

Table 4. Shrub and conifer species density (plants/ha) before and after burning (1983-1985). Counts include sprouts and/or seedlings. Values are means (SE) [Kauffman 1986, Kauffman and Martin 1985a].

Blodgett

Species	Early spring, moderate consumption			Late spring, high consumption			Early fall, high consumption			Late fall, moderate consumption			Unburned control		
	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)	prefire (1983)	year of fire (1984)	1985	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)
ponderosa pine	0 (0)	0 (0)	34 (33)	67 ^a (47)	0 ^a (0)	367 ^b (123)	0 ^a (0)	na	433 ^b (129)	84 (58)	167 (81)	209 (108)	34 (33)	67 (47)	34 (33)
white fir	2,400 ^a (459)	0 ^b (0)	1,100 ^c (274)	3,733 ^a (695)	0 ^b (0)	6,733 ^c (1,089)	1,434 ^a (243)	na	6,107 ^b (926)	1,750 ^a (395)	42 ^b (42)	292 ^b (120)	3,834 (637)	4,400 (863)	5,034 (971)
incense-cedar	22,367 ^a (5,012)	767 ^b (277)	400 ^b (196)	19,667 ^a (4,566)	67 ^b (47)	100 ^b (57)	29,633 ^a (7,769)	na	300 ^b (106)	1,667 ^a (470)	0 ^b (0)	0 ^b (0)	34,466 ^a (9,706)	13,533 ^b (3,313)	8,867 ^b (2,211)
California black oak	767 (88)	567 (65)	433 (50)	567 ^a (65)	33 ^b (4)	334 ^{ab} (38)	1,200 ^a (286)	na	467 (162)	417 ^{ab}	83 ^b (58)	500 ^a (155)	633 (184)	600 (177)	766 (222)
giant chinquapin	400 (46)	233 (27)	100 (12)	200 (23)	(19)	134 (15)	33 ^a (33)	na	0 ^b (0)	83 (58)	42 (42)	42 (42)	167 (87)	134 (81)	100 (57)
tanoak	33 (4)	0 (0)	0 (0)	100 (12)	34 (4)	34 (4)	100 (74)	na	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	67 (47)
Pacific dogwood	33 (4)	0 (0)	0 (0)	0 (0)	0 (0)	34 (4)	33 (33)	na	67 (47)	0 (0)	42 (42)	125 (125)	0 (0)	0 (0)	34 (4)
pine rose	86,800 (12,784)	78,267 (12,144)	78,800 (12,127)	30,267 (9,840)	10,400 (4,458)	22,400 (7,265)	51,467 ^a (10,217)	na	8,533 ^b (2,864)	94,667 (16,056)	56,667 (7,948)	70,833 (9,673)	70,833 (9,673)	65,600 (12,335)	64,000 (12,120)
Sierra mountain misery	12,667 (1,463)	13,167 (1,520)	9,900 (1,143)	8,800 ^a (1,016)	1,800 ^b (92)	2,433 ^b (261)	7,167 ^a (3,219)	na	400 ^b (217)	18,375 (6,929)	11,075 (4,238)	9,708 (3,425)	9,343 (2,171)	9,400 (2,451)	7,567 (2,020)
whitethorn ceanothus	467 ^a (194)	267 ^a (102)	5,367 ^b (2,006)	400 ^a (218)	133 ^a (66)	97,600 ^b (18,091)	0 ^a (0)	na	47,634 ^b (7,186)	792 ^a (339)	15,542 ^b (3,779)	2,370 ^a (1,085)	1,200 (4,711)	466 (1,679)	466 (1,679)
greenleaf manzanita	233 ^a (202)	34 ^b (33)	4,600 ^b (2,059)	367 ^a (200)	0 ^a (0)	25,233 ^b (5,832)	0 ^a (0)	na	11,833 ^b (2,625)	2,042 ^{ab} (1,116)	4,875 ^a (1,508)	958 ^b (305)	467 (210)	134 (65)	134 (65)
Sierra gooseberry	133 ^a (105)	67 ^a (47)	967 ^b (292)	133 ^a (105)	0 ^a (0)	4,333 ^b (1,046)	67 ^a (67)	na	500 ^b (171)	667 (389)	1,917 (741)	1,167 (668)	200 (140)	67 (47)	67 (47)
deerbrush	33 (4)	0 (0)	0 (0)	167 ^{ab} (19)	0 ^a (0)	500 ^b (58)	0 ^a (0)	na	1,433 ^b (477)	208 (171)	125 (93)	42 (42)	233 (202)	0 (0)	33 (33)

