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**Appendix B**  
**Vegetation and Wildlife Report**

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# **ENVIRONMENTAL IMPACT ASSESSMENT**

of the

## **OLYWEST SITE, WINNIPEG, MANITOBA**

by

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## **Site Description**

The proposed Olywest Site is a triangular-shaped piece of property which is on the south side of the St. Boniface Industrial Park. It is bounded on the west side by the extension of Mazenod Road and on the north side by the Winnipeg Aqueduct and Railway. To the south are the CNR Symington Yards which is a major rail complex.

This large tract of land is dominated by an extensive low-lying meadow, which, for many years was mowed for hay, but has since been left in a natural undisturbed state for several years. This meadow is full of native plants and because portions of it are often under water for a short time every spring, the vegetation has rejuvenated to produce a meadow which looks like it has always been in a natural state. This meadow covers the bulk of the terrain involved.

Along its south periphery is a narrow band of woods composed of Aspen Poplar and Balsam Poplar. This wooded band contains a variety of shrub species and its forest floor is covered with native plants growing in an undisturbed environment.

The property's narrowest point is at its eastern extremity which extends to Plessis Road. On this very narrow point the most eastern part is dominated by willows and has a north-south railway branch line bisecting it. Immediately to the west of this branch line is a small tract of meadow bounded by willows and trees on its western side but containing five species of goldenrod and two species of gentian. The spot is a botanist's treasure-house.

The study team commenced field work on the Olywest property in April, 2006 and continued field work up to and including August 17. During this five-month period, observations were made on the plant, mammalian, avian and herpetilian species present.

The following sections summarize the study team's 2006 observations. All of the species are listed in taxonomic order.

## **Frogs**

This piece of property surprisingly supported four species of frogs in 2006. It is surprising because amphibians and reptiles are very susceptible to being killed by vehicles whenever the amphibians and reptiles attempt to cross roads. Looking at the picture in a broader sense the Olywest property is part of a major, urban block of grassland habitat with some trees and obviously this tract is large enough to support a diversity of wildlife. To the south, north and, to a lesser extent the west, it is bordered by industrial and residential areas, but to the east it is relatively open and largely agricultural. Plessis Road is the only major street on the east side bordering this tract of land. The property is on the edge of a major urban centre and the keyword is "edge". These four species are still able to survive within the limits of the City of Winnipeg because the land is on the periphery and until the block becomes too fragmented they should be able to remain.

The four species are Boreal Chorus Frog, Wood Frog, Gray Treefrog and Northern Leopard Frog. The Northern Leopard Frog is classed as a Species-at-Risk in Canada.

### **Boreal Chorus Frogs:**

This species was very common on the property during April with the first ones heard calling on April 9. They utilized any little patch of shallow water and by April 17, were singing in such loud choruses over a great amount of the property that they must have been present in big numbers.

### **Wood Frog:**

This species is bigger than the Boreal Chorus Frog but present in comparatively small numbers, although also distributed wherever there were trees or willows on the property. One could easily pick out their individual songs amidst the symphony of sound from the Boreal Chorus Frogs. They were still calling on August 17, but at this time just giving their single autumn call-note.

### **Gray Treefrog:**

This species is classed as a woodland species and is seldom more than a few hundred meters from substantial stands of woods. Its presence on the Olywest property is unexpected because its distribution is so restricted within Winnipeg's Perimeter Highway, however, a small number did

regularly utter their loud, trilling calls on the property during May and June. On adjacent properties where Aspen Poplars were growing in good-sized clumps, these treefrogs were particularly common.

### **Northern Leopard Frog:**

This species was never recorded on the property until mid-June and then it suddenly appeared. Throughout the remainder of June, July and August a few large specimens were seen and would have to be classed as transients because they were traversing grasslands and there was no water at the time on the Olywest property to support them. Possibly, during the record-breaking drought of July, they were moving from one man-made lake to another. Never more than nine were seen on any one day (August 16, 2006), so they are not particularly common. Because they were seen regularly but in very small numbers this species, which is classed as a Species-at-Risk in Canada, merits special concern. There is no permanent deep water on the property and deep water is essential as wintering habitat for the species. The Olywest property also has no permanent breeding habitat under normal conditions. Consequently these Leopard Frogs must strictly be regarded as transient and if the species is to be maintained in the eastern portion of the city limits, it is imperative to safeguard its critical habitat, which is definitely not on the Olywest property.

### **Mammals**

The study team has a long history of working in the St. Boniface Industrial Park and its environs and is able to report on many mammal species from a recent historical perspective. Before going into any detail on the individual mammalian species, it is important to point out that there is still a considerable movement of wildlife living in and passing through the area, because there are enough patches of native habitat remaining in the general area to permit some of the larger mammalian species to thrive. For example, Plessis Road is to the east of the project area and, on the east side of it and slightly to the north, is the Transcona Golf Course. This 18-hole course has some good patches of Aspen Poplar and in summer months golfers often see deer on the course. On the west side of Mazenod Road, on both the north and south side of the railway, there are still two tracts of Aspen Poplar woods that are large enough to support deer through the winter months. This means that deer are able to pass southwestward from the Transcona Golf Course towards the CNR Symington Yards and go right through the St. Boniface Industrial Park and the two tracts of woods just mentioned.

The deer have become highly adaptable and actually utilize the railway track crossing the underpass on Lagimodière Blvd. to get to the west side and feed on the grain spilled at the large Feed-Rite mill on Speers Road. At the feed mill they have a dependable winter food source and in the two tracts of woods on the west side of Mazenod Road, they have shelter from the winter storms.

Immediately to the north of Symington Yard there are some large patches of mixed Aspen Poplar and Balsam Poplar and these also offer some protection for deer during the critical winter months, when it is important for them to get protection from the winter storms and thereby conserve energy.

The railway adjacent to the aqueduct in itself provides a corridor along which wildlife can travel and this is particularly true for species like Red Fox, Raccoon and Striped Skunk. The man-made ponds in St. Boniface Industrial Park are also heavily utilized by wildlife.

