Video 4 of 5: Add a new state

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Contents

Welcome and goals

Hi everyone, Randy Swaty here hoping to get you started with modifying a LANDFIRE Biophysical Settings model in a way that better represents current conditions. In this the 4th of 5 videos in the "Modify your Model" series we will work through our trusty Sage Steppe model as an example, learning how to add a new state.

Add a new state (due to novel Sasquatch disturbance)

So yes, Sasquatch is almost like a replacement event, but not quite. The understory response from wallowing is different than from replacement fire. We need a new class.

1. Copy, paste and rename the "Saq hates replacement fire" scenario. I named this new scenario "Sasq makes new state". I noted all of this in the Description Box.

2. Open the Transition Pathways tab.

3. Right click anywhere in the white space to get a menu. Select "Add State Class".

4. The Cover Type will be "Early2"; the Structural Stage will be "OPN" (or whatever you think!)
5. Open this new box. It will be empty. Since we do not know much, there will be little information here.
6. Right click on the header of the "States" table at the top. Select "To Class", "Age Min", and "Age Max" to add those columns.
7. Parameterize:

- Age Min = 0
- Age mMx = 18
- To Class = Mid1:OPN

8. We will not add any Probabilistic Transitions to this class right now.
9. We do need to change that Wind or Weather or Stress transition so that when that disturbance happens the pixels will go to this new class. Do you know how to do that?

10. Open the Late1:CLS state, then change the "To Class" to "Early2:OPN". Make sure you change the correct disturbance!
11. You've made it this far! Maybe you should have a beverage while the model runs. Further reward yourself by checking the results! And/or reading Lozier, J.D., Aniello, P. and Hickerson, M.J., 2009. Predicting the distribution of Sasquatch in western North America: anything goes with ecological niche modelling. Journal of Biogeography, 36(9), pp.1623-1627.
12. Check your results, remembering to add this new state to your results chart.