Means with different letters showed significant differences between years ($P < 0.10$).

na=not applicable.

Challenge

Species	Early spring, moderate consumption			Late spring, high consumption			Early fall, high consumption			Late fall, moderate consumption			Unburned control		
	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)
ponderosa pine	67 (47)	0 (0)	67 (47)	167 (87)	0 (0)	833 ^a (248)	67 (47)	100 (74)	500 ^a (150)	0 (0)	33 (33)	367 ^a (132)	167 (94)	56 (55)	389 (156)
Douglas-fir	500 (171)	0 (0)	167 ^a (87)	467 (155)	0 (0)	1,633 ^a (266)	233 (97)	0 (0)	2,867 ^a (515)	267 (122)	133 (81)	900 ^a (205)	722 (246)	833 (287)	1,167 (362)
incense-cedar	3,667 ^a (623)	100 (57)	67 (47)	2,100 ^a (346)	500 (12)	300 (106)	2,333 ^a (574)	67 (47)	0 (0)	1,733 ^a (339)	0 (0)	0 (0)	2,889 ^a (728)	1,500 (408)	1,222 (369)
California black oak	400 (135)	200 (79)	233 (85)	333 (99)	0 (0)	133 (66)	267 (90)	200 (92)	200 (79)	467 (123)	433 (278)	233 (85)	444 (165)	722 (219)	778 (208)
canyon live oak	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	100 (57)	0 (0)	0 (0)	33 (33)	67 (47)	33 (33)	0 (0)	0 (0)	0 (0)
tanoak	2,233 (390)	1,467 (251)	1,500 (251)	2,100 ^a (346)	500 (126)	300 (106)	1,833 ^a (270)	333 (119)	333 (119)	1,933 ^a (310)	200 (79)	500 (126)	1,222 (271)	1,167 (293)	889 (212)
Pacific madrone	0 (0)	0 (0)	0 (0)	667 (47)	0 (0)	0 (0)	0 (0)	155 (63)	0 (0)	0 (0)	200 ^a (92)	0 (0)	0 (0)	0 (0)	0 (0)
Pacific dogwood	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	700 (423)	217 (93)	133 (81)	167 (167)	600 (216)	267 (130)	0 (0)	56 (56)	0 (0)
pine rose	33 (33)	33 (33)	33 (33)	167 (89)	0 (0)	67 (47)	0 (0)	0 (0)	0 (0)	33 (33)	0 (0)	167 (110)	0 (0)	0 (0)	0 (0)
Sierra mountain misery	2,267 (2,166)	1,567 (1,469)	1,767 (1,637)	11,433 (4,909)	3, 867 (3,021)	9,667 (5,986)	11,333 (5,527)	4,993 (3,094)	5,567 (3,463)	40,033 (13,302)	32,700 (12,543)	34,400 (12,531)	9,445 (6,770)	7,556 (5,539)	12,556 (9,555)
greenleaf manzanita	0 (0)	0 (0)	67 (47)	0 (0)	0 (0)	100 (57)	0 (0)	1,567 ^a (321)	767 (511)	0 (0)	1,333 ^a (326)	67 (47)	0 (0)	0 (0)	0 (0)
Sierra gooseberry	0 (0)	33 (33)	933 ^a (218)	0 (0)	0 (0)	3,267 ^a (985)	100 (74)	10,033 ^a (376)	2,100 (662)	0 (0)	9,000 ^a (1,571)	1,033 (336)	0 (0)	0 (0)	0 (0)
deer brush	167 (110)	33(33)	1,667 ^a (632)	100 (57)	0 (0)	131,400 ^a (36,550)	266 (90)	215,975 ^a (33,662)	54,775 (7,916)	365 (101)	267,800 ^a (49,046)	69,625 (13,871)	167 (94)	222 (107)	111 (78)
Means with different letters showed significant differences between years (P<0.10).															

