

Alaska
Ips typographus
European Spruce Bark Beetle
Susceptibility
3/21/2007

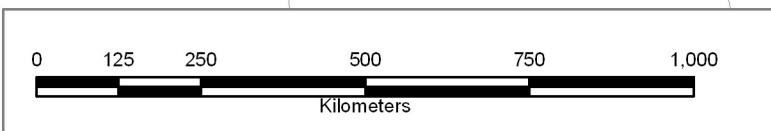
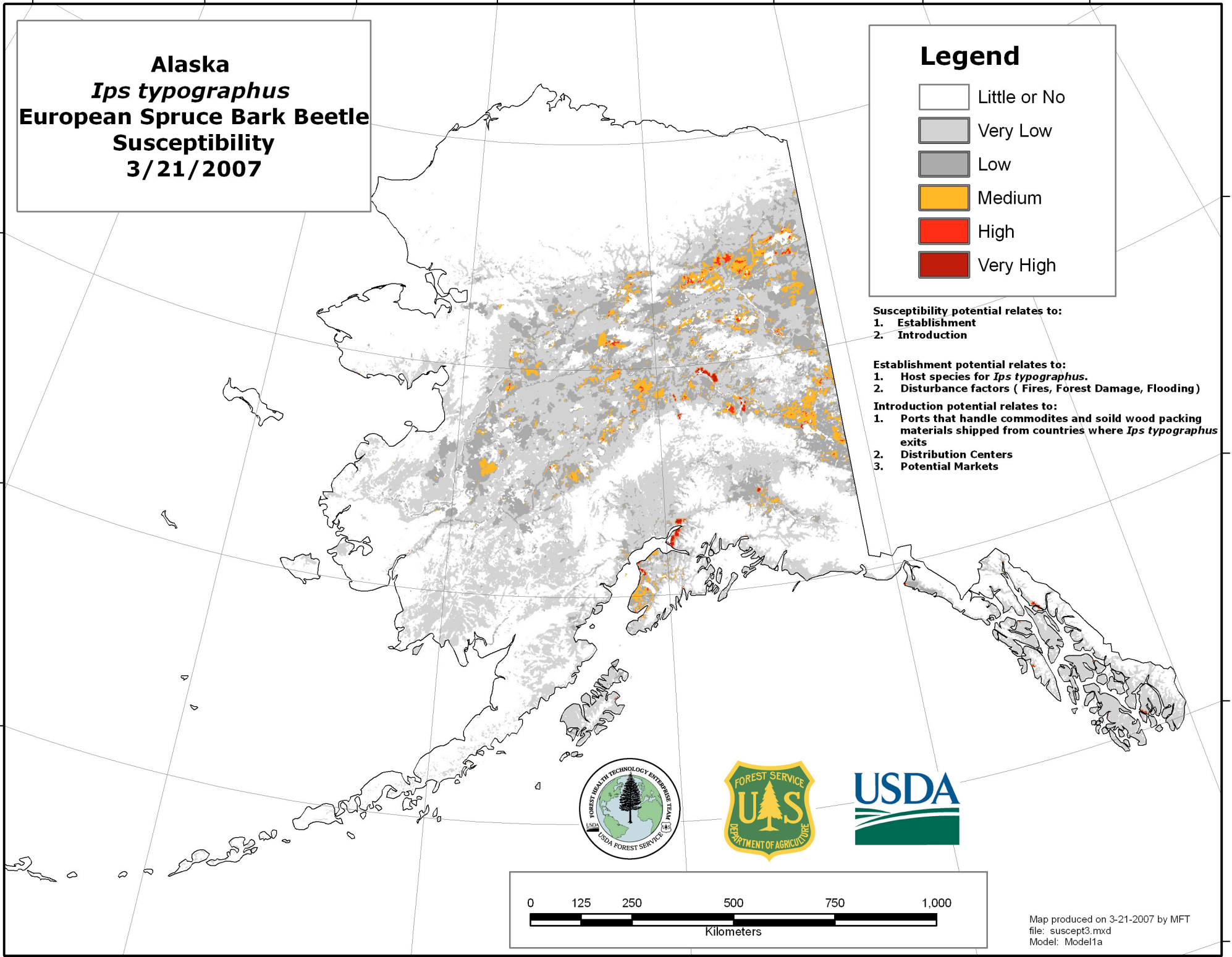
Legend



Susceptibility potential relates to:
1. Establishment
2. Introduction

Establishment potential relates to:
1. Host species for *Ips typographus*.
2. Disturbance factors (Fires, Forest Damage, Flooding)

Introduction potential relates to:
1. Ports that handle commodities and solid wood packing materials shipped from countries where *Ips typographus* exits
2. Distribution Centers
3. Potential Markets



Map produced on 3-21-2007 by MFT
 file: suscept3.mxd
 Model: Model1a

Summary of Susceptibility Potential for *Ips typographus* in Alaska USA

March, 21, 2007

www.fs.fed.us/foresthealth/technology/invasives_ipstypographus_AK_riskmaps.shtml

The Susceptibility Potential Surface for *Ips typographus* was produced for the State of Alaska in 1 square kilometer (km²) units by the U.S. Forest Service, Forest Health Technology Enterprise Team's (FHTET) Invasive Species Steering Committee (Table 1). The product's intended use is to develop a detection strategy for *Ips typographus*. Supporting information was taken from the Exotic Forest Pest (ExFor) website (<http://spfnic.fs.fed.us/exfor/>). The Susceptibility Potential Surface was produced by combining the *Ips typographus* Introduction and Establishment Potential surfaces in a final equal weighted overlay. The Introduction surface was created by combining Distribution Centers and Principal Ports via a maximum overlay process. The Establishment surface was created by using a weighted overlay of Disturbance and Host surfaces (Table 2). Table 3 shows that 65,060,800 hectares of forest in Alaska are susceptible to attack from *Ips typographus*.

Table 1
Steering Committee Members

Marla C. Downing, USDA, FS, FHTET Lead
Mark Schultz, USDA, FS
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Table 2 Establishment Datasets and Arithmetic Weights.

Variables	Weight
Disturbance	40%
Host Species	60%

Table 3 Summary of Susceptibility Potential for *Ips typographus*.

Category	Number of km ² Grid Cells	Hectares	Percent
Very Low	450,925	45,092,500	69.31
Low	160,084	16,008,400	24.61
Medium	35,180	3,518,000	5.41
High	3,321	332,100	0.51
Very High	1,098	109,800	0.17
Total	650,608	65,060,800	100.00
<i>Little or No</i>	<i>855,962</i>	<i>85,596,200</i>	

Point of Contact

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