The following section deals with the specific mammalian species as they relate to the project area and its immediate environs.

### **Water Shrew:**

On April 12, a very dark grey one was found dead on a sidewalk close to the north side of the project and this shrew may have been caught by a dog or some other predator and then abandoned. Water Shrew were probably relatively common in the project area, as a total of four were found on the property between April 1 and July 31, 2006. All were found dead. Shrews have a musky smell

to them and when foxes or other predators capture them they often immediately abandon them because of this unfavourable odour. In all probability the Water Shrews are caught by accident when the fox are hunting prey and don't realize, until they capture it, that they are capturing a Water Shrew rather than something like a Meadow Vole, which they readily eat and which form a major part of their diet.

The fact that four have been found is indicative that the species is relatively common even though it is difficult to see alive

#### **Eastern Cottontail:**

This is not a common species in the project area and is probably a transient on the property. Across the railroad tracks to the north there is a large pond on the west side of Beghin Avenue. Here some excellent healthy stands of Red-osier Dogwood have been planted and somebody puts out pellets at the base of one of these dogwood clumps so that wildlife can feed on the pellets. The cottontail feed on them and probably wander onto the project area on a daily basis. It is doubtful that they would be on the property if they were not getting easy food nearby and if they did not have some good winter cover, which the planted dogwood provides.

#### **Snowshoe Hare:**

This species is locally most commonly called a "Bush Rabbit". It is a regular species around the dense willow stands, but is particularly common to the west in the two tracts of Aspen Poplar woods on the west side of Mazenod Road and adjacent to the Winnipeg Aqueduct and Railway. Although this species is largely a transient on the property on the extreme northwest corner of the property there is a dense clump of willows growing amongst the Aspen Poplar and these willows provide ideal habitat, particularly in winter. It is almost impossible to visit this clump of willows and poplar on any winter day and not see a Snowshoe Hare.

#### **White-tailed Jackrabbit:**

This is a resident species on the property. It ranges widely and, during April, was regularly also seen at Symington Yard, the Transcona Golf Course and in the Terracona Business Park, which is on the north side of Dugald Road.

The surveys made between April 1 and August 17 have revealed that this species is a regular resident and is raising young on the property. During June, July and August in particular they were recorded virtually every day and on August 14 at least four different jackrabbits were observed within one-half hour.

#### **Woodchuck:**

This species is often also called a "Groundhog". Woodchucks are highly fascinating in that they can be very secretive and often are seldom detected by people who may live closeby. They must have good, dry denning sites and sufficient habitat to provide them with adequate food and protection from their enemies.

The project area in springtime is primarily a damp meadow and therefore is not suitable habitat to raise a family as Woodchucks need a dry den to raise their young. On the north perimeter of the property, the Woodchucks in 2006 had three dens that were all in man-made mounds well above the wet soil of this low-lying area. Usually their dens are close to, or right in, dense tree and shrub cover but in this case one of them had only bald prairie around it, while the other two were close to standing willows and Balsam Poplar, but were in mounds that are composed of soil and piled trunks and branches of trees and willows. These Woodchucks readily adapted to whatever habitat was available to them. All three of the dens were being utilized, judging by den activity and tracks, but the study team never saw Woodchucks at more than two of these dens on any one day. These Woodchucks were highly nervous of humans and that could well be because there are many people walking their dogs or letting their dogs run openly, along Mazenod Road and Camiel Sys Street. Few people walk along the railway track, with the result that the Woodchucks, whose dens were adjacent to the Winnipeg Aqueduct and Railway usually escaped notice.

In April it was interesting that the Woodchucks were foraging heavily on the new Stinging Nettles shoots and, secondarily, on the sweet clover.

As the season progressed a goodly number of the Woodchucks raised on the property seemed to disperse as their numbers significantly declined locally and one of the dens was abandoned. There may be two or more causes for this. Some people run their dogs through the area and a couple of people regularly let their dogs roam freely. These dogs frequently chased the Woodchucks and dug at their dens. There is a strong probability that this caused one of the pair of Woodchucks to move to a safer location.

There were few Woodchucks but they had a tendency to cross Camiel Sys Street during hot days and two of them were killed by vehicle traffic. When there was not much traffic some Woodchucks would actually sprawl out on the pavement soaking up the sun and this is not conducive to their longevity. There is a large rock on the south boundary of the Olywest property and a Woodchuck often laid on it during sunny days.

### **Thirteen-lined Ground Squirrel:**

The Olywest property is generally too low-lying to provide good breeding habitat for this species. Like the Woodchucks, they require a dry site for their burrows and there were very few such sites on the property. Those places that were dry enough did however have dens.

Immediately to the north across the aqueduct there is some higher ground and here it was a common species and there were many burrows. Here production of young in 2006 was high judging by the great frequency with which they were seen. Even though they were active above ground into the late evening, when foxes were prowling the property, there was never any evidence that the foxes tried to capture them.

### **Northern Pocket Gopher:**

This is another resident species but it was very restricted in its distribution during April, because much of the land was too wet for its subterranean burrows. June and July were incredibly dry and the pocket gophers took full advantage and their burrows were found in a few higher sites on the property. Associated with these burrows are push-ups of soft soil and this is how one immediately knows that the pocket gophers are present.

One of the great observations of the summer was seeing a Red-tailed Hawk suddenly plunge to earth and capture one of the pocket gophers at one of the mounds. The incident occurred late in the evening on a very hot day and it was probable that the hawk heard the pocket gopher pushing up the soil. The hawk was sitting on the top of a utility pole and intently peering downward. Pocket gophers normally stay under the ground surface most of the time and this one must have been pushing the soil out of the burrow and onto the surface. The hawk plunged right into the mound of earth and secured the pocket gopher. This is something that the Great Horned Owls do with regularity during the night as both nocturnal species are most active after the sun has set. Locally, pocket gopher bones are commonly found in the pellets that the owls regurgitate after eating their prey.

