

Waldron, Harvey Macy, Jr.

1969. Biology of Polyporus volvatus. M.S. Thesis. Washington State University, Pullman.

Reference Location:

Science Library, WSU P4 1969 W3  
Washington State University

Experimental Forest Unit:

Big Meadow Creek

Summary:

The biology of Polyporus volvatus, as well as the role of insects in its dissemination, was investigated in culture and under natural conditions.

Plesioces cribrum (Cisidae), consistently present in sporophores of P. volvatus regardless of the host tree species, is a prime suspect as the major vector of P. volvatus. Ips pini and Scolytus ventralis are likely vectors of P. volvatus; species of the Buprestidae and Cerambycidae are not considered vectors.

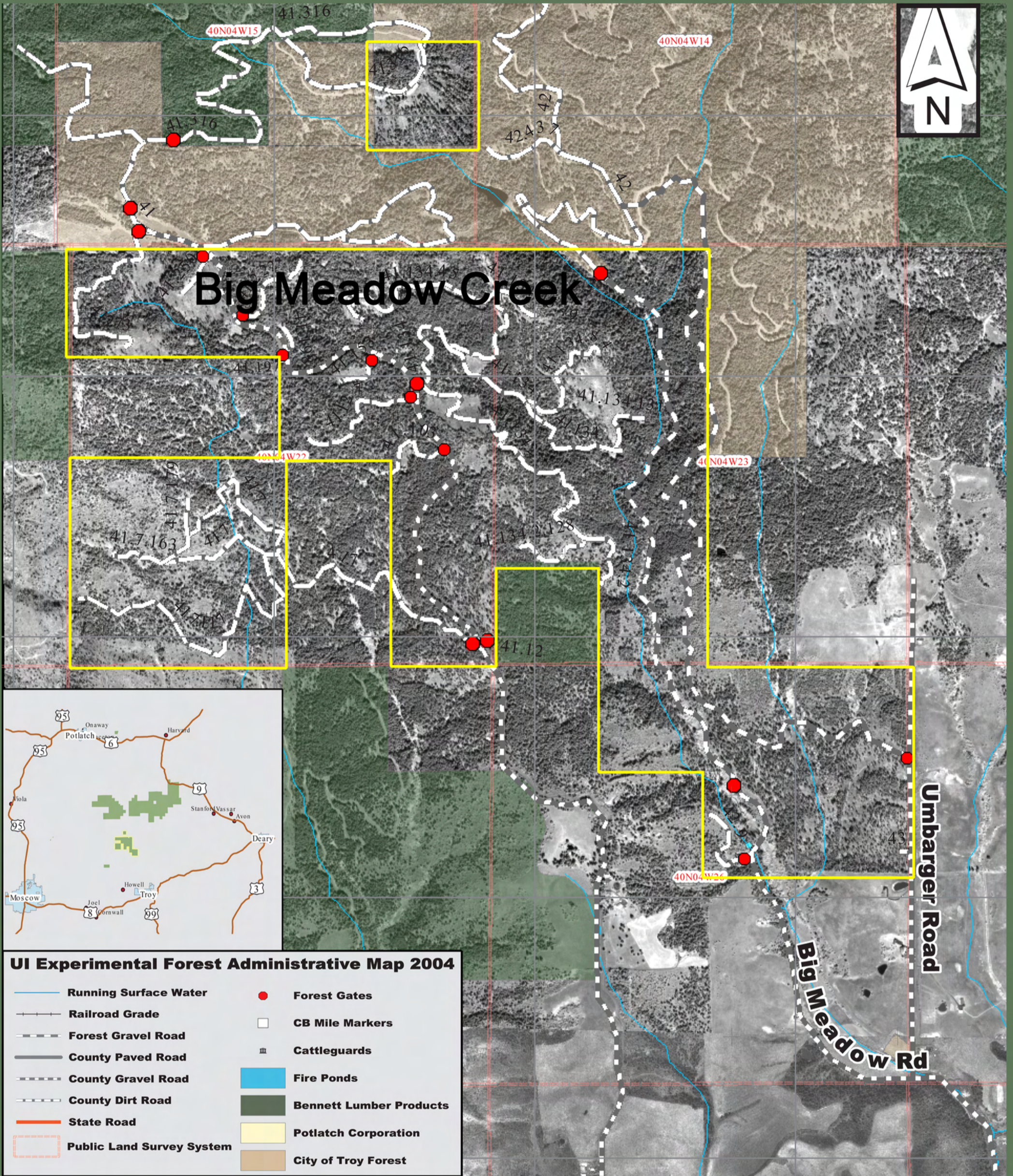
Cardinal temperatures for cultures of P. volvatus initiated with spore germlings were lower than those for cultures initiated with mycelium. These results suggest that metabolic changes occur between the time of spore germination and the establishment of extensive mycelium which permit maximum growth at low temperature during colony initiation (in the spring) and at higher temperatures after colony establishment (in the summer).

