

Seed Transfer 2.0: establishing plantations for the new normal

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Seed Transfer 2.0

- Assisted migration – why?
- Assisted migration – how?
- Diversification - why and how?

10/10/2015

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Seed source -1.3 °C
Plantation -1.3 °C



Seed source -1.3 °C
Plantation 2.9 °C

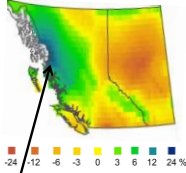
10/10/2015

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Risks associated with inaction

Observed climate trends & impacts

25-year trend in precipitation



Dothistroma needle cast



Woods et al. 2006

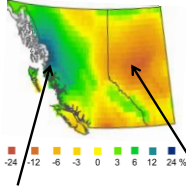
Image: Sally Attkin/Andreas Hamann

AdapTree

Risks associated with inaction

Observed climate trends & impacts

25-year trend in precipitation



Dothistroma needle cast



Woods et al. 2006

Spruce & aspen dieback

Hogg et al. 2008
Michaelian et al. 2010

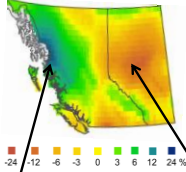
Image: Sally Attkin/Andreas Hamann

AdapTree

Risks associated with inaction

Observed climate trends & impacts

25-year trend in precipitation

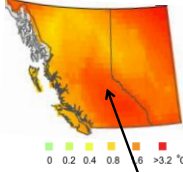


Dothistroma needle cast



Woods et al. 2006

25-year trend in winter temperature



Spruce & aspen dieback

Hogg et al. 2008
Michaelian et al. 2010

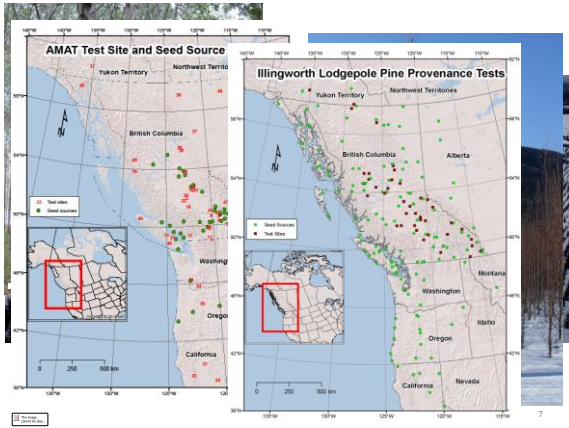
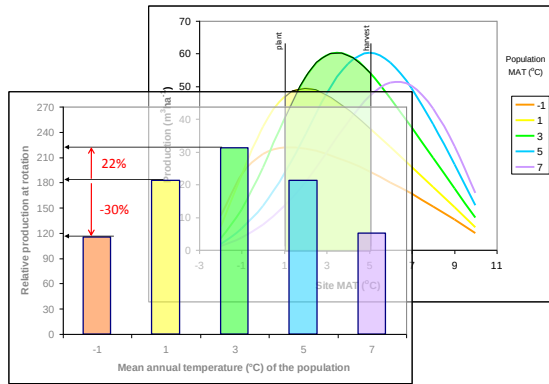
Mountain pine beetle



Allen et al. 2010

Image: Sally Attkin/Andreas Hamann

AdapTree



Species: coastal yellow-cedar
Test site: Fort St. John



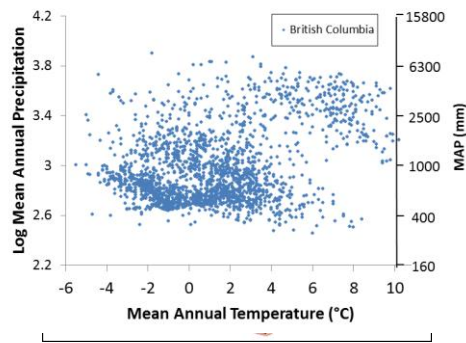
Species: western larch
Test site: Fort St. John



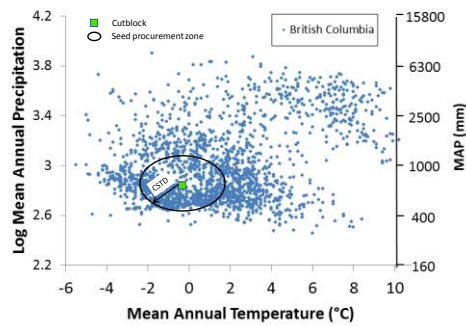
Seed Transfer 2.0

- Assisted migration – why?
- Assisted migration – how?
- Diversification - why and how?

