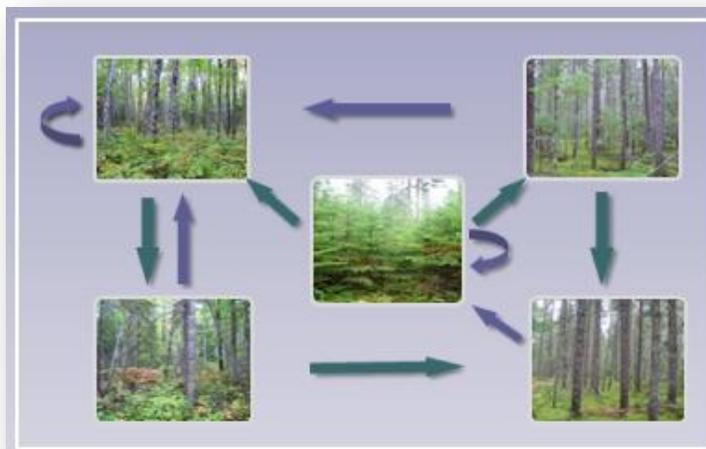


# Predicting Vegetation Change

## Course Syllabus

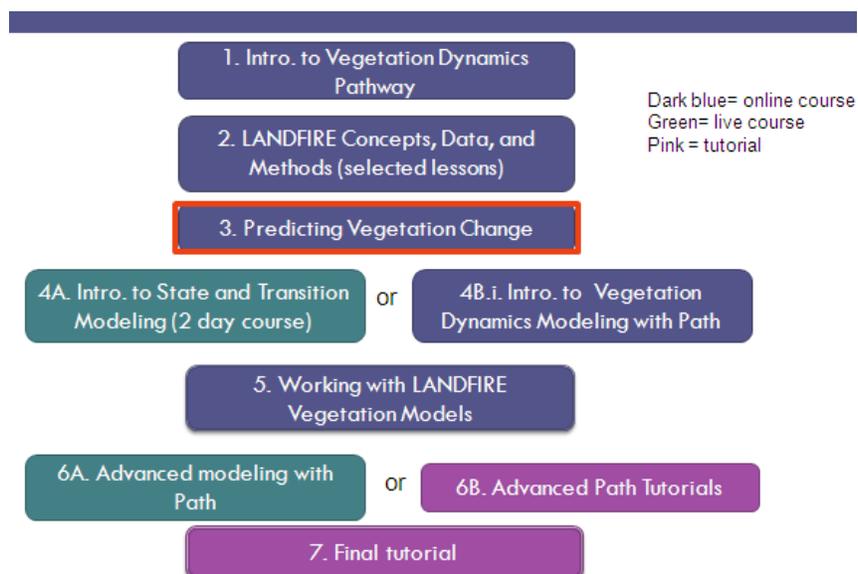
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**Predicting Vegetation Change** is a course in the Vegetation Dynamics Learning Pathway series produced by the National Interagency Fuels, Fire, and Vegetation Technology Transfer (NIFTT). The pathway comprises a sequence of courses and tutorials designed to help students understand the LANDFIRE vegetation dynamics models, adapt them to current conditions, and use them to predict vegetation change on real landscapes. Completing the courses and tutorials in the recommended order will facilitate learning, especially for beginning modelers. However, some students may be able to skip certain steps, depending on experience.

### The Vegetation Dynamics Learning Pathway

The pathway includes seven main steps. The steps shown in dark blue represent online courses, and those shown in pink are downloadable tutorials. In steps Four and Six, students can choose between online and live instruction options to suit different learning styles. More detailed descriptions of the steps can be found on the NIFTT website at [www.nifftt.gov](http://www.nifftt.gov).



## **Predicting Vegetation Change**

This *Predicting Vegetation Change* course constitutes Step Three in the pathway. It is recommended that, before taking this course, students take the *Introduction to Vegetation Dynamics Pathway* course and also have a good understanding of the information found in the *LANDFIRE: Concepts, Data, and Methods* course. All NIFTT courses are available online at [nifft.gov](http://nifft.gov).

This course is recommended for students who wish to learn about the concepts that led to the development of the LANDFIRE vegetation models and how these concepts may be applied to land management questions. The course provides an overview of common approaches to predicting vegetation change at the landscape level.

The two main objectives of the course are: 1) to cover basic introductory material for those who are new to vegetation dynamics modeling, and 2) to explain the vegetation dynamics modeling frameworks and clarify associated terminology.

This course is particularly designed for students...

- Who want to learn about approaches to quantifying landscape change,
- Who are new to state-and-transition modeling,
- Who want an introduction to how the LANDFIRE models fit into the larger arena of approaches to predicting vegetation change,
- Who are interested in the difference between non-spatial and spatial landscape models, and
- Who would like an overview of existing models and applications.

The course content is divided into the following main sections:

- Introduction and terminology
- Vegetation classification frameworks
- Approaches for describing vegetation change
- Models for quantifying vegetation change
- Non-spatial and spatially explicit models
- Currently available spatially explicit models
- Course quiz

Thank you for your interest in NIFTT's Vegetation Dynamics Learning Pathway!