### **Muskrat:**

This species is not frequently seen on the project site but its tracks are present. They do, however, live in the man-made ponds on adjacent property in the Industrial Park and in April were utilizing some of the shallow Cattail and Soft-stemmed Bulrush wetlands. They are often victims to vehicular traffic and on two occasions dead animals were found on streets adjacent to the property. There was limited traffic on these streets but Muskrats are very busy in the spring and not adept at escaping any traffic.

Muskrats do not breed on the property but in July and August they criss-crossed the property with frequency as they moved from one man-made waterbody to another. Muskrats are not seen often on the land during the daylight hours, but they certainly got killed regularly on the paved roads during July and August. This species is prone to travel at night and it was a common

occurrence for the study team to traverse neighbourhood roads in the morning and find the remains of a dead Muskrat.

Once during July we saw a roaming black Labrador dog encounter a Muskrat and attack it. Muskrats are very agile and have long front teeth. The dog was bitten and immediately terminated the attack and went whining back to its owner.

**Southern Red-backed Vole:**

The combination of grassy meadows and woods provides great habitat for this species. Because it is primarily active at night it is difficult to observe, but this is probably a common species on the property. Just to the north of the project area, one was found dead on Camiel Sys Street on August 4 having been hit by a vehicle.

**Meadow Vole:**

This is a common resident on the property and a nest, containing seven young, was found on April 9. The Meadow Vole population appeared particularly healthy in the summer and was the main food source for Red Fox visiting the property.

**Red Fox:**

This species is primarily a transient on the property, because the land is largely too wet in spring to support denning sites. A man-made mound that is quite old and covered with a dense growth of Smooth Brome was located along the south edge of the property and it contained a fox den. There are also dens in the landfill site that is close to Lagimodière Blvd., and bounded on the south by the Winnipeg Aqueduct and Railway and on the north by Dugald Road. The foxes range widely and regularly travel the railway tracks and undoubtedly feed in the project area on a daily basis. On two occasions one was observed on the property training its young how to catch small rodents. Foxes were most frequently observed in the late evening on hot days, but could be observed almost any time of the day if the temperatures were cooler and the skies were cloudy.

**Raccoon:**

This species is so nocturnal that it was never seen by the study team on the Olywest property. It is probably primarily a transient on the property as during June through August only tracks were observed. It is a very secretive species locally and none of the local workers mentioned ever detecting it.

**Ermine:**

Twice within a 15-minute period on July 28 the study team saw an Ermine dash across Camiel Sys St., which is just north of the Olywest property. It was shortly after 11:00 p.m. but they were able to quickly confirm its identity under the street lights.

**Mink:**

This species was detected around the edge of the man-made ponds in the St. Boniface Industrial Park and its tracks were seen in the project area, where it would have to be regarded as a transient. Judging by the number of times one was seen during April in the industrial park the species is relatively common in the general area or there were a few very active individuals.

During May, June and July it was surprising how often Mink were actually seen and probably a week never passed without one being observed. There was no evidence of them raising a family on the property and there is no good breeding habitat for them on the actual Olywest property, so they must be primarily transients moving from one wetland to another whether it be a man-made waterbody or a drainage ditch.

**Striped Skunk:**

Tracks were common across the project area in April but after May 10 the species was virtually never seen and there were few tracks.

### **White-tailed Deer:**

This species is a regular summer resident and a winter transient in the project area. The major use of this property during summer months by deer is best exemplified by the fact that on the evening of August 14, eight were in view at one time feeding in the broad expanse of meadow.

The initial paragraph in the section dealing with mammals, above, ties in the deer of the general area with this specific site. The deer are dependent upon the two tracts of Aspen Poplar woods on the west side of Mazenod Road and if they are ever bulldozed, there will be only limited wintering habitat remaining for the deer and it will be highly unlikely that the deer will visit the project site in large numbers any longer.

Along almost all of the south perimeter of the property is a narrow band of woods composed of Aspen Poplar and Balsam Poplar primarily but also with some excellent shrub cover which is very useful to deer. Adjacent to this strip of woods and just to the south of it bordering the Symington Yards are some other tracts of woods that are very important to deer at this time.

During May, June, July and August 2006, the Olywest property was home to a significant population of deer.

### **Birds**

This study commenced in April and field work terminated on August 17. Consequently the study covers the spring migration, the breeding season and the early stages of the fall migration.

The man-made ponds in the St. Boniface Industrial Park attract a great many migrating waterfowl, especially ducks, and are used in amazing numbers during June and July by locally raised Canada Geese. Three species of gulls, namely, Herring Gull, Ring-billed Gull and Franklin's Gull all sat on the ice of these little ponds in April and the first two of these species scavenged on the project area. All three species are frequently heard overhead during both spring and fall migration.

Waves of migrants pass through the project area but do not nest locally. For example, in April, it was possible to see a few score of American Tree Sparrows and Dark-eyed Juncos as they moved northward and foraged for food on the ground and particularly used the dense willow stands on the west edge of the property. In the latter third of May each year it is the norm to have days when there are a hundred or more warblers, representing several species, on the property. These birds are most closely tied to the trees, shrubs and willows found in greatest abundance on the southern and western sides of the property.

Willows are a very mundane group of species to some people but they can have great value to migrating birds. For example, the first Hermit Thrush the study team recorded in the Winnipeg area was on April 18 and it was of a bird feeding around the bases of clumps of willows. In urban areas, where habitat is often very scarce within which migrants can seek cover from predators, varying from cats to Cooper's Hawks, these willows may provide the only cover available. Therefore, one cannot overestimate the value of isolated clumps of willows in areas where any tree or shrub habitat is scarce.

The following is a brief account of a few species that definitely are tied to the property during the breeding season or, as in the case of the Snowy Owl, have long periods of the year when they are present on the property although not breeding.

### **Canada Goose:**

The man-made lakes in the St. Boniface Industrial Park are a big draw for this species and pairs have been nesting in the project area for a number of years. On April 18 there were at least five pairs nesting within two hundred meters of the Winnipeg Aqueduct and Railway and three of these had full clutches of eggs on that date. The abundance of temporary waterbodies in the project area made the place particularly attractive in 2006 for geese. There is a sizeable population of non-breeding Canada Geese in the Winnipeg area annually every April and May and a portion of these utilize the Olywest property.