Spores of P. volvatus are capable of surviving for 6 months or more under proper conditions of moisture and temperature and subsequently give high germination.

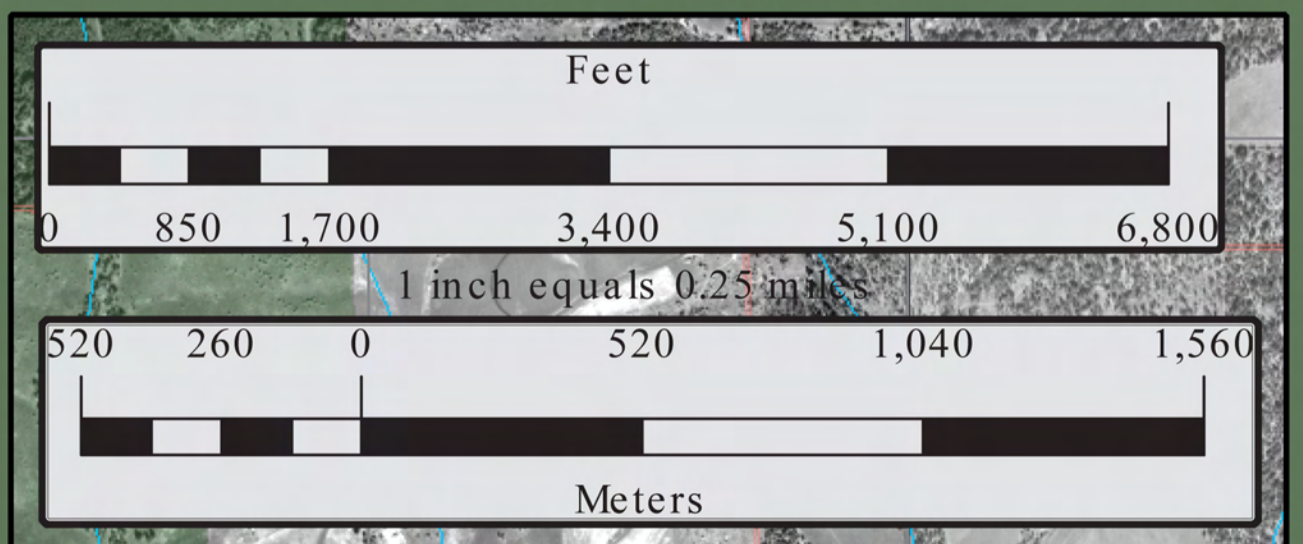
Light is required for sporophore initiation but not for continued growth and development. Development, numbers, and growth rate of sporophores are dependent on available moisture and suitable temperature.

Basidiospore production is correlated with sporophore size and growth rate; basidia mature only after the fruiting body exceeds 10 mm in length.

Development of the ostiole in the volva of a sporophore is natural and does not require insect activity.



# Big Meadow Creek Unit





## Location of Complete Research:

Author & Title: Waldron, Harvey Macy, Jr.;  
Biology of Polyporus Volvatus (1969)

Washington State University

Call Number- **WSU P4 1969 W3**

Other Sources: [http://griffin.wsu.edu/search~/I?  
SEARCH=wsu+p4+1969+w3](http://griffin.wsu.edu/search~/I?SEARCH=wsu+p4+1969+w3)