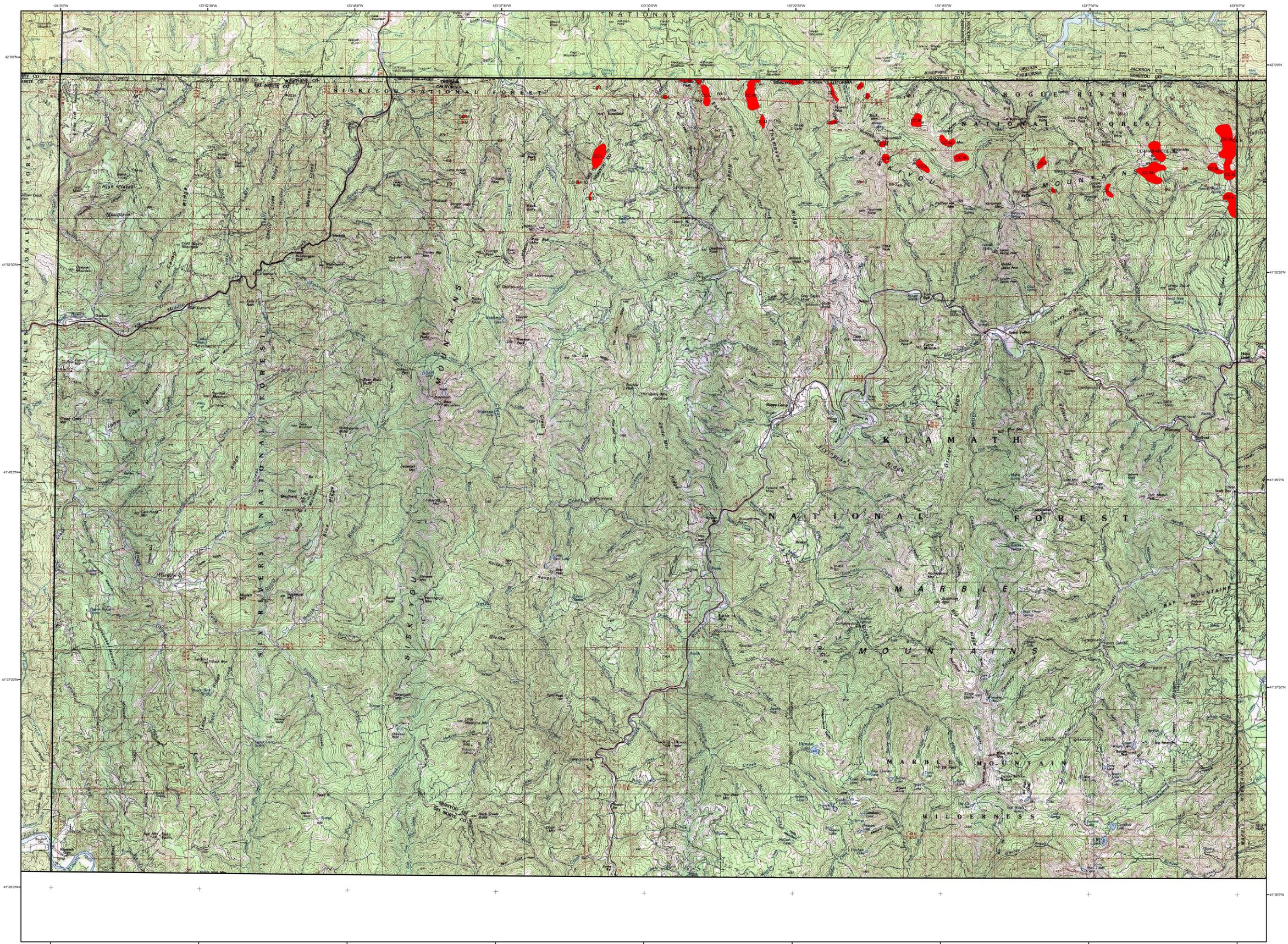


Draft 2008 Aerial Insect and Disease Survey ****Draft**** USGS 100K Quad: Happy Camp 41123-E1



Legend (For all Possible Agents)

Defoliating Agents			Mortality Agents			Other Damaging Agents		
Code	Damaging Agent	Primary Host	Code	Damaging Agent	Primary Host	Code	Damaging Agent	Primary Host
AS	Spruce aphid	Sitka spruce	1	Douglas fir beetle	Douglas fir	AB	Balsam woolly adelgid	True fir
BS	Western backheaded budworm	Hemlock, service, true fir	2	Douglas fir engraver	Douglas fir	AC	Colony spruce gall adelgid	Service, Douglas fir
BB	Mudoc budworm	White fir	3	Spruce beetle	Spruce	AD	Leaf discoloration	Maple, Douglas fir
BE	Sugar pine borer	Lodgepole, ponderosa pines	4	Fir engraver	Tuft fir	AE	Bleed-out	Five-needle pines
BF	Western spruce sawfly	Tuft fir, Douglas fir, spruce	5	Mountain pine beetle	Mountain pine	AF	Black rot	Hardwoods
BY	Byrrh's light/ophodermella	Ponderosa pine	6B	Mountain pine beetle	Whitebark pine	DH	Dying hemlock	Hemlock
CA	Western hemlock sawfly	Western hemlock	6C	Mountain pine beetle	Jeffrey pine	DIE	Fir	All species
CL	Western hemlock looper	Western hemlock	6K	Mountain pine beetle	Koehn pine	GP	Gouy pitch midge	Ponderosa pine
LL	Green striped forest looper	Douglas fir, Western hemlock	6L	Mountain pine beetle	Lodgepole pine	HAI	Hail	All species
LD	Larch looper	Western larch	6P	Mountain pine beetle	Ponderosa pine	HAU	Hardwood decline	Hardwoods
LE	Black pine needle scale	Douglas fir	6S	Mountain pine beetle	Sugar pine	HF	Areas not flown	
MD	Douglas fir burnmoth	Douglas fir	6W	Mountain pine beetle	Western white pine	OUT	No damage detected	
ML	Larch burnmoth	Western larch	6X	Mountain pine beetle	Ponderosa, lodgepole pines	PMO	Pacific madrone decline	Pacific madrone
MS	Douglas fir needle midge	Douglas fir	6Y	Mountain pine beetle	Pole-situated ponderosa pine	RE	Leaf fall in poplars	Poplars
MT	Spruce burnmoth	Spruce	8	Western white pine	Poplars	RB	Red bark	All species
NU	Needle miner	Jeffrey pine	8B	Western white pine	Sliver fir, true fir	RO	Root rot	All species
NK	Needle miner	Knobcone pine	BEAR	Bark damage	Conifer	UNCD	Unknown defoliation	All species
NL	Needle miner	Lodgepole pine	LW	Black stain root disease	Douglas fir, ponderosa pine	UNDM	Unknown mortality	All species
NI	Needle miner	Conifer	RL	Root disease	Conifer	WATR	Water damage	All species
NS	Needle miner	Ponderosa pine	WATR	Water damage	All species	WNTR	Winter Damage	All species
NW	Needle miner	Tuft fir						
NS	Western larch looper	Western white pine						
NU	Needle miner	Sliver fir						
NB	Needle miner	Knobcone pine						
NS	Needle miner	Sliver fir						
NW	Needle miner	Western white pine						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						
NS	Needle miner	Ponderosa pine						
NW	Needle miner	Tuft fir						
NS	Needle miner	Sliver fir						
NU	Needle miner	Knobcone pine						
NL	Needle miner	Lodgepole pine						
NI	Needle miner	Conifer						