CREP & CRP Planning Tools



DEFINITION

Planning tools are resources available to conservation planners that help in the process of evaluating a site's current condition by identifying resource concerns and estimating the impact an implemented practice will have. Planning tools help make planning recommendations using this information.

Web Soil Survey

Creation of soil maps and map unit descriptions by specific area of interest (AOI). Provides hydric features and information.

RUSLE 2

Predicts tons of soil loss by sheet and rill erosion on sites based on soil type, slope, and current management practices.

Wildlife Habitat Evaluation Guide

Assesses landscape for wildlife using a model that determines the degree to which a resource management system meets quality criteria.

MNFI/IPAC

Provides information on Michigan's endangered, threatened, or otherwise significant plant and animal species, natural plant communities, and other natural features.

<u>eFOTG</u>

Contains technical information about the conservation of soil, water, air, and related plant and animal resources.

Tree/Shrub Suitability Group

Contains technical information on what tree species are suitable for soil types.

Seeding Tables

Contains technical information to assist planners in making grass and forb recommendations.

COMMONLY USED TOOLS

RUSLE 2











Management system

Water erosion

FIELD OFFICE TECHNICAL GUIDE

"eFOTG"



About FOTG

Technical guides are the primary scientific references for NRCS. They contain technical information about the conservation of soil, water, air, and related plant and animal resources.

Technical guides used in each field office are localized so that they apply specifically to the geographic area for which they are prepared. These documents are referred to as Field Office Technical Guides (FOTGs).

Appropriate parts of the Field Office Technical Guides are automated as databases, computer programs, and other electronic-based materials such as those included in these web based pages.

FOTG Sections

Section 1 - General Resource References

- General state maps.
- Descriptions of Major Land Resource Areas, watershed information, and links to NRCS reference manuals and handbooks.
- · Links to researchers, universities, and agencies we work with.
- · Conservation practice costs and agricultural laws and regulations.

Section 2 - Natural and Cultural Resources Information

- · Detailed information about soil, water, air, plant, and animal resources.
- · Cultural resources and information about protected plant and animal species.
- NRCS Soil Surveys, Hydric Soils Interpretations, Ecological Site Descriptions, Forage Suitability Groups, Cropland Production Tables, Wildlife Habitat Evaluation Guides, Water Quality Guides, and other related information can be found here as it becomes available.

Section 3 - Resource Concerns and Planning Criteria

 NRCS Quality Criteria, which establish standards for resource conditions that help provide sustained use.

Section 4 - Practice Standards and Supporting Documents

 NRCS Conservation Practice Standards that define the practice and where it applies. Practice specifications are detailed requirements for installing the practice in the state.

Section 5 - Conservation Effects

 Background information on how Conservation Practices affect each identified resource concerns in the state.

EFOTG

- Practice standards/Job sheets
- Tree/shrub suitability groups
- Seeding tables



NRCS Employee Websites

- AgLearn
- CART
- Concur Travel System
- ConnectHR
- Conservation Desktop
- eDirectives
- eForms
- Employee Assistance Program
- · Employee Personal Page
- EmpowHR
- Exhibits & Displays 🖻
- FA Tracker
- FMI document management system
- FOTG Field Office Technical Guide
- FSA Compliance Review System
- National Planning Procedures Handbook
- National Publications & Distribution Center
- NEST (Easements Staging Tool)
- NFC National Finance Center
- ProTracts
- PRS
- · Receipt for Service
- Resource Stewardship (RSET)
- Science & Technology Training Library
 □
- Soil Resources
- Thrift Savings Plan 🖻
- Vehicle Management Tool 🖻
- WebTA

WILDLIFE HABITAT EVALUATION GUIDE

eFOTG>Michigan>Section 1>MI Tech Notes>Biology>No. 12

Sield Office Technical Guide MI										? Ielp	→ Log In
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Erosion prediction	~	No. 06 Wild Rice Production in	A	2004-1 <mark>1</mark> -23	()	Biology,	wild rice	-	34	43	0
eTech Guide Notices		Constructed Paddies				Technical Notes, Wildlife					
Laws	\sim		0								-
Maps		No. 12 Wildlife Habitat Evaluation	A	2007-04-27		Biology, Wildlife	habitat; wildlife	×	19	90	0
Michigan Technical Notes	~	No. 15 Guidelines for Herbaceous	L	2004-1 <mark>1-</mark> 23		Biology,	stand;	-	21	16	0
Agronomy		Stand Evaluation				Technical Notes,	herbaceous ; evaluation				
Biology						Grazing Land Management, Pasture					

