



P.O. Box 7950 Stn Main • Winnipeg Manitoba Canada • R3C 0J1  
Telephone/ N° de téléphone: (204) 360-4394 • Fax/ N° de télécopieur: (204) 360-6167  
SJohnson@hydro.mb.ca

July 7, 2015

Darrell Ouimet  
Environmental Approvals Branch  
Manitoba Conservation and Water Stewardship  
Suite 160, 123 Main Street  
Winnipeg, MB R3C 1A5

Dear Mr. Ouimet:

**Re: File # 5766. Harrow Station to Bishop Grandin Blvd - Information Request**

This letter is in response to your email of Wednesday, June 10, 2015, requesting additional information on the above project.

**Required Additional Information:**

On-site surveys should be conducted to confirm the presence of any species of concern given the timing of construction (spring) and the location of the proposed project relative to adjacent green space (including Parker Lands). Has Manitoba Hydro conducted on-site vegetation and wildlife surveys of the project area to confirm the search results of the Manitoba Conservation Data Centre regarding species of conservation concern? If so, please provide this additional information. Alternatively, please provide a submit a plan to undertake surveys and report the result of these surveys (including appropriate mitigation measures to be applied) to Environmental Approvals Branch.

**Response:**

A point count, vegetation and visual encounter survey was conducted on June 19th, 2015 to address the concerns regarding species of concern. A field report is attached that outlines the methods and results of the survey as well as proposed recommendations that will be followed during construction as precautionary measures. No evidence of any species of conservation concern were identified along the preferred route, or in adjacent areas.



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Please feel free to contact me at 360-4394 with any questions, or if you require more information.

Yours truly,

A handwritten signature in blue ink that reads 'Shannon Johnson'.

Shannon Johnson, Manager  
Licensing & Environmental Assessment Department,  
Transmission Planning & Design  
Transmission

# Reference: Field Survey Summary – Harrow Station to Bishop Grandin Blvd Transmission Project

## OBJECTIVE

The primary objective was to conduct a survey for species of conservation concern along the preferred route of Harrow Station to Bishop Grandin Blvd. Transmission Project (Environmental Assessment Branch File # 5766). This survey would provide information on the presence of species of conservation concern including amphibians, reptiles, birds, mammals and vegetation along the proposed route, and if identified, provide recommendations for mitigation.

## METHODS

### STUDY DESIGN

A multi species survey design was developed to detect the presence of species of conservation concern along the preferred route. Point count surveys were used to detect birds, and vegetation plot surveys were used to sample plants. Visual encounter surveys were also used to detect birds, plants, mammals, amphibians and reptiles of conservation concern. At the direction of Manitoba Conservation and Water Stewardship extra survey effort was focused on the north east portion of the preferred route, where it transected a green space commonly referred to as the “Parker Wetlands”. Species of conservation concern were identified as any species listed in the *Endangered Species and Ecosystems Act*, *Species at Risk Act*, or the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). A list of species with some likelihood of breeding in or near this urban green space includes:

#### BIRDS

Barn Swallow (*Hirundo rustica*)  
Bank Swallow (*Riparia riparia*)  
Bobolink (*Dolichonyx oryzivorus*)  
Canada Warbler (*Cardellina canadensis*)  
Chimney Swift (*Chaetura pelagic*)  
Common Nighthawk (*Chordeiles minor*)  
Eastern Wood Peewee (*Contopus virens*)  
Golden-winged Warbler (*Vermivora chrysoptera*)  
Sprague’s Pipit (*Anthus spragueii*)  
Peregrine Falcon (*Falco peregrines*)  
Red-headed Woodpecker (*Melanerpes erythrocephalus*)  
Eastern Whip-poor-will (*Caprimulgus vociferous*)

#### AMPHIBIANS

Leopard frog (*Lithobates pipiens*)

#### REPTILES

No species expected to occur

#### VEGETATION

No species expected to occur

### DATA COLLECTION

A reconnaissance survey (12:00pm to 2:00pm) was conducted along the entire project route on June 18<sup>th</sup>, 2015 to develop familiarity with the project area and identify any access issues.

