

Forest Growth and Yield Models:

What Makes Them
Work and What
Makes Them Fail?



April 13 –14, 2015
DoubleTree Lloyd Center • Portland, Oregon

Forest Growth and Yield Models: What Makes Them Work and What Makes Them Fail?

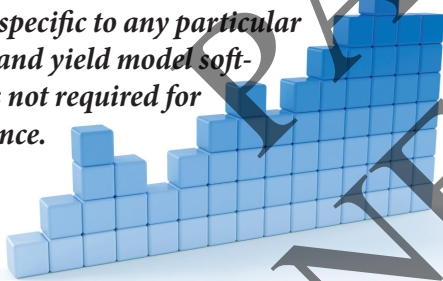
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Workshop Agenda

How to be a competent user . . . Models of forest growth and yield are complex collections of mathematical functions and computer code designed to simulate the biological growth of forest trees and/or stands. While models may differ in the details, most such models rely on a very similar collection of tree, stand, and forest input data. These data may derive from field measurements, external models and equations, and imputation procedures.

An understanding of the model framework is useful to understand the interaction of input data and model components in making predictions. Through this understanding, model users can gain a greater appreciation of models, model results, and conclusions to be drawn from inventory systems. Attendees will also gain insights into approaches for evaluating and comparing the most commonly used models.

The agenda is not specific to any particular software. Growth and yield model software experience is not required for workshop attendance.



April 13, 2015

1:00 PM

Understanding the types of forest growth and yield models with an emphasis on FVS, ORGANON and FPS.

- Why are model classifications important? Understanding the ramifications from using the various models.
- Compare and contrast model parts and components, strengths and weaknesses.
- Data requirements for each model.
- Basic mechanics of the different models and associated ramifications for users.

5:00 PM

Adjourn

April 14, 2015

8:00 AM

Model Evaluation: Why are you using one particular model and does it give you the answers that you need? Where models succeed and where they are suspect.

- How does one go about conducting an evaluation with data? What are the variables, time frames and scales for an evaluation?
- How does one evaluate models without data? Using biological patterns and biometric principles to see how your trees grow. Is your forest growing reasonably and will the model's predictions pass laugh tests?
- Techniques for comparing model predictions with data.
- An example will be provided to illustrate the types of comparisons.

12:00 PM

Lunch

1:00 PM

How do I localize a model for my area? When is it necessary to do a calibration?

- What is the difference between evaluation and calibration?
- You don't have to use the model right out of the box. How to adjust model parameters and the impact on diameter growth, height growth, mortality, and taper. Basic adjustments will be covered for FVS, FPS and ORGANON.

2:30 PM

Working through the process: Selecting the best model for unfamiliar areas and little data.

- Scenario 1: It is a project as a new acquisition or in an unfamiliar area, planting clone technology and non-native species.
- Scenario 2: It is a project with a new silvicultural technique and unfamiliar tools of geography, species, and carbon accounting.
- Scenario 3: It is a project with no long term data or comparables in an unfamiliar area.

4:30 PM

Adjourn



About the Instructors

Terry Droessler, PhD, CF

Terry has over 25 years of experience in quantitative natural resource analyses. His emphasis is in growth and yield model setup, projection of silvicultural scenarios, inventory design and processing, harvest scheduling, timberland appraisal and statistical analysis. Terry is president of Forest Analytics LLC in Monmouth, OR. Examples of past projects include:

- Net present value calculations of future harvest streams for multiple private and tribal entities in the PNW
- Independent analysis of growth, yield and harvesting scheduling for 600,000 acres private timberland in southern Oregon.
- Calibration of FPS growth and yield components for industry entity in California
- Tested and verified net present value calculations, silvicultural prescriptions and revenue flow over 640,000 acres for REIT formation.

Erin Smith-Mateja

Erin has over 15 years of experience in growth and yield modeling, specifically providing user support, training, and model development for the Forest Vegetation Simulator (FVS). She has collaborated on numerous projects with the US Forest Service and cooperators in the Pacific Northwest and throughout the country. Erin has a Masters in Forestry (Biometrics) from Michigan State University.

Dave Walters, PhD

David is the Director, Western Region Manager, and Biometrician for LandVest, an institutional timberlands group where he advises and assists institutional timberland owners in the acquisition, management and disposition of timberland properties in the western United States. He develops company consulting projects involving inventory, growth and yield, forestry research, harvest scheduling, and strategic planning and expands such projects into the western United States. Prior to joining LandVest, David was the Manager and Biometrician, Forest Planning Group with Roseburg Forest Products. He has a PhD In Forest Biometrics from the University of Minnesota.

REGISTRATION FORM

NAME _____

ORGANIZATION AND AFFILIATION _____

ADDRESS _____

CITY, STATE, ZIP _____

EMAIL _____ TEL _____

Registration

BEFORE April 6, 2015	\$250 _____
AFTER April 6, 2015	\$295 _____

Questions?

Call 888-722-9416 or 503-226-4562
or amanda@westernforestry.org



Western Forestry and Conservation Association
4033 SW Canyon Rd. • Portland, OR 97221
503-226-4562 • 888-722-9416 • FAX: 503-226-2515

Register online at www.westernforestry.org

Payment Method

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Meeting Location

The workshop will be held at the DoubleTree Hotel Lloyd Center at 1000 NE Multnomah St., Portland, OR. The hotel can be reached at: 503-281-6111. The DoubleTree is at the Lloyd Center/NE 11th Avenue stop on the Portland light rail MAX system.

Lodging

No block of rooms has been set aside for the meeting. Adjacent hotels to the DoubleTree include: Quality Inn Downtown Convention Center, (503) 233-7933 and Residence Inn Portland Lloyd Center, 503-288-1400.

Registration

The registration fee is \$250 if received by April 6 or \$295 after April 6. The registration fee includes a book of the speaker's PowerPoint slides, and lunch. Checks should be made payable to Western Forestry and Conservation Association. Purchase orders, VISA/MasterCard, and American Express are accepted. Tax id # 930-331-712.

Cancellations

Cancellations received on or before April 6, 2015 are eligible for re-funds, less a 15% service charge. Cancellations received after that time will be charged the entire registration fee, but substitutions are always welcome.

Continuing Education Credits

Attendees will be eligible for 11.0 CFE Cat 1 credits through the Society of American Foresters.

Registration questions?

Call Amanda at (888) 722-9416 or (503) 226-4562
or amanda@westernforestry.org

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