FOREST HEALTH PROTECTION 2018 HIGHLIGHTS OF TREE MORTALITY AND OTHER DAMAGE FROM INSECTS AND DISEASES

Approximately 450 million acres surveyed annually

EASTERN OAK

LYMANTRIA DISPAR DISPAR

- Lymantria dispar dispar defoliation can result in reduced annual growth, canopy dieback, and death
- Large defoliation events continue to occur in New England

PINF

SOUTHERN PINE BEETLE

- A major pest of southern yellow pine forests that greatly influences pine ecology and timber production
- In 2018, southern pine beetle continued to be at **outbreak levels** in Mississippi

ASH EMERALD ASH BORER

- Ash trees in urban areas and rural settings are being devastated
- EAB was recently detected in Oklahoma, Texas, Louisiana, and Alabama

MILLION ACRES WITH **DEAD TREES**

MILLION ACRES WITH OTHER TREE

DAMAGE

'ŌHI'A RAPID 'ŌHI'A DEATH

- A devastating tree killer caused by a vascular wilt fungus
- Rapid 'Ōhi'a Death (ROD) is newly established in Kaua'i

SPRUCE SPRUCE BEETLE

- Attacks most spruce trees across its range
- Activity **continues to increase** in Alaska in 2018

WESTERN FIRS FIR ENGRAVER

- Significantly impacting fir species on the west coast attacking white, red, and grand fir
- Activity is beginning to decrease in California in 2018

WESTERN OAK SUDDEN OAK DEATH

- Tree disease which kills several oak species and tanoak
- **Significant effects** on forests in California and Oregon

ACTIVITIES FOREST HEALTH PROTECTION SUPPORTED									
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LYMANTRIA DISPAR DISPAR	SOUTHERN PINE BEETLE	EMERALD ASH BORER	FIR ENGRAVER	SUDDEN OAK DEATH	SPRUCE BEETLE	RAPID 'OHI'A DEATH
Eradication, suppression, and slow-the-spread; (promote early intervention)	Suppression of active infestations and thinning forest for prevention	Provide technical assistance and outreach	Surveying, suppression, and developing management options	Stream detection and treatments in targeted areas to slow-the-spread	Pest suppression, detection, management, and treatments	Detection, suppression, and management including steam vacuum treatment

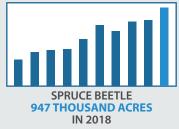
TREE MORTALITY SURVEY TRENDS 2009-2018







IN 2018





2018 INSECT AND DISEASE SURVEY WATERSHEDS WITH TREE DAMAGE