Canada Geese goslings follow their parents as they roam widely and by the last week of May they were seen throughout the general area. This travelling mode only became greater as June and July progressed, but these wandering, flightless geese are strongly tied to man-made waterbodies in Winnipeg until the geese reach the stage where they can fly. As there are no man-made waterbodies on the Olywest property, the property was largely free of them in July and August. The geese roamed extensively and are primarily grazing on the grass. They are a very common species in the general area and can be a tremendous nuisance, because as adjacent landowners will readily tell anyone who will listen, the droppings from these geese are a problem. It is not only unsightly but makes walking even on sidewalks unpleasant for people.

**Mallard:**

Over the past several years Mallards have successfully raised broods locally and there is a strong probability that some of these broods would have hatched from nests on the project property. Without the man-made waterbodies, many waterfowl species would not be nesting inside the Perimeter Highway as there is little suitable habitat available for them to raise brood.

**Northern Harrier:**

During April, a pair regularly utilized the property as they hunted for rodents. They nested in the broad expanse of meadows and raised four young. Throughout June and July they regularly criss-crossed the Olywest property and fed on Meadow Voles.

The Northern Harrier is not a common nesting species in the Winnipeg area any longer and that is because there is very little undisturbed nesting habitat for this ground nester. Over the past ten years there have been some years when it has been impossible to find a pair nesting within the Perimeter Highway and the most pairs recorded, probably nesting, during that decade on any one year was four. Therefore, the significance of a pair adjacent to the St. Boniface Industrial Park is worth noting.

**Cooper's Hawk:**

There are a number of old abandoned nests originally built by American Crows on the property and in 2006 a pair of Cooper's Hawks revamped one of these nests and raised a family in it.

**Red-tailed Hawk:**

The project site falls within the feeding range of this species. Some years a pair has nested just to the west of the site in the Aspen Poplar woods but more often the project area has been used by a pair nesting in an Aspen Poplar bluff on the south side of the Trans-Canada Hwy immediately south of the CNR Symington Yards. This pair is travelling a considerable distance to secure enough food to raise its brood.

Nearly daily in the last half of June and throughout July the property was visited by Red-tailed Hawks where they were catching mice, probably mainly Meadow Voles, and on at least one occasion, a Thirteen-lined Ground Squirrel. These Red-tailed Hawks often carried their prey northward, probably to their young, but were travelling so far over built-up areas that it was unknown where their nest would be.

**American Kestrel:**

This species did not nest on the property in 2006 but did regularly hunt for rodents here. These birds were often picking up small prey, possibly grasshoppers or beetles, but definitely something much smaller than a rodent and something that they captured using their bill and not their talons.

This is a cavity nester and there are cavities large enough for this species in some of the trees on the property but in 2006 they were not utilized by this species.

**Grey Partridge:**

Nesting habitat for this species was certainly good in the project area in April 2006 but the actual Olywest site may have been too wet for them to nest in April and early May. Over the past decade this species has been recorded irregularly from the St. Boniface Industrial Park and is most frequently found in close proximity to some of the railways. They are ground nesters that need an

abundance of grassy cover to be successful in rearing a brood. During July and August large stands of grassy cover on the Olywest site was used by one family.

At 8:31 p.m. on April 12, a pair was heard calling, and then ultimately found on the sidings bisecting the eastern portion of the project area. There was just too little dry nesting cover for this species to be nesting locally at the time of the sighting but possibly, by May, they could be nesting in the general area in some of the good habitat available. Too little is known locally about this species which has had a dramatic decline in the Winnipeg area in the last twenty years. The reason for this decline is uncertain but probably due to urban development and loss of nesting habitat.

During June and all of July prior to July 22, Grey Partridge were never seen nor heard on the Olywest property, then, a covey of 13 was observed. Almost daily thereafter they were present.

#### **Killdeer:**

This species probably has nested on the property most of the last ten years. They were present throughout April and the site provides both nesting habitat and a good food source. During 2006 at least three pairs successfully reared young on the property.

#### **Common Snipe:**

In April 2006 this species was particularly abundant as a migrant and, on April 22, there were at least fourteen flushed from the edges of some of the shallow ponds. The species is probably an irregular nesting species because some years when it is too dry, it is doubtful that there would be sufficient breeding habitat for it. The abundance of this species in mid-April was surprising but at that time the land was very wet and conditions were excellent for them. Judging by the unusually high number of snipe present, they were obviously finding an abundance of food. At least two pairs nested on the property in 2006.

#### **Ring-billed Gull:**

This species does not nest within Winnipeg city limits but during July significant numbers were often seen walking across the property and feeding on insects. The area is obviously an important foraging area for them after they have completed the nesting cycle. The man-made lakes located close to the property were used in April when the birds first returned. At that time the gulls would stand on the ice and sometimes make little trips out onto the land, walking about in search of food.

#### **Mourning Dove:**

They may have nested on the property as they were regularly heard and seen but no nests were actually found. They may raise more than one brood and have a very long nesting period with some birds nesting by mid-May and still having young in the nest as late as the first week in September. In July and August pairs of Mourning Doves were encountered intermittently on the property where they were searching for weed seeds.

#### **Eastern Screech Owl:**

A pair was nesting in a cavity in a Balsam Poplar in the extreme northwest corner of the Olywest property.

#### **Great Horned Owl:**

Owls often sit on the utility poles surrounding the area and are probably feeding on rodents and Snowshoe Hare locally. They have a long history of using the St. Boniface Industrial Park. For most of the last twenty-two years, a pair of Great Horned Owls have nested in one of the large Aspen Poplar woods located to the west of Mazonod Road. In the bulk of the years their nest has been on the north side of the railway but on at least four occasions it has been on the south side.

#### **Snowy Owl:**

This species is strictly a winter visitor to the Olywest property. Here it primarily feeds on rodents, particularly Meadow Voles. It often sits on neighbouring utility poles watching for its prey.

