

Agricultural Research Service

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Long-Term Trends in Ecological Systems:

A Basis for Understanding Responses to Global Change



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A Basis for Understanding Responses to Global Change

$Appendix \ 16. \ Annual \ average \ (standard \ error) \ above ground \ net \ primary \ production \ (ANPP) \ at sites \ with \ data$

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

Site code	Station	ANPP ¹
Alpine and arctic		
ARC	Control ANPP plots	156 (20)
	Nitrogen-fertilized ANPP plots	306 (33)*
NWT	Dry meadow plots at Saddle Location	204 (13)*
	Moist meadow plots at Saddle Location	208 (8)*
	Wet meadow plots at Saddle Location	171 (8)*
Aridlands		
JRN	Creosote Study Sites	84 (6)
	Grassland Study Sites	130 (17)*
	Mesquite Study Sites	113 (20)*
	Playa Study Sites	204 (36)
	Tarbush Study Sites	79 (8)
SEV	Blue Grama Study Site	83 (17)
	Five-Points Grass Study Site	93 (21)*
	Five-Points Larrea Study Site	63 (6)
Coastal		
PIE	Spartina alterniflora-dominated salt marsh at Law's Point, Rowley	725 (137)
	River, Plum Island Environment, MA	` ,
	Spartina patens-dominated salt marsh at Law's Point, Rowley	1183 (92)
	River, Plum Island Environment, MA	. ,
	Spartina alterniflora-dominated salt marsh at Goat Island, North Inlet, Georgetown, SC	913 (58)*
Eastern forests		
HBR	Unknown	705 (8)*
HFR	Little Prospect Hill at Harvard Forest, trees only; unit: Mg carbon/ha	3 (0.2)
Temperate grassla	ands and savannas	
CDR	Unknown	277 (22)*
FTK	Lysimeter 1	430 (83)
	Lysimeter 8	231 (29)
	Treatment 8, never plowed, 200 m south of the others, serves	302 (44)
	as a historical control for soil organic matter studies	, ,
	Treatment SF, old field successional community, never tilled	197 (19)*
KBS	Treatment 7, native successional treatment, abandoned	501 (39)*
	after spring plowing in 1989	

Long-Term Trends in Ecological Systems:

Appendix 16. Annual average (standard error) aboveground net primary production (ANPP) at sites with data—Continued

Site code	Station	ANPP ¹
KNZ	Watershed 020b, burned every 20 years, on shallow Florence soils	338 (15)
	Watershed 020b, burned every 20 years, on deep Tully soils	424 (19)
SGS	ESA Control 1	92 (7)*
	Owl Creek, coarse texture soil	104 (11)*
	Sec 25, fine texture soil	62 (7)
Western forests		
AND	Reference Stand 2, tree boles only	326 (47)
	Reference Stand 29. tree boles only	566 (96)
BNZ	Unknown	300 (16)

¹ Unit is g/m² unless otherwise specified.

^{*} Linear regression of the variable against time is significant (p < 0.05) and the trend appears linear.