Columbia Quarry-White Rock Land and Water Reserve Monroe County Part 4/4



Eastern red cedar and various dogwoods were primarily treated at the Lost Prairie Unit at Columbia Quarry-White Rock Land and Water Reserve in Monroe County.

Columbia Quarry-White Rock Land and Water Reserve Monroe County



The Overlook Prairie Unit at White Rock Land and Water Reserve was expanded. The north end of the unit, which was degraded with with sweet clover, mullien and tree of heaven, was vastly improved during the post assessment.

Columbia Quarry-White Rock Land and Water Reserve Monroe County



The Edna's Dell Unit of White Rock Land and Water Reserve received a significant amount of bush honeysuckle and other woody vegetation control, leaving behind bare areas to receive much needed sunlight.



An aerial view of the Harry's Cedar Prairie Nature Preserve in Monroe County, Illinois. The prairie was expanded to the right, upper left and lower center of the prairie.



The state endangered Missouri coneflower at Harry's Prairie Nature Preserve. The numbers have not increased but were able to remain stable in abundance and distribution due to the management.



In the 1970's this was a large prairie. During the Pre assessment it had shrank to 2 patches totaling 700 square feet. The sites were cut open, burned and reseeded to buy more time for active management at the Lost Unit at Harry's Prairie.



At the Orchid Prairie Unit, sumac and rough-leaved dogwood were treated to really open up the unit. The site was also burned twice. An endangered orchid is present at this unit.



Similarly, sumac and rough-leaved dogwood were treated in the Cedar Unit at Harry's Prairie Nature Preserve.



Sumac and rough-leaved dogwood were primarily located within the swales in the Cedar Unit at Harry's Prairie Nature Preserve.



The Pipeline Prairie Unit at Martha and Michelle Prairie Land and Water Reserve received prescribed fire over the course of the grant to open up adjacent woodlands to the high quality hill prairie.



Within the Turkey Prairie Unit, sassafras, rough leaved dogwood and 2 species of sumac were controlled. The adjacent woods are now connected to the main body of this grade A prairie.



Sumac was primarily treated within the Sumac prairie unit at Martha and Michelle Prairie Land and Water Reserve. It was once connected with Turkey Prairie. A prescribed fire opened up the woodlands between the two units (Turkey and Sumac Prairie).



At the Hidden Unit at Martha and Michelle Prairie Land and Water Reserve, native woody vegetation required control.



Cut stumps and brush pile remains from the contractual work at Autumn Glade Unit at Salt Lick Point Unit. The site was burned for the first time in Fall 2013.



Woody cover was the target for control at Bandits Glade Unit of Salt Lick Point. The pre assessment indicated that brush was all the way to the bluff's edge of this small site.



Control of eastern red cedars and a prescribed fire in the Boy Scout Prairie Unit allowed for an increase in sunlight for prairie vegetation. This site was also completely covered with woody vegetation.



Woody vegetation was reduced by 25% on the Bluestem Glade Unit of Salt Lick Point .



The Hidden Prairie Unit had minimal contractual work and a prescribed burn.



Sumac removal from the core was the only priority in the Prairie Dock Unit.



The small grade A Rock City Unit was helped considerably by rough leaved dogwood control along the edges and adjacent woods.



This Sideoats Prairie #14 unit is still barrely hanging on due to prescribed fire and some woody vegetation control from this contract.



Woody vegetation control and prescribed burn in Post Oak Prairie Unit helped to keep this prairie open and further connection between 2 patches.



Despite prescribed fire and several brush clearing efforts, the large grade A Salt Lick Point Prairie Unit of Salt Lick Point Prairie Complex continues to be invaded with woody vegetation.



Common mullien was a problem in most of the units at Salt Lick Prairie. Sometimes it was present before management, and other times it showed up afterwards.

Sugarloaf Hill Prairie St. Clair County



At Sugarloaf Prairie, cores areas and the edges were cleared of woody vegatation, including fragrant sumac, bush honeysuckle and eastern red cedar. The site also received prescribed fire.

Sugarloaf Hill Prairie St. Clair County



Woodland edges opened up at Sugarloaf Prairie Unit responded favorably.

North New Canton Pike County



Sassafras, smooth sumac, rough-leaved dogwood, eastern red cedar, and bush honeysuckle were among the species controlled at the North New Canton Hill Prairie. This photo shows the clearing on the south unit, facing north.

Prairie du Rocher Herp area/DeMint Nature Preserve Monroe County



An aerial view of the Demint Nature Preserve in Monroe County.