**Long-eared Owl:**

This species, in southern Manitoba, has a long history of nesting in abandoned nests originally built by Black-billed Magpies and this is particularly true of this property and the immediate area. Here, there are always old magpie nests and in about four of every ten years it is possible to find a Long-eared Owl raising its family in one of these nests. This special of owl is unpredictable in its breeding distribution and it is greatly influenced by the supply of small rodents. Therefore, in years of low rodent numbers, it would not be expected on this property.

**Downy Woodpecker:**

This species is a permanent resident, raising a family on the property or the immediate area and foraging for food throughout the entire year in the immediate locale.

**Hairy Woodpecker:**

Everything said of the Downy Woodpecker is equally applicable here.

**Northern Flicker:**

This species was a very common nesting bird in the Winnipeg area, but its numbers as a local breeder, dropped dramatically with the arrival of the introduced European Starling. In the last two decades few pairs have attempted nesting within the Perimeter Highway annually. In 2006 a pair raised a brood in a cavity in a large Balsam Poplar on the western edge of the Olywest property and that is noteworthy because of the scarcity of this species as a local breeder.

**Alder Flycatcher:**

This species is highly localized as a nester in the Winnipeg area but for several years has regularly been found breeding at the south end of Mazenod Road where it is heavily tied to some of the expanses of willow adjacent to Aspen Poplar woods. Consequently, a pair is quite consistently found along the west edge of the project site. It is one of the very few places in which the species nests with any regularity within the Winnipeg City limits.

**Eastern Kingbird:**

This species regularly nests on the property and its nests are often found in the Hawthorn along the western periphery.

**Black-billed Magpie:**

In April 2006 there was an active nest 1.5 meters above the ground in a large clump of willows on the property. Five young were reared from this nest and fledged in mid-June. Magpies are regularly encountered in the project area. This is because the largest remaining roosting site for this species, within the Perimeter Highway, is located in a large clump of willows that forms part of the Aspen Poplar woods on the south side of the Winnipeg Aqueduct and Railroad right-of-way.

From April 1 to August 17, there were probably few days, if any, that magpies were not recorded on the property. They are periodically observed flying over the property but most frequently encountered strutting across it.

**American Crow:**

This species nests on the property annually.

**Black-capped Chickadee:**

This species nests on the property annually and is a winter resident.

**White-breasted Nuthatch:**

This species nests on the property annually and is a winter resident.

**Sedge Wren:**

This species nests on the property annually.

**American Robin:**

This species is often seen feeding on the property and nests in the poplar woods.

**European Starling:**

There are cavities in the Balsam Poplar in which this species can nest on the property and it does so regularly. During the last half of June flocks of starlings appeared on the property. These birds were feeding on the ground in dense concentrations just like the dense concentrations in which they fly at that time of the year. Flocks of up to 80 were recorded.

**Red-eyed Vireo:**

This is a regular nesting species on the property where it nests normally in the Balsam Poplar and Aspen Poplar. In late June there were three nests with two being in Balsam Poplar and one in a Cottonwood. Nests of this vireo are very easy to find because the adult sings from the nest.

**Yellow Warbler:**

This species nests in the willows and shrubs on the property annually.

**Common Yellowthroat:**

In 2006 there were three pairs on the Olywest property where they were found in the dense stands of grasses and sedges in the low-lying areas. They were almost certainly nesting but no nests were located despite a relatively thorough search.

**Clay-colored Sparrow:**

There is not much suitable nesting habitat for this species but two pairs did nest on the property.

**Savannah Sparrow:**

Annually, this ground-nesting species breeds on the property and in significant numbers. There were at least eight nesting pairs on the property at the height of the breeding season in 2006. This is by far the most common passerine species breeding on the property.

**Song Sparrow:**

This is a resident species during the nesting season and probably regularly breeds on the project site as it is recorded every summer. Two pairs nested on the property in 2006.

**Bobolink:**

The meadow had two breeding pairs of Bobolink and each raised a brood in early July.

**Red-winged Blackbird:**

The project area is within this species' feeding range and some years there is a limited amount of nesting in the Cattail and Soft-stemmed Bulrush bordering some of the small, shallow wetlands. In 2006 there was not enough water present on the property after mid-May to solicit nesting by this species and none nested even though they periodically came into the area and sang during May and early June. After nesting was completed in the Winnipeg area in general, there was no concentrating of this species in the project area.

**Western Meadowlark:**

It is probable that this species annually nests in the project area. In April they were regularly seen feeding and at least five singing males were utilizing the property. Some evenings, in a two-minute listening period, one could hear three singing from perches within the project area. This is a relatively high nesting population. It indicates the value of the grassy meadows paralleling the railroad tracks as these meadows provide nesting cover and food. Since the inception of the railways across the Canadian prairies, Western Meadowlarks have been closely associated with these right-of-ways, which provide a ribbon of nesting habitats often in areas of intense cultivation and/or urban sprawl.

In 2006 adults were carrying food to nestlings in May and June. They sang on the property into the third week of July. On July 17 the study team flushed a group of eleven gathered over a distance of approximately forty meters. The Olywest property is important not only as a nesting site but also as a post-breeding site.

### **American Goldfinch:**

From the last week of May to the end of July this species was heard often flying over the property. They were encountered feeding on Dandelion seeds in significant numbers in June and again in late July and August, the seeds of Canada Thistle were utilized as a food source.

### **Plants**

This tract of land has a host of native plants and some of the species are considered very scarce in the immediate area but are in good supply on the Olywest property. There are actually some spectacular patches of plants and one two-hectare patch contains two species of gentian and five of goldenrod. This is an amazing concentration in a small area. Plants determine, to a great extent, what kinds of wildlife occur in an area. For example a patch, such as this one, attracts a significant number of butterfly species.

None of the species on the Olywest property fall into the classification of being rare in Manitoba although some of them are significant because they are found in very small quantities in the general Red River Valley and, in particular, the Winnipeg area.

Because plant species can have a number of common names, the scientific name is also given with one common name for each of the species found in the study area. The common and the botanical (scientific) names utilized in this report largely follow the format utilized in the four-volume set entitled *The Flora of Canada*, written by H. J. Scoggan and produced by the National Museum of Natural Sciences, National Museums of Canada in 1978. The number in the first column is the page number in this text for easy referencing.