A point count, vegetation and visual encounter survey was conducted on June 19<sup>th</sup>, 2015 from 6:45 am to 12:00 pm. Surveys were conducted using recognized survey protocols (MBBA 2010, *Braun-Blanquet 1932*, and GoS 2014). Early morning conditions were sunny, 12 C with light west winds. The survey began at the northeast portion of the route (near Harrow), and ended at the southwest portion of the route (near Bishop Grandin). The survey was conducted by crew consisting of one wildlife biologist and one botanist.

Point count and vegetation plot surveys were conducted at approximately 500 meters intervals directly along the preferred route. Visual encounter surveys were conducted between point count and vegetation survey plots (Map 1). Additional visual encounter surveys were conducted in areas adjacent to the preferred routes including the edge of adjacent forested lands in the “Parker Wetlands”.

All survey information was recorded on an iPad with ArcGIS *Collector* and notepads. Photos of sites were also taken to provide supporting evidence and documentation. Incidental information regarding other wildlife species, large trees, and weeds, were also recorded, as they were encountered along the route on ArcGIS *Collector*.

## RESULTS

No evidence of any species of conservation concern were identified along the preferred route, or in adjacent areas. Numerous bird species were identified as part of point count surveys and visual encounter surveys (Appendix A). The most common species identified included the Clay colored sparrow (*Spizella pallid*), American goldfinch (*Carduelis tristis*), Song sparrow (*Melospiza melodia*), Common grackle (*Quiscalus quiscula*) and American crow (*Corvus brachyrhynchos*). Many other species were identified flying over, including Franklin's gulls (*Leucophaeus pipixcan*), American Robin (*Turdus migratorius*), Common raven (*Corvus corax*), and Ring-billed gull (*Larus delawarensis*). One dead blue winged teal (*Anas discors*) hen was found along the preferred route (Photo 2). It showed evidence of being killed and foraged on by a canine (wild and/or domestic). Wood frog (*Lithobates sylvaticus*) tadpoles and calling adults were identified along the edge of the forested area in a shallow pool. No reptiles were identified. Whitetail deer (*Odocoileus virginianus*) tracks were identified at multiple locations along the route.

Sixty-six plant taxa were identified along the preferred route, or in adjacent areas, of these none were species of conservation concern. The drier areas of the route were dominated by an assortment of grasses including various bluegrass species and smooth brome (*Bromus inermis*). The most common forbs were primarily weedy species such as dandelion (*Taraxacum officinale*), sow thistle (*Sonchus arvensis*), silverweed (*Argentina anserine*), alsike clover (*Trifolium hybridum*) and bird vetch (*Vicia cracca*). The moister areas were colonized by various sedge species including wheat sedge (*Carex atherodes*), as well as other graminoids such as common spike-rush (*Eleocharis palustris*), Baltic rush (*Juncus balticus*) and reed canary grass (*Phalaris arundinacea*). In a few locations stands of dwarf milkweed (*Asclepias ovalifolia*) were identified. This species is regionally common and valuable to monarch butterflies (*Danaus plexippus*).

Overall, the habitat along the preferred route could be characterized as broadly disturbed and predominantly consisting of upland weedy and agronomic plant species. The areas limited size, invasive plants, regular mowing activities, and evidence of heavy dog traffic appear to preclude the ability of many wildlife species to establish in the area.

More information is available in map 1 and photos 1-4. Appendix A lists all the species identified.

## NOTABLE INFORMATION AND RECOMMENDATIONS

It is recommended that the following general mitigation measure be considered for this project:

- Establish marshalling yards and vehicle trails in dry upland areas

A few potential bird related concerns were identified along portions of the preferred route. Consider the following mitigation efforts to avoid conflicts with the *Migratory Bird Convention Act (MBCA)*, *Species at Risk Act (SARA)*, and *Wildlife Act (WA)*:

- At multiple locations along the preferred route large trees and shrubs have become established in the right-of-way. During the general bird nesting window (April 21 to August 15) some bird species could establish nests in these areas. (EC 2014a, b). If right-of-way clearing activities are required, it is recommended that they be performed outside the breeding bird window to prevent interactions with nesting birds.
- Maintain regular mowing schedule in advance of project construction to prevent the establishment of tall weeds or grasses, which could attract some ground-nesting birds.
- If construction crews identify a bird nest along the route, an environmental inspector should be contacted to identify the nesting species and determine the appropriate buffer distance (MCDC 2014).