Hopewell Hill Prairies Nature Preserve Pre and Post Photo Assessment Marshall County



November 12, 2009, Pre-SWG, 40.98310 89.45629 +/- 11ft @280°



May 15, 2013, post-assessment, 40.98310 89.45626 +/- 12 ft @ 280°



November 12, 2009, Pre-SWG, 40.98299 89.45605+/- 12 ft @ 200°



May 15, 2013, post-assessment, 40.98294 89.45620 +/- 11 ft @ 200°



May 15, 2013, post-assessment, 40.98250 89.45621 +/- 10 ft @ $15^{\rm o}$



November 12, 2009, pre-SWG, 40.98289 89.46072 +/- 12 ft @ 115°



May 15, 2013, post-assessment, 40.98290 89.46075 +/- 13 ft @ 115°



November 12, 2009, pre-SWG, 40.98274 89.46018 +/- 12 ft @ 290°



May 15, 2013, post-SWG, 40.98269 89.46021 +/- 18 ft @ 290°

Oak Bluff Nature Preserve Pre and Post Assessment Photos Marshall County



November 12, 2009, pre-SWG, 41.08636 89.44310 +/- 13 ft @310°



May 15, 2013, post-assessment, 41.08632 89.44310 +/- 11 ft @ 345°



November 12, 2009, pre-SWG, 41.08652 89.44329 +/-13 ft @340°



Wier Hill Prairie Nature Preserve Marshall County



Woody encroachment was removed from a brushy draw in the lower middle of Wier Hill Prairie (seen on the right side of the photo). Bush honeysuckle was removed in the forest surrounding the hill prairie and sweet clover plants were hand pulled from the prairie.

Witter's Bobtown Nature Preserve Pre and Post Photo Assessment Menard County



November 10, 2009, pre-SWG, 40.07236 89.98210 +/- 12 ft @ 0°



March 22, 2013, post-assessment, 40.07236 89.98210 +/- 10 ft @ 0°



November 10, 2009, pre-SWG, 40.07286 89.98145 +/- 11 ft @ 180°



March 22, 2013, post-assessment, 40.07287 89.98145 +/- 9 ft @ $180^{\rm o}$



November 10, 2009, pre-SWG, 40.07286 89.98145 +/- 11 ft @ $45^{\rm o}$



March 22, 2013, post-assessment, 40.07287 89.98145 +/- 9 ft @ $45^{\rm o}$

APPENDIX E Taxa List from the Hill Prairie Research Project

Order	Family	Subfamily	Genus	Species
Orthoptera				
	Acrididae(61)			
			Arphia (8)	
			Melanoplus (15)	
			Metaleptea (8)	
			Orphulella (15)	
			Pseudopomala (4)	
			Spharagemon (1)	
			Syrbula (10)	
	Gryllidae(72)			
			Allonemobius (22)	
			Anaxipha (6)	
			Eunemobius (11)	
			Gryllus (15)	
			Hapithus (1)	
			Miogryllus (6)	
			Neonemobius (7)	
			Oecanthus (1)	
			Velarifictorus (3)	
	Mogoplistidae (11)			
			Cycloptilum (11)	
	Rhaphidophoridae(291)		
			Ceuthophilus (291)	
	Tetrigidae(5)			
			Nomotettix (1)	
			Tettigidea (4)	
	Tettigoniidae (2)			
			Conocephalus (1)	
			Neoconocephalus (1)	
Blattodea				
	Blattelidae(2)			
Hemiptera				
	Achilidae (2)			
			Catonia (2)	
	Alydidae (2)			
			Alydus (2)	
				A. eurinus (2)
	Aphididae(65)			
			Drepanosiphum (1)	

Order	Family	Subfamily	Genus	Species
Hemiptera	Aradidae (2)			
			Aradus (1)	
			Neuroctenus (1)	
	Caliscelidae (70)			
			Bruchomorpha (36)	
			Fitchialla (24)	B. dorsata (36
			Fitchiella (34)	F. robertsoni
				(34)
	Cercopidae (8)			(31)
			Lepyronia (1)	
			Pelitropis (1)	
	Cicadellidae(236)			
		Agallinae (4)		
		Cicadellinae (8)		
		Deltocephalinae		
		(171)		
		Dorycephalinae (1)		
		(1) Idocerinae (3)		
		Neocoelidiinae		
		(25)		
		Typhlocybinae		
		(24)		
	Coreidae (1)			
			Acanthocephala (1)	
	Cydnidae (9)			
			Amnestus (1)	
			Dallasiellus (2)	
			Pangaeus (5) Sehirus (1)	
	Delphacidae (6)		Jennus (1)	
			Liburnia (2)	
	Dictyopharidae (2)			
			Phylloscelis (2)	
				P. atra (2)
	Enicocephalidae(13)			
			Systelloderes (13)	
	Geocoridae (9)			