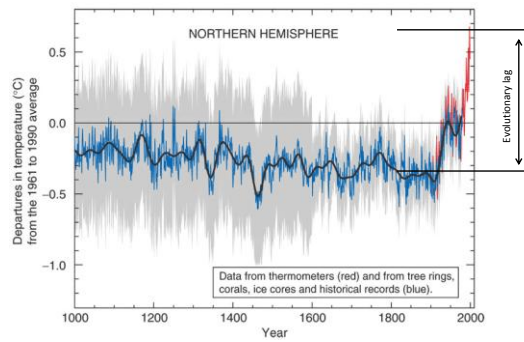
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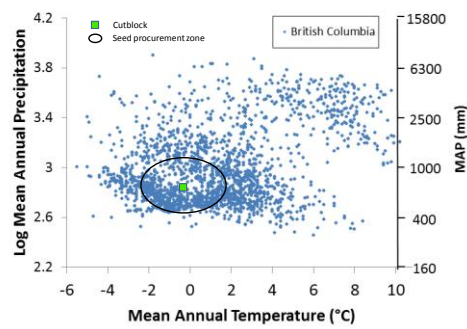


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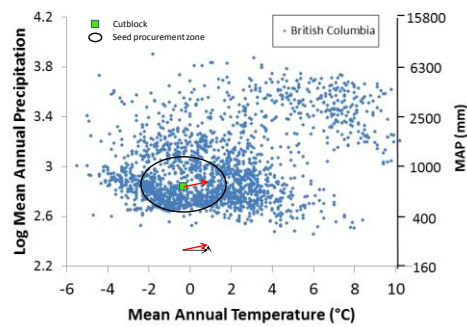


IPCC 2001

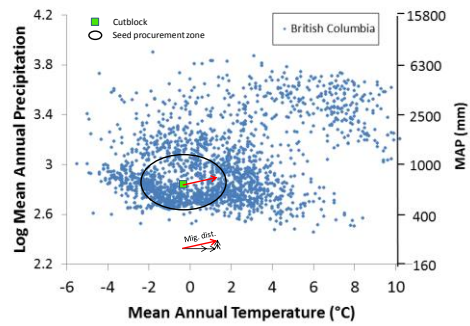
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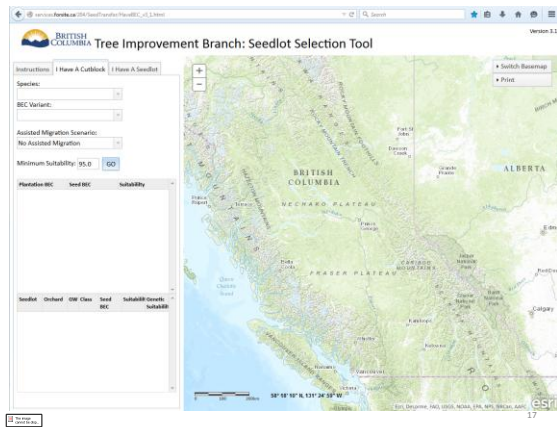
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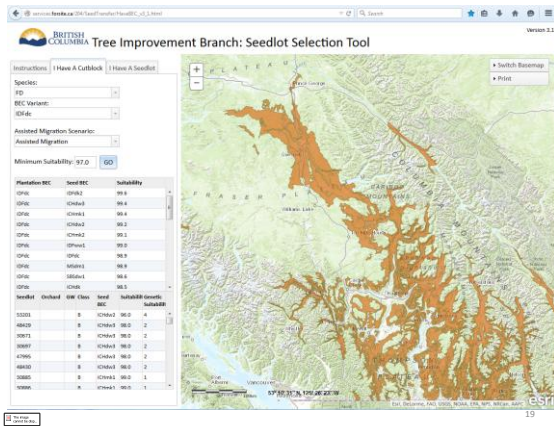


