Out on a limb?

Managing for Mushrooms and Timber

Certification: International Perspectives • Accredited Forestry Schools
THAT'S WHY THEY REALLY GO FOR FAST-GROWING SHORT-ROTATION HARDWOODS.

Now there are two herbicides that let you harvest and profit from your short-rotation woody crops in as few as 6 to 10 years—or only about 1 dog year.

SQUADRON® and SCEPTER® 70 DG herbicides control competitive vegetation so your sensitive young trees can grow to unprecedented sizes.

Before bud break, use SQUADRON. Before or after bud break, use SCEPTER 70 DG—the effective new herbicide labeled for post-bud break use in hybrid poplars and eastern cottonwoods.

You'll minimize your cultivating and hand weeding and won't have to worry about crop-tree tolerance.

So get a leg up on the competition with these breakthrough solutions from American Cyanamid. For more information and a jumbo poster of this ad, call 800-545-9525, ext P2120.

**Squadron**

**SCEPTER® 70 DG**

JUMP START YOUR HARDWOODS.
Mushrooms and Timber: Managing Commercial Harvesting in the Oregon Cascades
David Pilz, Jerry Smith, Michael P. Amaranthus, Susan Alexander, Randy Molina, and Daniel Luoma

Management of American matsutake harvests on national forest lands in Oregon exemplifies ecosystem management by integrating forestry, monitoring, research, economics, sociology, and public education.

Wood Rats and Northern Spotted Owls in the Coastal Redwoods
Gregory A. Giusti

Silvicultural activities that change the habitat structure of coastal redwood forests affect dusky-footed wood rat populations, thereby influencing damage factors and prey relationships.

Gypchek: Biological Insecticide for the Gypsy Moth
John D. Podgwaite

Gypchek, a viral pesticide developed by the Forest Service for gypsy moths, is not in commercial production and its availability is limited. Because the market for it and similar biopesticides is not large or stable enough to attract industry, a federal R&D center may be needed.

The Evolving Use of Insecticides in Gypsy Moth Management
Andrew Liebhold and Michael McManus

Both the insecticides used against the gypsy moth and the objectives they serve have evolved through the 20th century, yet the pest continues to expand its range in the United States.
25 Forest Certification: The View from Europe’s NIPFs
Tommy Lindström, Eric Hansen, and Heikki Juslin
European forest landowners share a common attitude to certification programs—participation is currently attractive to only a few. The European preferences form a reference point for the certification discussion in the United States.

32 The Certification Model for Forestry in Bolivia
John B. Wittler and Daniel W. Nash
With nearly 450,000 hectares under certified management, and another 380,000 hectares evaluated and awaiting final certification, Bolivians hope to penetrate green markets in North America.

Pest management with targeted biological controls has become rather more sophisticated since c. 1895, when workers scrabbled into the limbs of an elm in Malden, Massachusetts, to remove gypsy moth egg masses. The old photo comes from The Gypsy Moth, by E.H. Forbush and C.H. Fernald (1896). In this issue of the Journal Liebold and McManus recount the history of gypsy moth insecticides, and Podgwaite considers the future of one safe, useful biopesticide for which the private sector sees little market potential.

In the Pacific Northwest there is a market for mushrooms—a large and lucrative market. Pilz et al. describe how Forest Service managers are learning more about this forest resource so that both the matsutake and the timber can be harvested sustainably.
LI-COR’s Photosynthesis Solution...
Instrument Flexibility You Never Thought Possible.

Elegant Control
A photosynthesis system must have the flexibility to control what you want, where you want, and LI-COR’s photosynthesis solution provides environmental control like no other system. The LI-6400 allows the control of light, CO$_2$, humidity and temperature through one single console and sensor head. You decide the conditions, and the instrument controls these conditions, measurement after measurement. With the LI-6400, total environmental control is at the tips of your fingers - or toes!

Agile Maneuvering
The LI-6400 software gives you maximum flexibility in operating and computing. Default computations, which include common gas exchange quantities, are modified or extended by simply pressing a few keys. Automatic operation is done through AutoPrograms, which generate response curves automatically and unattended. You may use the AutoPrograms provided, or write your own. You can also create AutoPrograms by selecting from a pre-defined list of actions.

Graceful Presentation
A photosynthesis system must give you flexibility in displaying your research data, and the LI-6400 has superior graphical capabilities. Real time displays show up to 12 variables at one time. Multiple variables can be tracked in real time, allowing you to see response curves as they develop, or monitor trends. There is even a versatile, built-in package for plotting data after it is logged. This allows you to analyze and curve fit your results - before you download to a computer.

Stretching the Limits in Available Accessories
The LI-6400 has a wide variety of chambers and accessories to help accommodate your research needs. These chambers and accessories include: Needle Chamber, Conifer Chamber, Narrow Leaf Chamber, Clear Chamber Bottom, LED Light Source, Soil CO$_2$ Flux Chamber, Sample Cell Outlet Manifold, and several fluorometer adapter chambers, including the PAM2000 Adapter, MiniPAM Adapter, and the Opti-Sciences Adapter Chamber.

Call Now For More Information on the LI-6400 Portable Photosynthesis System
1-888-645-6710

LI-COR®
Phone: 402-467-3576, Fax: 402-467-2819
E-mail: envsales@env.licor.com
Internet: http://www.licor.com
How SECURE Is Your Family’s Future?

That’s where LifeSource comes in.

It’s from The SAF Insurance Trust so you know it’s quality term life insurance. And it’s group coverage so you know it’s affordable. Add in the Plan’s history of returning dividends—although not guaranteed, they’ve averaged 35% of annual premium each of the last three years—and you can be sure you’re getting a Plan specially designed to protect your family’s financial security, at a cost you can live with.

As a member of SAF, you can apply for up to $180,000 in coverage, with $24,000 in benefits guaranteed with no Evidence of Insurability requirements (as long as you are a member of SAF, under age 55, working full-time and are not currently insured in the Plan). And, your spouse is also eligible for coverage for one-half of your selected benefit, up to $60,000.

LifeSource is provided through:
The Society of American Foresters
Group Insurance Trust
5400 Grosvenor Lane • Bethesda, MD 20814-2198

LifeSource is underwritten by:

Call Toll-Free 1-800-865-2324, Or Complete And Mail The Coupon Below For Your Free LifeSource Information Packet.


Please check if applicable:
☐ Student
☐ I Am Also Interested in the SAF Disability Income Plan

PLEASE PRINT

Name ____________________________________________
SAF Member ID # ________________________________
Address _________________________________________
City __________________ State _______ Zip __________

Mail to: LifeSource Administrator
SAF Group Insurance Plans
5272 River Road, Suite 700 • Bethesda, MD 20816-1405