Order	Family	Subfamily	Genus	Species
Hemiptera			Araphe (1)	
			Geocoris (8)	
	Membracidae (12)			
			Entylia(1)	
			Tropidocera (1)	
	Miridae(4)			
			Halticus (1)	
	Pachygronthidae (1)			
	Pentatomidae (9)			
			Coenus (1)	
			Eustictus (2)	
			Oebalus (2)	
				O. pugnax (2)
			Phlegyas (1)	
			Thyanta (3)	
				T. custator (2)
	Phylloxeridae(1)			
	Psyllidae (2)			
	Reduviidae(5)			
			Arilus (1)	
				A. cristatus (1)
			Barce (1)	
			Nabis (1)	
			Phymata (1)	
			Oncerotrahelus (1)	
	Rhypharochromidae (7)			
			Cnemodus (4)	
			Cryphula (2)	
			Perigenes (1)	
	Schizopteridae (3)			
			Glyptocombus (3)	
	Thyreocoridae (5)			
			Corimelaena (4)	
	Tingidae (15)			
			Atheaus (13)	
			Corythuca (1)	
			Gargaphia (1)	

Order	Family	Subfamily	Genus	Species
Thysanoptera	Phlaeothripidae(7)			
	Thripidae(3)			
Psocoptera	Dachytractidae(1)			
Coleoptera	Pachytroctidae(1)			
concopteru	Anobiidae(1)			
			Calymmaderus(1)	
	Brentidae(27)			
			Kissingeria(27)	
	Buprestidae (1)			
			Pachyschelus(1)	
	Cantharidae (27)			
			Ditemnus(1)	
			Caccodes (2) Belotus (22)	
			Chauliognathus (2)	
				C.
				pensylvanicus
				(2)
	Carabidae (78)			
			Acupalpus (1)	
			Chlaenius (15)	
			Cincindela (9)	
				C. sexguttata
				(1) C. colondida (1
				C. splendida (1 C. unipunctata
				(7)
			Dicaelus (1)	<u>\-</u> /
			Galerita (4)	
			Lebia (2)	
			Notiobia (1)	
			Pasimachus (33)	
			Phrypeus (1)	
	Chrucomolideo (77)		Pterostichus (11)	
	Chrysomelidae (77)		Altica (8)	
			Anisostena (5)	

Order	Family	Subfamily	Genus	Species
Coleoptera			Anomoea (2)	
			Capraita (2)	
			Diabrotica (24)	
				D. barberi (4)
				D. cristata (20)
			Disonycha (2)	
			Ditemnus (1)	
			Gonioctena (1)	
			Luperaltica (4)	
			Pachybrchis (21)	
			Systena (5)	
			Tymnes (1)	
			Tytthonyx (1)	
	Coccinelidae (1)			
		Scymninae (1)		
	Curculionidae (30)			
			Cylindridia (7)	
			Geraeus (9)	
			Linogeraeus (2)	
			Madarellus (1)	
			Otiorhynchus (2)	
		Scolytinae (8)		
			Scolytodes (1)	
	Dermestidae (3)			
	Histeridae (2)			
			Cryptorhopalum (1)	
	Lampyridae (1)			
			Saprinus (2)	
	Leiodidae (1)			
	Lucanidae (1)			
			Lucanus (1)	
	Meloidae (2)			
			Epicauta (2)	
	Melyridae (1)			
			Attalus (1)	
	Mordellidae (8)			
			Glipodes (3)	
			Isotrilophus (4)	

Order	Family	Subfamily	Genus	Species
Coleoptera			Mordellina (1)	
	Nitidulidae (11)			
			Stelidota (1)	
	Phalacridae (4)			
			Phalacrus (4)	
	Ripiphoridae (1)			
			Macrosiagon (1)	
	Scarabaeidae (9)		A (1)	
			Aegila (1)	
			Canthon (2)	
			Melanocanthon(1)	
			Onthophagus (3) Trichiotinus (2)	
	Staphylinidae (11)		memotinus (2)	
	Tenebrionidae (1)			
	Trogidae (2)			
			Hymenorus (1)	
			Omorgus (1)	
Hymenoptera			5 ()	
	Braconidae(4)			
	Cephidae(1)			
	Ceraphronidae(25)			
	Chrysididae(5)			
	Diapriidae(1)			
	Eucoilidae(3)			
	Formicidae (687)			
	(),		Aphaenogaster (13)	
			Brachymyrmex (6)	
			Camponotus (5)	
			Crematogaster(184)	
			Forelius (172)	
			Formica (31)	
			Hypoponera(4)	
			Monomorium (84)	
			Neivamyrmex (1)	
			Pheidole (68)	
			Prenolepis (20)	