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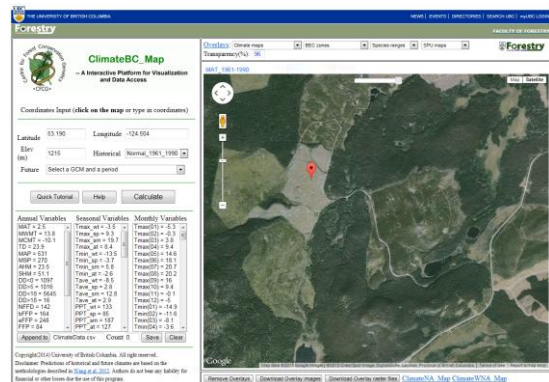
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Summary – assisted migration

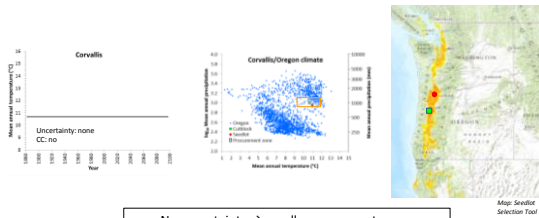
1. Warm seed good. Cold seed bad.



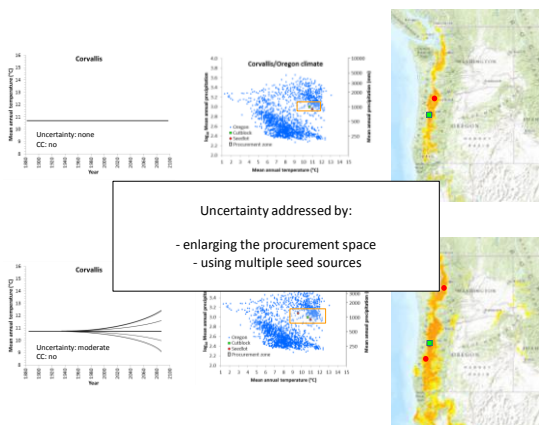
Seed Transfer 2.0

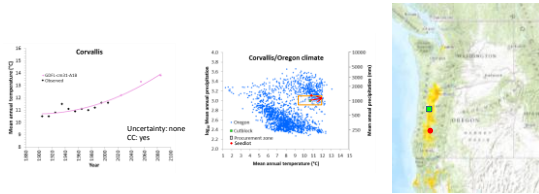
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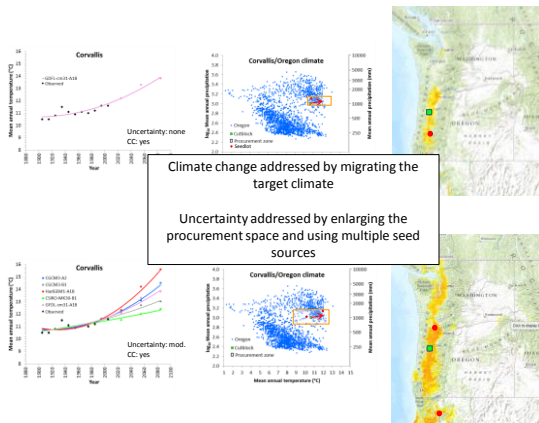


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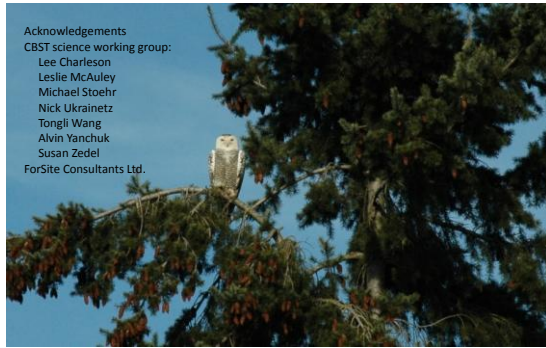
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Summary - diversification

1. Enlarge and multiply.

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