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- Leafy spurge (*Euphorbia esula*) was identified at one location along the route. Ensure that construction activities do not contribute to the spread of this noxious invasive weed.

Jonathan Wiens, MSc, CWB®  
Biophysical Analyst (Terrestrial)  
Licensing & Environmental Assessment Dept  
Manitoba Hydro  
820 Taylor Ave (3), Winnipeg, MB, R3M 3T1  
Phone: (204) 360-6623

Maria Zbigniewicz M.Sc.  
Environmental Specialist  
Major Projects and Protection Programs Section  
Environmental Licensing and Protection Department  
Power Planning Division, Manitoba Hydro  
360 Portage Avenue (15)  
Winnipeg, MB R3C 0G8

## REFERENCES

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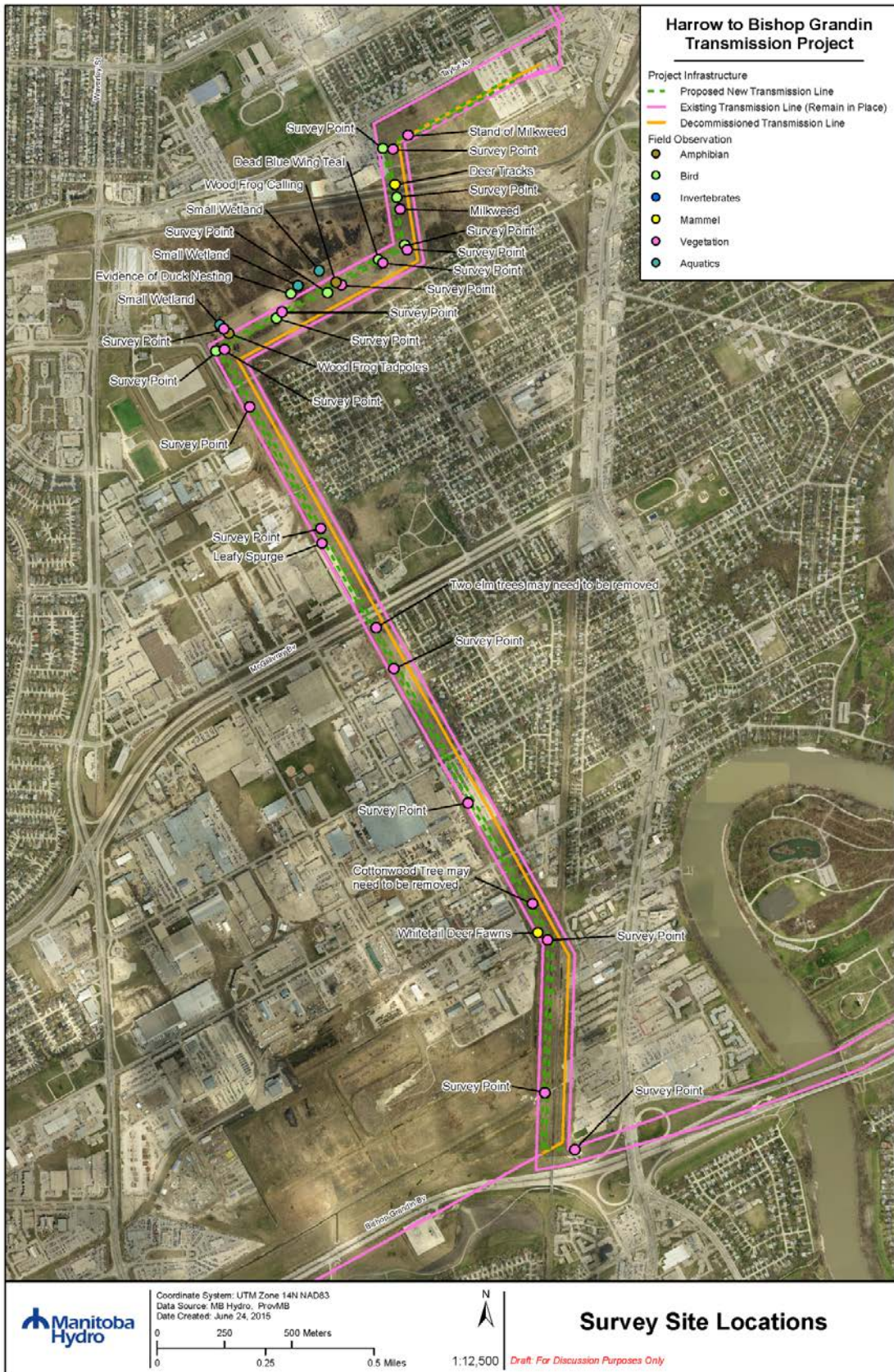
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Map 1. Species of Conservation Concern Survey Information