All of the species identified on the property are listed below.

<b><u>Common Name</u></b>	<b><u>Scientific Name</u></b>
123. Common Horsetail	<i>Equisetum arvense</i> L.
191. Cattail	<i>Typha latifolia</i> L.
209. Seaside Arrow-grass	<i>Triglochin maritima</i> L.
212. Water Plantain	<i>Alisma plantago-aquatica</i> L.
213. Arum-leaved Arrowhead	<i>Sagittaria cuneata</i> Sheldon
230. Northern Wheatgrass	<i>Agropyron dasystachyum</i> (Hook.) Scribn.
231. Couch Grass	<i>Agropyron repens</i> (L.) Beauv.
232. Slender Wheatgrass	<i>Agropyron trachycaulum</i> (Link) Malte.
238. Redtop	<i>Agrostis stolonifera</i> L.
241. Big Bluestem	<i>Andropogon gerardii</i> Vitman
242. Little Bluestem	<i>Andropogon scoparius</i> Michx.
245. Slough-Grass	<i>Beckmannia syzigachne</i> (Steud.) Fern.
251. Smooth Brome	<i>Bromus inermis</i> Leyss.
255. Marsh Reed Grass	<i>Calamagrostis canadensis</i> (Michx.) Nutt.
267. Barnyard Grass	<i>Echinochloa crusgalli</i> (L.) Beauv.
269. Canada Wild Rye	<i>Elymus canadensis</i> L.
280. Reed-meadow Grass	<i>Glyceria grandis</i> Wats.

281. Fowl-meadow Grass	<i>Glyceria striata</i> (Lam.) Hitchc.
282. Sweet Grass	<i>Hierochloe odorata</i> (L.) Beauv.
284. Foxtail Barley	<i>Hordeum jubatum</i> L.
291. Scratchgrass	<i>Muhlenbergia asperifolia</i> (Nees & Meyen) Parodi
291. Marsh Muhly	<i>Muhlenbergia racemosa</i> (Michx.) BSP.
303. Reed Canary Grass	<i>Phalaris arundinacea</i> L.
305. Timothy	<i>Phleum pratense</i> L.
305. Giant Reed Grass	<i>Phragmites australis</i> (Cav.) Trin.
315. Fowl Meadow Grass	<i>Poa palustris</i> L.
316. Kentucky Blue Grass	<i>Poa pratensis</i> L.
316. Blue Grass	<i>Poa</i> sp.
380. Water Sedge	<i>Carex aquatilis</i> Wahl.
381. Awned Sedge	<i>Carex atherodes</i> Spreng.
398. Lakeshore Sedge	<i>Carex lacustris</i> Willd.
399. Woolly Sedge	<i>Carex lanuginosa</i> Michx.
413. Turned Sedge	<i>Carex retrorsa</i> Schwein.
414. Beaked Sedge	<i>Carex rostrata</i> Stokes
434. Needle Spike-Rush	<i>Eleocharis acicularis</i> (L.) R. & S.
436. Spike-Rush	<i>Eleocharis</i> sp.
449. Soft-Stemmed Bulrush	<i>Scirpus lacustris</i> L. ssp. <i>validus</i> (Vahl) Koyama
450. Hard-Stemmed Bulrush	<i>Scirpus lacustris</i> L. ssp. <i>glaucus</i> (Sm.) Hartm.
456. Common Duckweed	<i>Lemna minor</i> L.
470. Baltic Rush	<i>Juncus balticus</i> Willd.
492. Prairie Onion	<i>Allium stellatum</i> Nutt.
501. Wild Lily-of-the-Valley	<i>Maianthemum canadense</i> Desf.
504. Star-flowered Solomon's Seal	<i>Smilacina stellata</i> (L.) Desf.
512. White Camass	<i>Zigadenus elegans</i> Pursh
530. Large Yellow Lady's Slipper	<i>Cypripedium calceolus</i> L.
544. Hooded Ladies'-tresses	<i>Spiranthes romanzoffiana</i> Cham.
549. Balsam Poplar	<i>Populus balsamifera</i> L.
550. Cottonwood	<i>Populus deltoides</i> Marsh.
551. Trembling Aspen	<i>Populus tremuloides</i> Michx.
564. Beaked Willow	<i>Salix bebbiana</i> Sarg.
567. Pussy Willow	<i>Salix discolor</i> Muhl.

568. Sandbar Willow	<i>Salix exigua</i> Nutt.
573. Willow	<i>Salix</i> sp.
600. Bur Oak	<i>Quercus macrocarpa</i> Michx.
603. American Elm	<i>Ulmus americana</i> L.
607. Wood Nettle	<i>Laportea canadensis</i> (L.) Wedd.
608. Stinging Nettle	<i>Urtica dioica</i> L.
625. Water Smartweed	<i>Polygonum amphibium</i> L. var. <i>stipulaceum</i> f. <i>fluitans</i> (Eat.) Fern.
626. Common Knotweed	<i>Polygonum arenastrum</i> Jord.
628. Climbing Buckwheat	<i>Polygonum convolvulus</i> L.
631. Lady's Thumb	<i>Polygonum persicaria</i> L.
638. Curly-leaf Dock	<i>Rumex crispus</i> L.
638. Western Dock	<i>Rumex occidentalis</i> Wats.
639. Dock	<i>Rumex</i> sp.
651. Oak-leaved Goosefoot	<i>Chenopodium glaucum</i> L. var. <i>salinum</i>
653. Kochia	<i>Kochia scoparia</i> (L.) Schrad.
685. Mouse-eared Chickweed	<i>Cerastium arvense</i> L.
708. Long-stalked Chickweed	<i>Stellaria longipes</i> Goldie
711. Hornwort	<i>Ceratophyllum demersum</i> L.
720. Baneberry	<i>Actaea rubra</i> (Ait.) Willd.
722. Canada Anemone	<i>Anemone canadensis</i> L.
722. Thimbleweed	<i>Anemone cylindrica</i> Gray
722. Cut-leaved Anemone	<i>Anemone multifida</i> Poir.
724. Prairie Crocus	<i>Anemone patens</i> L.
746. Seaside Buttercup	<i>Ranunculus cymbalaria</i> Pursh
748. Small Yellow Water-Crowfoot	<i>Ranunculus gmelinii</i> DC.
750. Macoun's Buttercup	<i>Ranunculus macounii</i> Britt.
755. Celery-leaved Buttercup	<i>Ranunculus sceleratus</i> L.
757. Tall Meadow-rue	<i>Thalictrum confine</i> Fern.
801. Wild Mustard	<i>Brassica kaber</i> (DC) L.C. Wheeler
805. Shepherd's-purse	<i>Capsella bursa-pastoris</i> (L.) Medic.
815. Flixweed	<i>Descurainia sophia</i> (L.) Webb.
830. Wormseed-Mustard	<i>Erysimum cheiranthoides</i> L.
835. Common Peppergrass	<i>Lepidium densiflorum</i> Schrad.

