

## SPECIES AT RISK STUDY

Species at risk background information was initially compiled and reviewed in 2012. MNRF Aurora District was also contacted to confirm which species at risk could potentially occur within the study area. Based on the results of the initial background data screening and input from MNRF, in-season species at risk surveys for plants, birds and butternut were completed throughout the East Quarry property in 2013.

Based on the results of the species at risk surveys completed by PLAN B Natural Heritage and Conservation Halton, the following species at risk were recorded on the subject property:

- Eastern Flowering Dogwood (a small, Carolinian tree species impacted by a fungal infection);
- American Columbo (a monocarpic, perennial herbaceous plant species); and,
- Mottled Duskywing (a medium sized butterfly from the Skipper family).

All three species are considered to be “endangered” in the Province of Ontario. Both Eastern Flowering Dogwood and American Columbo occur in deciduous forest habitats. The Mottled Duskywing and its host plant New Jersey Tea, occur in sparsely vegetated, dry habitats such as open canopy woodlands and valley rims. Habitat for all three species of risk on the subject property is primarily associated with the valley slopes and rim of an intermittent tributary of Indian Creek. Based on discussions with MNRF, the forested portions of the property likely provide potential habitat for four endangered species of bat.

Management measures to reduce the impact of the quarry on species at risk include the following:

### Eastern Flowering Dogwood

- Protection of existing trees within proposed setbacks and habitat management areas; and,
- Planting of nursery stock within proposed management areas to offset tree removal for the quarry.

### American Columbo

- Protection of existing plants within a species at risk habitat management area.

### Mottled Duskywing

- Protection of New Jersey Tea (host plant) within habitat management areas;
- Transplanting of New Jersey Tea (and butterfly pupa) to proposed management areas; and,
- Creation of butterfly restoration areas within the Centre Quarry through a combination of New Jersey Tea plantings from nursery stock and transplanting of plants from areas to be excavated.

### Bats

- Installation of different sized bat houses in forested setback areas to accommodate solitary and colonial bat species.