## PHOTOS



Photo 1. Typical habitat composition along the proposed route.



Photo 2. Dead duck found along the proposed route.





Photo 3. Small disturbed wet area near the proposed route.



Photo 4. Survey activity at a point along the proposed route.

## APPENDIX A

Species identified along the preferred route:

### Birds

American Crow (*Corvus brachyrhynchos*)  
American Goldfinch (*Carduelis tristis*)  
American Robin (*Turdus migratorius*)  
Blue Jay (*Cyanocitta cristata*)  
Chipping Sparrow (*Spizella passerine*)  
Clay colored Sparrow (*Spizella pallid*)  
Common Grackle (*Quiscalus quiscula*)  
Common Raven (*Corvus corax*)  
Franklin Gull (*Leucophaeus pipixcan*)  
Gray Catbird (*Dumetella carolinensis*)  
Blue winged Teal (*Anas discors*)  
Red Eyed Vireo (*Vireo olivaceus*)  
Red Winged Blackbird (*Agelaius phoeniceus*)  
Ring billed Gull (*Larus delawarensis*)  
Song Sparrow (*Melospiza melodia*)  
Western Meadowlark (*Sturnella neglecta*)

### Amphibian

Wood Frog (*Lithobates sylvaticus*)

### Mammal

Whitetail Deer (*Odocoileus virginianus*)

### Vegetation

Alfalfa (*Medicago sativa*)  
Alkali Buttercup (*Ranunculus cymbalaria*)  
Alsike Clover (*Trifolium hybridum*)  
Arrow-leaved-coltsfoot (*Petasites sagittatus*)  
Asparagus (*Asparagus officinalis*)  
Aster (*Aster spp.*)  
Baltic Rush (*Juncus balticus*)  
Bastard Toadflax (*Comandra umbellata*)  
Black Medick (*Medicago lupulina*)  
Bladder Campion (*Silene vulgaris*)  
Blue-eyed Grass (*Sisyrinchium montanum*)  
Bluegrass (*Poa spp.*)  
Buttercup (*Ranunculus sp.*)  
Canada Anemone (*Anemone Canadensis*)  
Canada Golden-rod (*Solidago Canadensis*)  
Canada Thistle (*Cirsium arvense*)  
Cattail (*Typha spp.*)  
Chickweed (*Stellaria sp.*)

