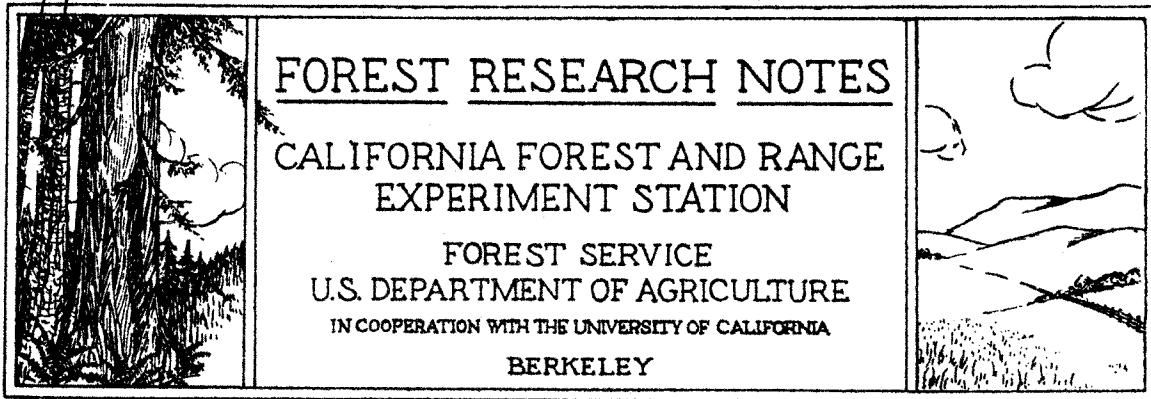


Sample



Research Note No. 25

September 15, 1940

PALATABILITY OF FOOTHILL RANGE PLANTS FOR CATTLE

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The following palatability figures represent preliminary information on a class of vegetation in California which has received comparatively little study in the past but is now claiming the attention of many experimental and land planning agencies. This vegetation is commonly referred to as the "annual type" because the herbaceous ground cover is dominated to the extent of 95 to 99 percent by annual plants, both introduced and native.

The type covers about 25,000,000 acres in the State at elevations mainly below 2,500 feet and includes the major portion of the uncultivated valley and foothill lands in the San Joaquin and Sacramento Valleys, the southern portion of the north Coast Range, and practically all of the south Coast Range except where shrubs and trees are too dense to permit herbaceous growth.

In past years forage palatabilities were developed primarily by the Forest Service for application in surveys on national forests where the herbaceous plant cover is dominated by perennials, but the Cooperative Western Range Survey in 1937, the Agricultural Adjustment Administration in their range programs since 1936, and the current Flood Control Surveys in the State have created a demand for palatability figures for annual-type plants.

The following figures were developed in 1937 to facilitate the completion of the Western Range Survey in San Benito County. Since data were not available for that locality at the start of the survey it became necessary to assemble the best available figures from previous work on national-forest ranges bordering on the annual type, and to revise the figures during the San Benito survey to fit local conditions. These figures of course are subject to further revision.

<u>Scientific name</u>	<u>Symbol</u>	<u>Percent palatability</u>	<u>Scientific name</u>	<u>Symbol</u>	<u>Percent palatability</u>
FORBS					
Achillea millefolium			Euphorbia	EH	0
var. lanulosa	ACm	30	Evax sparsiflora	EVs	0
Achyrrachaena mollis	ACCm	10	Fragaria	FR	0
Agastache urticifolia	AGSu	20	Galium	GM	0
Agoseris (annuals)	AG	10	Geranium	GE	10
Allium	ALU	10	Gilia sp.	GI	0
Amsinckia douglasiana	AKd	10	Gilia tricolor	Git	0
" intermedia	AKi	10	Godetia amoena	Ga	0
Anaphalis margaritacea	ANAm	0	Grindelia	GRI	10
Anthemis cotula	ANHc	0	Hemizonia	HM	10
Arabis	ARA	20	Hypericum concinnum	HPc	0
Asclepias eriocarpa	ASLe	10	" perforatum	HPp	0
" mexicana	ASLm	10	Lagophylla	LG	0
Aster	AST	10	Lathyrus	LA	20
Astragalus	AS	10	Layia	LAY	10
Baeria debilis	BAEd	10	Lepidium	LEP	10
Brassica campestris	BRC	20	Linanthus	LI	0
Brodiaea capitata	Bca	10	Lomatium	LOM	10
Capsella bursa-pastoris	CAPb	10	Lotus (annual)	LO	30
Carum gairdneri	CRMg	20	" (perennial bushy)	LO	15
Castilleja	CS	10	Lupinus (annual)	L	15
Centaurea melitensis	CENm	0	" (tall)	L	10
" solstitialis	CENs	0	" (woody)	L	20
Centromadia pungens	CEDp	0	Madia	MA	10
Cerastium arvense	CERa	10	Malva	MV	10
Chenopodium album	CPa	0	Marrubium vulgare	MABv	0
Chlorogalum pomeridianum	CHLp	10	Matricaria	MR	0
Cirsium	CI	20	Medicago hispida	MDh	80
Collinsia bicolor	COB	0	Melilotus	ME	20
Composites (annual)		10	Mentzelia	MZ	0
Convolvulus	CV	10	Micropus californicus	MPc	0
Cynoglossum grande	CGg	10	Microseris	MI	10
Daucus pusillus	DAP	10	Mimulus	MI	0
Delphinium	D	10	Montia perfoliata	MTp	15
Dodecatheon	DO	0	Navarretia	NV	0
Echinocystis	EC	20	Nemophila	N	0
Epilobium	EP	10	Orthocarpus	OR	10
Eremocarpus setigerus	ERM	0	Pentstemon	PE	10
Eriogonum nudum	EGn	20	Phacelia	PH	10
Erodium botrys	Eb	60	Phlox	PHX	0
" cicutarium	Ec	80	Plagiobothrys	PL	10
" moschatum	Em	70	Plantago erecta	PNe	10
Erysimum asperum	ERSa	10	Platystenon californicus	PLAc	0
Eschscholtzia californica	ESc	0	Polygonum	PG	0