843. Marsh Yellow Cress	<i>Rorippa islandica</i> (Oeder) Borbas
848. Stinkweed	<i>Thlapsi arvense</i> L.
867. Richardson's Alumroot	<i>Heuchera richardsonii</i> R. Br.
870. Northern Grass-of-Parnassus	<i>Parnassia palustris</i> L.
876. Wild Black Currant	<i>Ribes americanum</i> Mill.
906. Saskatoon	<i>Amelanchier alnifolia</i> Nutt.
913. Long-spined Hawthorn	<i>Crataegus succulenta</i> Link
919. Smooth Wild Strawberry	<i>Fragaria virginiana</i> Dcne.
923. Three-flowered Avens	<i>Geum triflorum</i> Pursh
929. Silverweed	<i>Potentilla anserina</i> L.
929. White Cinquefoil	<i>Potentilla arguta</i> Pursh
935. Rough Cinquefoil	<i>Potentilla norvegica</i> L.
939. American Plum	<i>Prunus americana</i> Marsh.
942. Chokecherry	<i>Prunus virginiana</i> L.
947. Wild Rose	<i>Rosa acicularis</i> Lindl.
948. Prairie Rose	<i>Rosa arkansana</i> Porter
957. Raspberry	<i>Rubus idaeus</i> L.
960. Dewberry	<i>Rubus pubescens</i> Raf.
965. Narrow-leaved Meadow-sweet	<i>Spiraea alba</i> Du Roi
984. American Milk-vetch	<i>Astragalus americanus</i> (Hook.) Jones
996. Wild Licorice	<i>Glycyrrhiza lepidota</i> Nutt.
1001. Pale Vetchling	<i>Lathyrus ochroleucus</i> Hook
1015. White Sweet Clover	<i>Melilotus alba</i> Desr.
1016. Yellow Sweet Clover	<i>Melilotus officinalis</i> (L.) Lam.
1023. Purple Prairie-clover	<i>Petalostemon purpureum</i> (Vent.) Rydb.
1033. White Clover	<i>Trifolium repens</i> L.
1036. American Vetch	<i>Vicia americana</i> Muhl.
1075. Manitoba Maple	<i>Acer negundo</i> L.
1108. Early Blue Violet	<i>Viola adunca</i> Sm. var. <i>adunca</i>
1109. Canada Violet	<i>Viola canadensis</i> L. var. <i>rugulosa</i> (Greene) Hitchc.
1112. Northern Bog Violet	<i>Viola nephrophylla</i> Greene
1113. Crowfoot Violet	<i>Viola pedatifida</i> G. Don
1122. Russian Olive	<i>Elaeagnus angustifolia</i> L.
1133. Fireweed	<i>Epilobium angustifolium</i> L.

1135. Marsh Willow-herb  
1163. Water Hemlock  
1166. Cow Parsnip  
1175. Anise-root  
1178. Black Snakeroot  
1179. Water Parsnip  
1180. Golden Alexanders  
1182. Bunchberry  
1184. Red-osier Dogwood  
1217. Pygmyflower  
1220. Sea-Milkwort  
1222. Tufted Loosestrife  
1233. Green Ash  
1239. Closed Gentian  
1242. Fringed Gentian  
1247. Spreading Dogbane  
1248. Indian Hemp  
1251. Showy Milkweed  
1254. Hedge-bindweed  
1287. Hoary Puccoon  
1300. Giant Hyssop  
1306. Water Horehound  
1309. Wild Mint  
1311. American Dragonhead  
1312. Wild Bergamot  
1320. Common Skullcap  
1321. Woundwort  
1398. Common Bladderwort  
1405. Common Plantain  
1410. Northern Bedstraw  
1412. Small Bedstraw  
1422. Snowberry  
1422. Western Snowberry  
1436. Harebell

*Epilobium palustre* L.  
*Cicuta maculata* L.  
*Heracleum lanatum* Michx.  
*Osmorhiza longistylis* (Torr.) DC.  
*Sanicula marilandica* L.  
*Sium suave* Walt.  
*Zizia aurea* (L.) Koch  
*Cornus canadensis* L.  
*Cornus stolonifera* Michx.  
*Androsace septentrionalis* L.  
*Glaux maritima* L.  
*Lysimachia thysiflora*  
*Fraxinus pennsylvanica* Marsh.  
*Gentiana andrewsii* Griseb.  
*Gentiana crinita* (Froel.) Don  
*Apocynum androsaemifolium* L.  
*Apocynum cannabinum* L.  
*Asclepias speciosa* Torr.  
*Convolvulus sepium* L.  
*Lithospermum canescens* (Michx.) Lehm.  
*Agastache foeniculum* (Pursh) Ktze.  
*Lycopus americanus* Muhl.  
*Mentha arvensis* L.  
*Moldavica parviflora* (Nutt.) Britt.  
*Monarda fistulosa* L.  
*Scutellaria epilobiifolia* Hamilton  
*Stachys palustris* L.  
*Utricularia vulgaris* L.  
*Plantago major* L.  
*Galium boreale* L.  
*Galium trifidum*  
*Symphoricarpos albus* (L.) Blake  
*Symphoricarpos occidentalis* Hook.  
*Campanula rotundifolia* L.