### Vegetation (con't)

Common Dandelion (*Taraxacum officinale*)  
Common Horsetail (*Equisetum arvense*)  
Common Plantain (*Plantago major*)  
Common silverweed (*Argentina anserine*)  
Common Spike-Rush (*Eleocharis palustris*)  
Common Strawberry (*Fragaria virginiana*)  
Couch Grass (*Elymus repens*)  
Curly Dock (*Rumex crispus*)  
Curlycup Gumweed (*Grindelia squarrosa*)  
Dwarf milkweed (*Asclepias ovalifolia*)  
Field Bindweed (*Convolvulus arvensis*)  
Field mint (*Mentha arvensis*)  
Fowl Bluegrass (*Poa palustris*)  
Foxtail Barley (*Hordeum jubatum*)  
Golden Sedge (*Carex aurea*)  
Hawkweed (*Hieracium sp.*)  
Heart-leaf Golden Alexanders (*Zizia aptera*)  
Indian hemp (*Apocynum cannabinum*)  
Leafy Spurge (*Euphorbia esula*)  
Low everlasting, Pussy Toes (*Antennaria aprica*)  
Northern Bedstraw (*Galium boreale*)  
Perennial Ragweed (*Ambrosia psilostachya*)  
Philadelphia Fleabane (*Erigeron philadelphicus*)  
Poison Ivy (*Toxicodendron radicans*)  
Poplar (*Populus x hybrid*)  
Prickly Wild Rose (*Rosa acicularis*)  
Reed Canary Grass (*Phalaris arundinacea*)  
Sea Milkwort (*Glaux maritime*)  
Sedge (*Carex spp.*)  
Slough Grass (*Beckmannia syzigachne*)  
Smartweed (*Polygonum persicaria*)  
Smooth Brome (*Bromus inermis*)  
Sow Thistle (*Sonchus arvensis*)  
Swamp Hedge-Nettle (*Stachys palustris*)  
Switchgrass (*Panicum virgatum*)  
Thimbleweed (*Anemone cylindrical*)  
Timothy-grass (*Phleum pretense*)  
Tufted Vetch (*Vicia cracca*)  
Unknown grasses (no inflorescence) (*Poaceae*)  
Virginia Creeper (*Parthenocissus quinquefolia*)  
Water Plantain (*Alisma triviale*)  
Western Goat's-Beard (*Tragopogon dubius*)  
Western Snowberry (*Symphoricarpos occidentalis*)  
Wheat Sedge (*Carex atherodes*)  
White Clover (*Trifolium repens*)  
Wild Licorice (*Glycyrrhiza glabra*)  
Willow (*Salix spp.*)  
Yarrow (*Achillea millefolium*)

# **Jonathan Paul Wiens, MSc, Certified Wildlife Biologist®**

820 Taylor Ave  
Winnipeg, MB R3M 3T1  
Phone: (204) 360-6623  
Email: [jwiens@hydro.mb.ca](mailto:jwiens@hydro.mb.ca)

## **CAREER EXPERIENCE**

- 2013                    **Biophysical Analyst – Manitoba Hydro**  
Provide terrestrial expertise, coordination, and analysis for the Keeyask and Conawapa Generation Projects environmental assessments. Help prepare and review environmental protection plans. Develop collaborative working relationships, internally and externally, necessary to identify and incorporate best practices in areas of strategic importance to Manitoba Hydro's capital projects. Liaise with Federal and Provincial Regulators, including concerns regarding Species at Risk, to identify project related concerns and coordinate solutions. Work as an interdisciplinary team player, and apply leadership and sound judgment on all tasks.
- 2011 to 2013        **Wildlife Habitat Biologist – Manitoba Conservation and Water Stewardship**  
Provided technical expert wildlife analysis of environment impact assessments for Manitoba Conservation. Recommended wildlife habitat mitigation conditions for hydroelectric projects, mining developments, oil and gas pipelines, and new highways. Collaborated as a team member with the conservation data centre, endangered species biologists, big game biologists, and regional wildlife managers on critical aspects of wildlife management in Manitoba. Coordinate Manitoba's new Wildlife Habitat Mitigation Program.
- 2008                    **Natural Resource Planner (RP2)**  
Responsible for the development of watershed management plans in southern Manitoba. Combined bio-physical and socio-economic data to create consensus documents with multiple stakeholders. Utilized ArcGIS to understand and display landscape information. Facilitated meetings with the public, local government, technical experts, and First Nations. Managed human resources, developed work plans, conducted performance evaluations, and helped manage annual budgets of greater than \$1 million. Travelled across Manitoba to gather data and facilitate meetings.

## **EDUCATION**

- 2004-Dec 2007     **Master of Science (Environment and Geography) - University of Manitoba**  
**GPA 4.0**  
Conducted a three-year wildlife research project near Jenpeg, Manitoba. Partnered with Manitoba Hydro and the University of Manitoba. Specifically researched garter snake habitat use and ecology, using radio telemetry and mark recapture techniques.

Conducted surveys and interviews with First Nation peoples. Developed technical reports and peer-reviewed scientific publications.

2000-2004

**Bachelor of Environmental Science (Honours) - University of Manitoba  
GPA 3.5**

An interdisciplinary education with a focus on ecosystem management, environmental impact assessments, endangered species, wildlife management, population ecology, First Nations, natural resource law, biology, fisheries and zoology. Participated in field courses in northern locations including Churchill and Nunavut.