WHEG EXAMPLE

MICHIGAN HABITAT INDEX WORKSHEET

GRASSLAND¹

					Participant	Tract No.	Date	Field No	
	EXI	STING COND	DITION		Observer	Acres			
Habitat Type	Habitat Index	Acres	Weighted Index	CTU					
Cropland	x		=		GRASSLAND HABITAT	F INDEX POINTS	EXISTING	PLANNED	
Woodland	X		=						
Pastureland/Hayland	x		=		1. Species Composition (Diversity)			
Grassland	X		=		2 points for each common	² grass species and 2 points for	each common		
Shrubland	X		=		forb or broadleaf species v	with a maximum total of 14 poi	ints.		
Wetland	X		=		-				
	SUM TOTALS				2. Presence of Bare Group	nd			
					> 40% bare ground/light l	itter	0		
	TOTAL WEIGHTE	ED INDEX/TO	TAL ACRES		30-39% bare ground/light	litter	5		
					10-29% bare ground/light		10		
	<u>PLA</u>	NNED COND	<u>OITION</u>		1-9% bare ground/light lit		5		
Habitat Type	Habitat Index	Acres	Weighted Index	CTU	< 1% bare ground/light lit		0		
Cropland	x		=				-		
Woodland	x		=		3. Average Field Size				
Pastureland/Hayland	x		=		> 40 acres		10		
Grassland	x		=		20-40 acres		8		
Shrubland	x		=		5-19 acres				
Wetland	X		=				4		
	SUNTOTALS				< 5 acres		0		
	SUM TOTALS								
	TOTAL WEIGHTE	ED INDEX/TO	TAL ACRES		4. Abundance of Grasslar	nds Within 1 Mile Radius			
					Comprises >25% of area		10		
Note: In general, a h	abitat index below 0.2	indicates noor l	habitat, between 0.3 and 0.4	10 indicates fair	Comprises 11-25% of area		7		
			75 would be considered exe		Comprises 1-10% of area		3		
	-				Comprises <1% of area		0		

INVENTORY

MNFI is a frequently updated system that allows conservation planners to see if there have been any reported sightings of threatened or endangered species in the planning area.

Must be documented on the CPA-52 form. Used to confirm that implementing a practice will not negatively impact a special concern species.

IPAC is another similar database needed for any forestry practices – through USFWS.

Both require login access.

	MNELHZ	ome ContactUs P	Plant List J	nimal List A	ostracts Help										
Search	Michigan Natural Features Inventory Web Database Search Ch Results for Town 07S, Range 02E, Section 16 and Lenawee County aying Record 1 to 1 of 1 Records Found Common Scientific State Federal Last Observed Element Mapping General Site EO Data Site of Best Documentation of EO Town Range Section County														
426-100-	Common Name	Scientific Name	State Status	Federal Status	Last Observed Date	Element Category	Mapping Precision	General Site Description	EO Data	Site of Observation	Best Documentation of EO	Town	Range	Section	County
	Pickerel frog	Lithobates palustris	SC		2006-04-02	Animal			MI Herp Atlas Data 1998-03-28 to 2005-04-10: 4 individuals obs in T075R02E26 2000-04-02: 1 individual obs in T075R02E17 2003-05-05: 1 individual obs in T075R02E01 2004-04-06: 1 individual obs in T075R02E18 2004-04-06 to 2006-04-02: 3 individuals obs in T075R02E24 2005-04-10: 1 individual obs in T07SR02E17	Dover Twp	MI Herp Atlas 2019. Excel spreadsheet containing MI Herp Atlas data and mxd for spatial reference.	075	02E	1, 7, 8, 9, 13, 16, 17, 18, 23, 24, 25, 26	Lenawee
											New Search (Refine Search)	(Prev	rious 25	Records) (Next 25 Reco	urds ▶)

TREE/SHUB SUITABILITY GROUPS

eFOTG>Michigan>Section 2>Forestry Information>CTSGs



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Conservation Tree/Shrub Suitability Groups (CTSGs)

Document Title 📻	Type 🚍	Pub Date	End Date	Subject	Keywords	Abstract	Size (kb)	Info
Conservation Tree/Shrub Suitability Groups (CTSGs) Worksheet	X	2021-02-22	1771	Forestry and Agroforestry	2754	Conservation Tree/Shrub Suitability Groups (CTSGs) Worksheet	274	()
CTSG Soil Descriptions	\mathbf{X}	2010-03-31	-	6.55		-	180	()

TREE/SHUB SUITABILITY GROUPS

eFOTG>Michigan>Section 2>Forestry Information>CTSGs

- 1. Identify soil type in *All Soils* tab
- 2. Go to that CTSG tab
- 3. Filter by region
- 4. View all species that are suitable for that soil type