Order	Family	Subfamily	Genus	Species
Hymenoptera			Solenopsis (90)	
			Trachymyrmex (9)	
	Halictidae(1)			
	Ichneumonidae(3)			
	Mutillidae(3)			
	Platygastridae(42)			
	Sceliionidae(13)			
	Signiphoriade(4)			
	Trichogrammatidae(1)			
Siphonoptera				
	Ceratophyllidae(4)			
Mecoptera				
	Panorpidae(12)		_ /	
			Panorpa (5)	
Diptera				
	Agromyzidae (1)			
			Liriomyza (1)	
	Anthomyiidae(1)			
			Paregle (1)	
	Bibionidae(1)			
			Bibio (1)	
	Cecidomyiidae(19)			
			Anaretella (1)	
			Arthrocnodax (1)	
			Asphondylia (1)	
			Camptomyia (1)	
			Cecidomyia (3)	
			Contarinia (2)	
			Corinthomyia (1)	
			Corydylomyia (1)	
			Eucatocha (2)	
			Iteomyia (1)	
			Miastor (3)	
			Monardia (1)	
	Corotonomial = -(4.2)		Planetella (1)	
	Ceratopogonidae(13)		Pozzia (2)	
			Bezzia (2) Dasubolog (4)	
			Dasyhelea (4)	

Order	Family	Subfamily	Genus	Species
Diptera			Leptoconops (6)	
			Sphaeromias (1)	
	Chaoboridae (2)			
			Chaborus (2)	
	Chironomidae(107)			
			Ablabesmyia (1)	
			Cardiocladius (1)	
			Chironomus (50)	
			Cricotopus (14)	
			Cryptochironomus (1)	
			Dicrotendipes (2)	
			Glypotendipes (1)	
			Gymnometriocnemus (1)	
			Heterotrissocladius (1)	
			Microspectra (5)	
			Nanocladius (1)	
			Orthocladius (7)	
			Pagastia (1)	
			Parachironomus (5)	
			Polypedilum (2)	
			Procladius (4)	
			Pseudochironomus (1)	
			Symbiocladius (2)	
			Tanytarsus (7)	
	Chloropidae(6)			
			Elachiptera (1)	
			Parectecephala (1)	
			Thaumatomyia(4)	
	Cylindrotomidae (1)			
			Phalacrocera (1)	
	Dolichopodidae (3)			
			Argyra (3)	
	Drosophilidae (13)			
			Chymomyza (2)	
			Drosophila (8)	
			Leucophenga (1)	
			Mycodrosophila (2)	

Order	Family	Subfamily	Genus	Species
Diptera	Heleomyzidae(12)			
			Suillia (12)	
	Hybotidae (24)			
			Drapetis (19)	
			Platypalpus (4)	
			Tachypeza (1)	
	Lauxaniidae(1)			
			Calliopum (1)	
	Limoniidae (1)			
			Limonia (1)	
	Phoridae(52)			
			Beckerina (1)	
			Chaetopleurophora (1)	
			Diplonerva (5)	
			Dohrniphora (40)	
			Phora (3)	
			Stichillus (1)	
			Triphelba (1)	
	Piophilidae(25)			
			Protopiophila (25)	
	Pipunculidae (1)			
			Chalarus (1)	
	Rhagionidae(1)			
			Spania (1)	
	Sciaridae(50)			
			Bradysia (2)	
			Chaetosciara (1)	
			Corynoptera (2)	
			Epidapus (4)	
			Sciara (13)	
			Lycoriella (17)	
			Scatopsciara (9)	
			Schwenkfeldina (2)	
	Scathophagidae (1)			
			Orthacheta (1)	
	Sphaeroceridae(13)			
			Leptocera (13)	
	Stratiomyidae(18)			

Order	Family	Subfamily	Genus	Species
Diptera			Ptecticus (18)	
	Tachinidae (3)			
			Archytas (2)	
			Phytomyptera (1)	
	Tephritidae (6)			
	Therevidae(1)			
			Cyclotelus (1)	
	Tipulidae(1)			