1458. Yarrow	<i>Achillea millefolium</i> L.
1459. Siberian Yarrow	<i>Achillea sibirica</i> Ledeb.
1471. Common Burdock	<i>Arctium minus</i> (Hill) Bernh.
1480. Absinthe	<i>Artemisia absinthium</i> L.
1483. Prairie Sage	<i>Artemisia frigida</i> Willd.
1484. Pasture Sage	<i>Artemisia ludoviciana</i> Nutt.
1496. Lindley's Aster	<i>Aster ciliolatus</i> Lindl.
1497. Many-flowered Aster	<i>Aster ericoides</i> L.
1498. Smooth Aster	<i>Aster laevis</i> L.
1504. Small Blue Aster	<i>Aster simplex</i> Willd.
1524. Canada Thistle	<i>Cirsium arvense</i> (L.) Scop.
1525. Flodman's Thistle	<i>Cirsium flodmanii</i> (Rydb.) Arthur
1541. Canada Fleabane	<i>Erigeron canadensis</i> L.
1544. Philadelphia Fleabane	<i>Erigeron philadelphicus</i> L.
1552. Gumweed	<i>Grindelia squarrosa</i> (Pursh) Dunal
1557. Common Sneezeweed	<i>Helenium autumnale</i> L.
1561. Beautiful Sunflower	<i>Helianthus laetiflorus</i> Pers. var. <i>subrhomboideus</i> (Rydb.) Fern
1561. Narrow-leaved Sunflower	<i>Helianthus maximiliani</i> Schrad.
1575. Common Blue Lettuce	<i>Lactuca pulchella</i> (Pursh) DC
1575. Prickly Lettuce	<i>Lactuca scariola</i> L.
1588. Black-eyed Susan	<i>Rudbeckia hirta</i> L.
1606. Graceful Goldenrod	<i>Solidago canadensis</i> L.
1607. Flat-topped Goldenrod	<i>Solidago graminifolia</i> (L.) Salisb.
1610. Riddell's Goldenrod	<i>Solidago riddellii</i> Frank
1610. Stiff Goldenrod	<i>Solidago rigida</i> L.
1612. Marsh Goldenrod	<i>Solidago uliginosa</i> Nutt.
1613. Perennial Sow-thistle	<i>Sonchus arvensis</i> L.
1614. Annual Sow-thistle	<i>Sonchus oleraceus</i> L.
1619. Common Dandelion	<i>Taraxacum officinale</i> Weber
1622. Goat's-beard	<i>Tragopogon dubius</i> Scop.

## Rehabilitation

There are many ways, after the construction phase of the Olywest Project is completed, that the project site could be enhanced to make it more attractive for flora and fauna. One way of doing this is to restore much of the native vegetation particularly on the dry meadows where such uplands species as Prairie Rose, Yellow Lady's Slipper, Prairie Crocus and Three-flowered Avens could thrive. These sites would be very appealing as places for Western Meadowlarks and Mallards to nest.

A dense band of Red-osier Dogwood could be planted and provide a wildlife corridor through the area. It would also provide food for White-tailed Deer during the critical winter months. In some parts of the province, Red-osier Dogwood is the most important winter food for deer. Also, the dogwood would provide privacy for people and the company in addition to producing protective cover for wildlife.

Clusters of large, healthy spruce would give the area aesthetic appeal and would be readily used by nesting and migrating birds. They are invaluable for providing protection from winter storms.

Three rows of fast-growing Jack Pine, bordered by Ivy-leafed Lilac, around much of the west and north sides of the property would provide seclusion and privacy besides making the site attractive to visitors and people who work there. Moreover, wildlife would benefit tremendously from this band of vegetation because it would provide great cover from storms and ideal nesting habitat for birds.

Placing nesting boxes around the property would assist cavity-nesting birds such as, Wood Duck, American Kestrel and Tree Swallow. A Purple Martin house that was well maintained would enhance the corporate image. It would provide the martins with a nesting site plus have the birds feeding over the nearby ponds and devouring insects.

Grass around any man-made pond on the property should not be mowed. That saves money but it also greatly improves the area for wildlife. If the area was well designed for wildlife the only part that needs mowing would be around the entranceway and flower gardens.

Much can be learned by visiting the Terracona Business Park—a close neighbour on the north side of Dugald Road. Here, the businesses are situated in a park-like setting where one can often get very close to Jackrabbits and Canada Geese yet sit at picnic tables and enjoy a lunch with beautiful coniferous trees providing shade. That setting can be very appealing and is on the northwest side of the St. Boniface Industrial Park. It does have one serious setback in the view of some people and that is the problem of goose droppings which can ruin a lawn and even pollute small waterbodies, plus make a real mess of adjacent sidewalks. Nothing should be done to encourage Canada Geese to nest on the Olywest site.

Finally, if a man-made lake must be created on the east edge of the property, as presently conceived, it could be excellent for wildlife. In April, on a number of occasions, the study team visited the pond immediately adjacent to the project area on the east side and it contained the following eleven waterfowl species: Canada Goose, Mallard, Green-winged Teal, Northern Shoveler, Redhead, Canvasback, Ring-necked Duck, Lesser Scaup, Bufflehead, Ruddy Duck and Red-breasted Merganser. In addition, on the evening of April 18, this same pond contained three species of grebes, viz., Red-necked Grebe, Pied-billed Grebe and Horned Grebe. The value of these ponds to migrating birds cannot be over-emphasized, especially at a time of growing urban sprawl and relentless draining of wetlands.

Every attempt should be undertaken to preserve, as is, the beautiful tracts of prairie plants on the eastern half of the Olywest property. The site planners are urged to work closely with a botanist who is familiar with the site in both the development and the landscaping on the site.

**By beautifying the grounds of this site for wildlife, as well as people, the managers of the property can go a long way in countering the criticism that they are not sensitive to environmental concerns.**