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Long-Term Trends in Ecological Systems:

A Basis for Understanding Responses to Global Change

Contents

Appendix 19. Average (standard error) biomass of primary producers (plants, algae) for sites with data

(Multiple stations are given if possible. Sites are grouped by ecosystem type. See Appendix 28 for length of record for each station.)

Site code	Taxon	Station	Biomass[1]
Alpine and arctic			
ARC		Tussock Tundra 1981 Plots,	
	Betula nana (Dwarf birch)	control	81 (18)
		fertilized	410 (146)
	Eriophorum vaginatum	control	56 (12)
	(Tussock cottongrass)	fertilized	55 (27)
	Ledum palustre	control	79 (6)
	(Marsh labrador tea)	fertilized	48 (13)
	Vaccinium vitis-idaea	control	72 (7)
	(Lingonberry)	fertilized	23 (12)
Coastal			
FCE	Periphyton (algae)	Shark River Slough sites 1, 2, and 3,	
		Epiphyton substrate	9 (3)*
		Mat substrate	18 (2)
		Periphyton substrate	8 (2)
GCE	Plants	High Marsh site	4245 (238)
		Zone 1, Creek Bank	5984 (972)
PIE	*Spartina* spp. (Cordgrass)	*Spartina alterniflora*-dominated salt marsh at Goat Island, North Inlet, Georgetown, SC	547 (46)*
		Spartina alterniflora-dominated salt marsh at Law's Point, Rowley River, PIE, MA	560 (69)
		Spartina patens-dominated salt marsh at Law's Point, Rowley River, PIE, MA	1023 (87)
SBC	*Macrocystis pyrifera* (Kelp)	Arroyo Burro Reef, Santa Barbara Channel	185 (123)
		Arroyo Quemado Reef, Santa Barbara Channel	508 (90)
		Mohawk Reef, Santa Barbara Channel	530 (134)
VCR	Plants	Randomly selected, destructively sampled, non-treated plots at	
		Frank Day Well Location R2, Hog Island	112 (15)
		Frank Day Well Location R3, Hog Island	141 (27)
		Frank Day Well Location R4, Hog Island	139 (16)
Eastern forests			
HBR	Plants (kg/625 m^2)	Vegetation zone 1 at watershed 6	110 (15)
		Vegetation zone 4 at watershed 6	258 (29)
		Vegetation zone 5 at watershed 6	338 (37)
		Vegetation zones 2 and 3 at watershed 6	172 (20)
NTL	Aquatic plants	Trout Lake	39 (5)

Appendix 19. Average (standard error) biomass of primary producers (plants, algae) for sites with data—*Continued*

Site code	Taxon	Station	Biomass[1]	
Temperate grasslands and savannas				
CDR	Plants	Old Fields 24, 4, 41, 28	118	(7)
		Old Fields 72, 35, 45, 5	130	(8)
		Old Fields 77, 70, 26, 53	134	(9)
SPR	Forbs	Watershed 1	76	(7)
	Grass	Watershed 1	172	(17)
Western forests				
AND	Tree boles (kg/m^2)	Reference Stand 2	62	(6)
		Reference Stand 29	106	(3)

[1] The unit is g/m^2 if not specified.
* Linear regression of the variable against time is significant ($p < 0.05$) and the trend appears linear.