

Supplementary Information

Mapping Mountain Pine Beetle Mortality through Growth Trend Analysis of Time-Series Landsat Data. *Remote Sensing*, 2014, 6, 5696–5716

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Table S1. MPB host species in LF Refresh 2001. Their vegetation type code, vegetation type, system group name, canopy cover, area of occupancy in Grand County, associated omission error and commission error are listed.

Code	Vegetation Type	System Group Name	Canopy Cover	Area (km ²)	Omission Error (%)	Commission Error(%)
2049	Rocky Mountain Foothill Limber Pine-Juniper Woodland	Limber Pine Woodland	Open	0.73	NA	NA
2050	Rocky Mountain Lodgepole Pine Forest	Lodgepole Pine Forest and Woodland	Closed	140.01	54.50	18.60
	Southern Rocky Mountain					
2051	Dry-MesicMontane Mixed Conifer Forest and Woodland	Douglas-fir-Ponderosa Pine-Lodgepole Pine Forest and Woodland	Closed	43.58	53.30	46.20

Table S1. *Cont.*

Code	Vegetation Type	System Group Name	Canopy Cover	Area (km ²)	Omission Error (%)	Commission Error(%)
2057	Rocky Mountain Subalpine-Montane Limber-Bristlecone Pine Woodland	Limber Pine Woodland	open	2.25	NA	NA
2117	Southern Rocky Mountain Ponderosa Pine Savanna	Ponderosa Pine Forest, Woodland and Savanna	sparse	0.004	NA	NA

Note: NA—No data in the LANDFIRE national quality assessment report.

Table S2. Confusion Matrix of the forest growth trend analysis for each year from 2000 to 2011.

Reference Data					
Classification	2000	H	A	C	UA(%)
	H	44	4	5	83.02
	A	0	32	2	94.12
	C	0	0	13	100.00
	PA(%)	100.00	88.89	65.00	
	2001	H	A	C	UA(%)
	H	45	0	2	95.74
	A	0	31	8	79.49
	C	0	0	14	100.00
	PA(%)	100.00	100.00	58.33	
	2002	H	A	C	UA(%)
	H	43	1	1	95.56
	A	0	30	8	78.95
	C	0	1	16	94.12
	PA(%)	100.00	93.75	64.00	
	2003	H	A	C	UA(%)
	H	41	1	2	93.18
	A	0	37	3	92.50
	C	0	1	15	93.75
	PA(%)	100.00	94.87	75.00	
	2004	H	A	C	UA(%)
	H	42	0	0	100.00
	A	0	35	4	89.74
	C	0	4	15	78.95
	PA(%)	100.00	89.74	78.95	

Table S2. Cont.

Reference Data					
Classification	2005	H	A	C	UA(%)
	H	43	1	0	97.73
	A	4	34	4	80.95
	C	0	0	14	100.00
	PA(%)	91.49	97.14	77.78	
	2006	H	A	C	UA(%)
	H	27	1	0	96.43
	A	10	40	1	78.43
	C	0	1	18	94.74
	PA(%)	72.97	95.23	94.74	
	2007	H	A	C	UA(%)
	H	35	0	0	100.00
	A	3	42	2	89.36
	C	0	1	17	94.44
	PA(%)	92.11	97.67	89.47	
	2008	H	A	C	UA(%)
	H	28	0	1	96.55
	A	6	39	1	84.78
	C	0	1	24	96.00
	PA(%)	82.35	97.50	92.31	
	2009	H	A	C	UA(%)
	H	27	0	1	96.43
	A	4	44	4	84.62
	C	0	0	20	100.00
	PA(%)	87.10	100.00	80.00	
	2010	H	A	C	UA(%)
	H	34	0	1	97.14
	A	1	38	6	84.44
	C	0	2	18	90.00
	PA(%)	97.14	95.00	72.00	
	2011	H	A	C	UA(%)
	H	26	1	1	92.86
	A	6	41	4	80.39
	C	0	1	20	95.24
	PA(%)	81.25	95.35	80.00	