## HIGHLIGHTS OF QUALIFICATIONS

- Experience in planning, executing, and analyzing a wide range of wildlife research in northern and southern Manitoba.
- Certified Wildlife Biologist®, 2013 TWS Leadership Institute Graduate, 2011 TWS Chapter President
- Advanced education and experience in the Keeyask and Conawapa environmental impact assessments, field studies, project management, data gathering, and technical writing.
- Experienced in collaborating with external agencies and stakeholders, including the federal government, First Nations in northern Manitoba, non-government organizations, and consultants.
- Expert project coordination skills demonstrated in the development of large-scale watershed management plans.
- Avid outdoors person who enjoys hunting, fishing, bird watching, canoeing.

## PAST EMPLOYMENT

2005-2007

**Cooperative Education Program Manager**

Faculty of Environment, Earth, and Resources - University of Manitoba

Developed an extensive network of connections and partnerships with external agencies including: Ducks Unlimited, The Nature Conservancy, Parks Canada, Environment Canada, Fisheries and Oceans, and Manitoba Hydro.

2002 – 2003

**Park Interpreter**

Spruce Woods Provincial Park - Manitoba Conservation

Developed extensive skills in planning, delivering, and interpretive materials.

## PUBLICATIONS

Wiens, J. 2011. Gigantism in Red-sided Gartersnakes. *Herpetological Review*. 42(2) 305.

Mooi, R.D., J.P. Wiens, G.S. Casper. 2011. Extreme Color Variation within Populations of the Common Gartersnake, *Thamnophis sirtalis*, in Central North America, with Implications for Subspecies Status. *Copeia* (2) 187-200.

Wiens, J. 2009. Including Traditional and Local Knowledge in a Wildlife Study. In: Oakes, J., et al. (EDs.), *Sacred Landscapes* pp. 171-177. Winnipeg: Aboriginal Issues Press.

# Maria Wanda Zbigniewicz

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**ADDRESS** 2021 Loudoun Rd.  
Winnipeg, MB, R3S 1A3 Canada  
(204) 885-3969  
mwz@shaw.ca

**CITIZENSHIP** Canadian

## **EDUCATION**

1986 MSc. (Department of Botany, University of Manitoba)  
1982 BSc. Honours (Department of Botany, University of Manitoba)

## **EXPERIENCE**

### **Teaching**

2013	U of Manitoba	Landscape Architectural Field Studies
2005 - 11	U of Manitoba	Landscape Architectural Field Ecology
2007	U of Manitoba	Biology 2 Biological Diversity, Function & Interactions
2006	U of Manitoba	Forest Botany
2005	U of Manitoba	Community Ecology
2003	Wildflowers for Beginners (Weekend Workshop, Delta Marsh Field Station)	
1998 - 02	U of Manitoba	Environmental Science I: Concepts
1999 & 01	U of Manitoba	Flora of Manitoba
1996 – 97	University of Winnipeg	Environmental Biology, Principles of Ecology, Evolution and Ecology, Biology of Vascular Plants
1990,93,94	U of Manitoba	Flora of Manitoba
1994	Brandon University	Anatomy of Seeds Plants
1992	Brandon University	Survey of Non-vascular Plants
1991 & 92	U of Manitoba	Community Ecology

### **Environmental**

2012 - present	Manitoba Hydro	Environmental Specialist (Terrestrial)
2011 - 12	Manitoba Hydro	EIS Production Coordinator
2010 - 11	Manitoba Hydro	Biophysical Analyst
2007 - 09	Golder Associates Ltd.	Intermediate Vegetation and Rare Plant Specialist
2005 - 07	Salix Consulting	Chief Scientist

**PUBLICATIONS**

- Zbigniewicz, M.W. 2009. Determination of Success of Prairie Restoration at CFB/ASU Shilo prepared for the Department of National Defence.
- Zbigniewicz, M.W. 2006. Native Vegetation Restoration and Management Plans for Four Sites in the Delta Marsh 73 pp.
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- Goldsborough, L.G. & M.W. Zbigniewicz 1990. Studies on the distribution and morphology of *Typha* spp. in the Delta Marsh. University Field Station (Delta Marsh) Annual Report 25:47-57.
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