	Α	B	C D E F G H I		J	K	L	
5	BADAXE	2rx 1	that have a low to high available water capacity. The depth to a water					
	BADRIVER	1	table during the growing season is greater than 1.5 feet. Some soils in					
7			this group may have a root restrictive layer at a depth of greater than 40 inches. Some soils in this group may experience frequent or					
}	BAMFIELD	3K	occasional flooding for brief durations. Soils in this group may have					
	BANAT	1	skeletal profiles.					
)	BARRY	2K	skeleta profiles.					
	BATTLEFIELD	1	Group 5					
	BATTYDOE	5K	Soils in CTSG-5 are deep, loamy, moderately well to well drained soils					
	BEARTOWN	2SF	with a moderate available water capacity. The depth to a water table					
ŀ	BEAVERTAIL	10	during the growing season is greater than 1.5 feet. Soils in this group					
)	BEECHWOOD	1	are at least 40 inches in depth to a restrictive layer. Some soils in this					
j	BELDING	1	group may experience frequent or occasional flooding for brief					
	BELLEVILLE	2G	durations.					
	BENONA	7	0 C					
	BENZONIA	7	Group 6					
)	BERGLAND	2C	Soils in CTSG-6 are moderately deep and have a root restrictive layer 20 to 40 inches in depth. These soils are moderately well to well					
	BERVILLE	2	drained and have a low to moderate available water capacity. The					
	BESEMAN	2HA	depth to a water table during the growing season is greater than 1.5					
	BETEGRISE	1	feet. Soils in this group have bedrock fragipan or sand and gravel					
	BIRGIRON	1	present in the profile at 20 to 40 inches.					
5	BISCUIT	1	' · · ·					
;	BIXBY	6G	Group 7					
,	BIXLER	1	Soils in CTSG-7 are moderately deep to deep sandy soils that are					
3	BLOUNT	1	moderately well drained to excessively drained. The depth to a water					
,)	BLUE LAKE	7	table during the growing season is greater than 1.5 feet. These soils					
)	BLUEBILL	2	have low to moderate available water capacity. These soils may have					
	BODI	6	a restrictive layer at 20 inches or more in depth. Group 7w soils have a water table influence between 1.5 and 6.5 feet deep during the	_				
	BOHEMIA	6	growing season.					
	BOHEMIAN	3	growing season.					
ļ	BONO	2	Groups 8 and 9 do not occur within Michigan and have been excluded					
+ ;	BOOTS	2	from this tool.					
	BORGSTROM	2 10D						
5	BOWERS		Group 10					
		1	Soils in CTSG-10 have one or more characteristics that are severely					
3	BOWSTRING	2HF	limiting to the planting and growth of trees and shrubs. Soil depth is					
)	BOYER	5K	less than 20 inches; available water capacity is less than 3 inches;					
)	BRADY	1	some soils may have cobbles, fragipan, bedrock, sand and gravel or other restrictive layers at less than 20 inches that may make					
	BRANCH	7W	tree/shrub establishment difficult. Some soils in this group may					
-	BRECKENRIDGE	2	experience frequent or occasional flooding for very long durations.					
	BREMS	7W	Some soils may have a pH of < 4.0. These soils also include urban					
Ļ	BRETHREN	7W	land medo land and miscollanoous land typos. An on-site ovaluation					