Quincy															
Species	Early spring, moderate consumption			Late spring, high consumption			Early fall, high consumption			Late fall, moderate consumption			Unburned control		
	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)	prefire (1983)	postfire yr 1 (1984)	postfire yr 2 (1985)
Jeffrey pine	200 ^{ab} (92)	0 ^a (0)	367 ^b (182)	267 ^{ab} (102)	33 ^a (33)	467 ^b (182)	389 ^a (131)	56 ^b (39)	278 ^{ab} (92)	667 ^a (189)	133 ^b (65)	300 ^{ab} (106)	111 (78)	111 (78)	222 (108)
sugar pine	600 ^a (124)	267 (90)	200 (79)	567 ^{ab} (147)	0 ^a (0)	933 ^b (325)	528 (165)	0 ^a (0)	583 (198)	467 (194)	267 (266)	367 (132)	278 (143)	500 (219)	944 (415)
Douglas-fir	500 (308)	67 (67)	133 (81)	900 ^a (279)	33 (33)	0 (0)	1,028 ^a (316)	56 (39)	28 (28)	867 (366)	300 (134)	167 (99)	333 (151)	556 (223)	444 (255)
incense-cedar	2,367 ^a (526)	233 (144)	33 (33)	2,533 ^a (471)	100 (57)	133 (81)	4,289 ^a (678)	0 (0)	0 (0)	2,900 ^a (440)	333 (173)	300 (164)	1,389 (351)	500 (188)	167 (94)
California black oak	533 (145)	300 (106)	733 (255)	467 (140)	133 ^a (65)	500 (307)	1,056 ^a (185)	389 (111)	583 (223)	1,000 ^{ab} (164)	233 ^b (97)	933 ^a (382)	778 (206)	833 (100)	833 (100)
pine rose	0 (0)	0 (0)	467 (291)	0 (0)	0 (0)	67 (67)	0 (0)	0 (0)	833 ^a (362)	0 (0)	0 (0)	167 (11)	0 (0)	0 (0)	0 (0)
greenleaf manzanita	0 (0)	0 (0)	367 ^a (155)	0 (0)	0 (0)	833 ^a (540)	0 (0)	3,567 ^a (769)	861 (285)	0 (0)	1,167 ^a (356)	167 (87)	0 (0)	0 (0)	0 (0)
Sierra gooseberry	33 (33)	233 (202)	300 (134)	0 (0)	0 (0)	2,067 (1,901)	0 (0)	333 ^a (106)	167 (95)	0 (0)	33 (33)	0 (0)	0 (0)	0 (0)	0 (0)
prostrate ceanothus	0 (0)	0 (0)	3,033 ^a (975)	0 (0)	0 (0)	3,400 ^a (1,007)	0 (0)	10,806 ^a (2,008)	1,639 (407)	0 ^b (0)	2,000 ^a (1,038)	467 ^{ab} (271)	0 (0)	56 (56)	111 (78)
deer brush	0 (0)	0 (0)	933 ^a (328)	100 (100)	0 (0)	5,867 ^a (2,024)	83 (48)	18,083 ^a (5,507)	6,361 (2,162)	33 (33)	1,800 ^a (571)	833 (214)	56 (56)	56 (56)	56 (56)
pale serviceberry	33 (33)	0 (0)	33 (33)	33 (33)	33 (33)	0 (0)	83 (48)	0 (0)	0 (0)	0 (0)	0 (0)	33 (33)	56 (56)	222 (174)	0 (0)
thimbleberry	1,767 (851)	2,233 (1,090)	2,200 (1,145)	133 (105)	200 (123)	267 (122)	0 (0)	28 (28)	28 (28)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
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