<u>Scientific name</u>	<u>Symbol</u>	<u>Percent palatability</u>	<u>Scientific name</u>	<u>Symbol</u>	<u>Percent palatability</u>
FORBS (Continued)					
Polystichum	PQ	0	Suaeda moquini	SUm	0
Pteris aquilina	PTa	0	Thysanocarpus	TY	10
Ranunculus californicus	RAc	10	Trichostema	TR	0
Rumex	RU	10	Trifolium (moist ground)	T	50
Salsola kali	SALk	10	" (dry ground)	T	30
Salvia	S	10	Uropappus linearifolius	URl	10
Sanicula bipinnatifida	SANb	10	Urtica	UT	0
" menziesii	SANm	0	Verbena	VB	10
Senecio	SN	10	Vicia	VI	10
Sidalcea	SD	10	Viola	V	10
Silene californica	SIc	0	Wyethia angustifolia	Wa	20
Sisyrinchium bellum	SRb	10	Xanthium spinosum	XAS	0
Sonchus	SOC	0	Zygadenus	Z	0
Stachys bullata	SSb	0			

SHRUBS AND TREES

Adenostoma fasciculatum	ADf	10	Populus	PP	20
Aesculus californica	AEc	25	Prunus demissa	PRd	0
Alnus rhombifolia	ALNr	0	" emarginata	Pre	20
Arctostaphylos	A	0	" ilicifolia	PRI	10
Artemisia californica	ARc	0	Quercus agrifolia	Qa	20
" vulgaris	ARv	10	" chrysolepis	Qc	10
Atriplex	AT	10	" douglasii	Qdo	20
Baccharis pilularis	BCp	0	" dumosa	Qd	10
" viminea	BCv	0	" kelloggii		
Ceanothus	C	20	(californica)	Qk	20
Chrysothamnus	CRY	10	" lobata	Ql	10
Dendromecon rigida	DEr	0	" wislizenii	Qw	20
Diplacus aurantiacus	DIA	0	Rhamnus californica	RHc	10
Ephedra viridis	Ev	10	" crocea	RHcr	20
Eriodictyon californicum	ERc	0	Rhododendron occidentale	RRo	0
Eriogonum fasciculatum	EGf	10	Rhus diversiloba	Rd	40
Eriophyllum	EY	0	Ribes (not thorned)	RI	20
Fraxinus	F	0	" (thorned)	RI	0
Garrya	GA	0	Rosa californica	ROc	20
Holodiscus discolor	HOD	10	Rubus parviflorus	RBp	0
Juniperus californica	Jc	0	Salix	SL	20
Lepidospartum squamatum	LPDs	0	Salvia	S	10
Lonicera	LR	20	Sambucus glauca	SBg	20
Lotus scoparius	LOsc	20	Senecio douglasii	SNd	0
Nicotiana glauca	NIG	0	Solanum	SO	0
Photinia arbutifolia	PHTa	0	Symphoricarpos albus	SYa	20
Platanus racemosa	PLTr	0	Umbellularia californica	Uc	0
			Vitis californica	VTC	0