TREE/SHUB SUITABILITY GROUPS

eFOTG>Michigan>Section 2>Forestry Information>CTSGs

*See def below th		l descriptions					SI Climat Proje	ection	Climat Proje	/EUP te Chg. ection	Clima Proj	/UP ite Chg. ection					СТЯ
Form 🔽		20 yr. 🔍 Height (ft.)	Mature Height (ft.)	Shad(~ Toler-an ce		Comm€∽ cially Avail.?	Lo	Hig√	Low	High√	Low	High(∽	Scientific Name		State v Status	Current Region	- 1
tree	yes	18	60	Т	L, M, H	A			4	\downarrow	\downarrow	4	Abies balsamea	balsam fir		UP, NLP	1
ree	yes	35	60	Т		Α	1	^	1	1	•	•	Acer negundo	boxelder		ALL	1
tree	yes	35	90	Т	M. H	A	4	\downarrow	•	•	•	•	Acer rubrum	red maple		ALL	1
tree	yes	45	80	М	M	A	1	1	1	1	•	•	Acer saccharinum	silver maple		ALL	1
tree	yes	30	30	Т	Н				↓ ↓	Ť	1	1	Acer spicatum	mountain maple		UP, NLP	1
shrub	yes	16	16	М	L	Α							Alnus incana ssp. rugosa	speckled alder		ALL	1A
shrub	ves	10	10	М	L								Alnus viridis ssp. Crispa	mountain alder		UP	1A
tree	ves	25	100	M	н	A	4	Ť	•	•	1	1	Betula allegheniensis	vellow birch		ALL	1
tree	yes	40	70		L. M	A	J.	Ĵ.	•	•	•		Betula papyrifera	white or paper birch		ALL	1A
shrub	ves	20	20	1									Betula pumila	dwarf or bog birch		ALL	1
tree	yes	18	40	T	L	A	1	Ť	\downarrow	4	4	Ť	Carpinus caroliniana	American hornbeam, blue be	ech	ALL	1
tree	no	35	120	1	H	A	+	+	•	•	· ·	- *	Carya illinoinensis	pecan		none	1, 1
tree	yes	30	100			A	1	1	•	1	1	1	Carya cordiformis	bitternut hickory		LP	1
tree	ves	35	100	T		A						· ·	Carva laciniosa	shellbark hickory		SLP	1
shrub	yes	6	10	M									Ceanothus sanguineus	redstem ceanothus	Т	WUP	1
tree	no	35	80		L. M		+	+				+	Celtis laevigata	sugarberry		none	1
tree	yes	26	70	M	2,	A	1	1	+	+	1	1	Celtis occidentalis	northern hackberry		SLP	1K
shrub	yes	20	20	T		A			-			- '-	Cephalanthus occidentalis	buttonbush		LP	1
shrub	ves	16	16		L. H	A			+	+	+	+	Cercis canadensis	redbud		SLP	1
shrub	yes	4	4	M	1	~						· ·	Chamaedaphne calyculata	leatherleaf		ALL	1
tree	ves	25	25		L М. Н								Cornus alternifolia	alternateleaf dogwood		ALL	1
shrub	yes	7	10		M	A							Cornus amomum	silky dogwood		ALL	1
subshrut	-	0.5	0.5	T		· · · · · · · · · · · · · · · · · · ·							Cornus canadensis	bunchberry dogwood		ALL	1
shrub	yes	18	18	M		Α							Cornus drummondii	roughleaf dogwood		SLP	1
tree	yes	30	40		М. Н	A	4	Ť	4	•		+	Cornus drammonan Cornus florida	flowering dogwood		SLP	1
shrub	yes	6	15			A	*	¥	*	-			Cornus nonua Cornus racemosa	gray dogwood		ALL	1
shrub	-	12	12	-	L. M. H	A							Cornus racemosa Cornus sericea ssp. sericea	red-osier dogwood		ALL	1
	yes	30	30		L, IVI, I I	A							Crataegus crus-galli	cockspur hawthorn		SLP	1
tree shrub	yes	15	15		L 	~							Crataegus crus-gaili Crataegus douglasii		SC	UP	1
	yes	15	30		L									dotted hawthorn	30	ALL	1
tree	yes	2	2.5		L								Crataegus punctata	dotted nawthorn shrubby cinquefoil			
shrub	yes	2	2.5	M	L								Dasiphora fruticosa ssp. Floribunda	shrubby cinqueion swamp loosestrife		ALL	

SEEDING TABLES

eFOTG>Michigan>Section 4>Ecological Sciences Tools>Michigan Common Seeding Tables



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(i) Keyboard Navigation Instructions

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Ecological Sciences Tools

Document Title 🚍	Туре 🚍	Pub Date	F	End Date	F	Subject	Keywords	Abstract	Size (kb)	Info
000 MI EST Grassland Activity Dates Specification Sheet 2009	X	2005-02-	01	-		1. 	-0	-	10 <mark>0</mark>	()
000 MI EST Michigan Common Seeding Tables 2018	ß	2018-02-	01			122	225	ш.	1284	()

SEEDING TABLES

eFOTG>Michigan>Section 4>Ecological Sciences Tools>Michigan Common Seeding Tables

MICHIGAN COMMON SEEDING TABLE February 2018

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386 FIELD BORDERS

TABLE	– Plantir	ig rable f	or Grasses, L	egumes, and	other For	os
Species or Seeding Mixture	Cool/ Warm Season	Seeding Rate (Lb/Acre)	Established Density (Stems Per Ft ²)	Minimum Mowing Height (In.) <u>1</u> /	Sediment Trapping	Nutrient Trapping
Smooth Bromegrass	Cool	15-30	50	4	Y	
Garrison Creeping Foxtail	Cool	6-10	70	4		Y
Orchardgrass	Cool	10-15	70	4	Y	Y
Reed Canarygrass	Cool	10	50	4	Ŷ	Ŷ
Tall Fescue **	Cool	15-25	60	4	Y	
Tall wheatgrass	Cool	8-12		6	Y	
Prairie grasses						
Intermediate	Cool	8-12	60	4		
Wheatgrass					Y	
Big Bluestem	Warm	10-20*	40-50	12		Y

