
- Cultural traditions mixed over multiple generations
- Growing interest in culinary use of mushrooms
- Growing interest in harvesting wild mushrooms

North American Mycological Association www.namyco.org



74 Affiliated Mushroom Clubs and Societies in the US

Hundreds of Mushroom Festivals (Some for more than 50 years.)

Trends in Commercialization Eastern morels and cultivated truffles





Amish Farmer's Market in Ohio
Photo by Edsel L.

First commercial scale truffle production in the United States



www.tennesseetruflle.com



East Asia

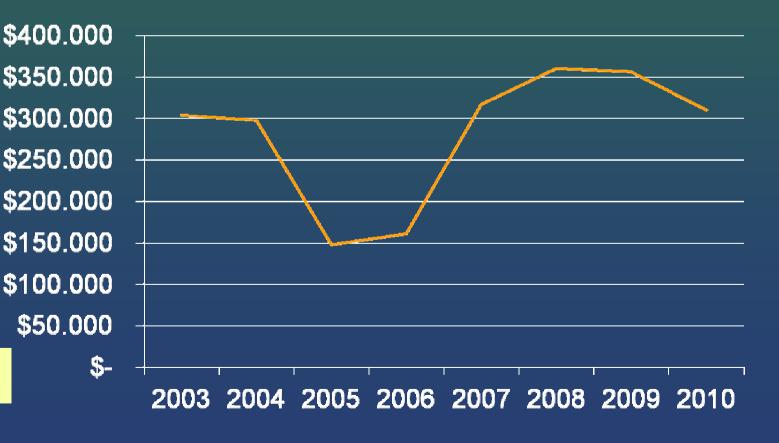
Trends in Commercialization Western – International competition

Commercial Mushroom Permit Sales US Forest Service, Oregon & Washington

Himalayas

Central Asia

Eastern Europe



Trends in Commercialization Western - New demand and markets

- 1. Mushroom Festivals
- 2. Farmer's Markets
- 3. Food Cooperatives
- 4. Restaurants
- 5. Specialty Food Markets
- 6. Local Grocery Stores
- 7. National Supermarkets
- 8. McDonalds?

- Value-Added
- **Organic**
- Family Farms
- Sustainable
- Healthy
- Gourmet
- Wild





MycoLogical

www.mycological.com



Well, maybe not McDonalds, but.....



Trends in Commercialization Myco-Tourism

Chris Matherly's Morel Mushroom Club Forays





More than 40 Forays since 2004





Trends in Commercialization Tibetan Myco-Tourism (but based in Washington)



Tricholoma matsutake



www.mushroaming.com



Caterpillar Fungus



Cordyceps sinensis

Trends in Commercialization Truffle Cultivation



NEW WORLD TRUFFIERES, INC.

'Truffle Cultivation Specialists'

www.truffletree.com www.oregontrufflefestival.com www.oregontruffles.org



Regulations Federal Harvesting Permits



- Each jurisdiction a separate permit
- Variable specifications
- Personal use free but very limited quantities
- Commercial permits allow unlimited quantities (estimated 10% of value)
- Cumbersome to obtain permits

Regulations States – Transportation & Commerce



Washington State Legislature

OregonLaws.org

Permits required from landowners to transport and sell wild mushrooms

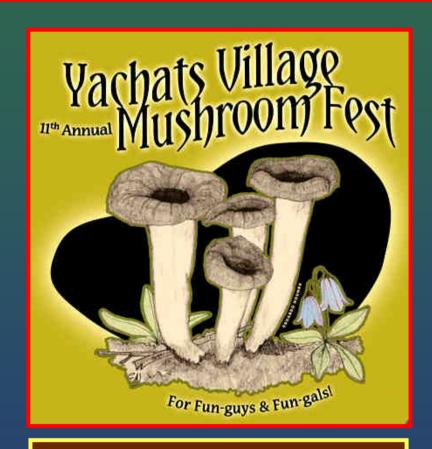
§ 2175. Maine Wild Mushroom Harvesting Certification Program

Harvesting and Selling Wild Mushrooms in Minnesota

Verification of species by trained individual

Public – Private Partnerships

- Very Few Examples
- Mostly towns and cities
- Rarely an educational component
- None focused on managing forests for fungi



Town on Oregon Coast Lecture series and guided walks

Conclusions — Integrated Conservation/Development Models



...contributing to the promotion in Europe of a multifunctional and sustainable forest management integrating and enhancing ecological and socioeconomic functions of edible wild mushrooms



CUSSTA - Plan for the Conservation and Sustainable Use of Wild Mushrooms and Truffles in Andalusia

UNESCO and IUCN Myco-Parks — Declaration of Córdoba

Conclusions – Integrated Conservation/Development Models

The Next Challenge:

Developing *financially self-sustaining* integrated models of fungal conservation, research, education, management, promotion, and economic development.

