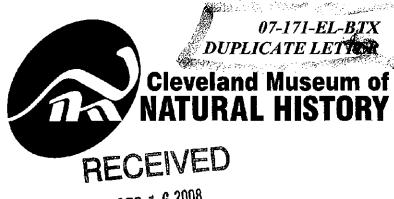


1 Wade Oval Drive, University Circle Cleveland, Ohio 44106-1767 USA

(216) 231-4600 • 1-800-317-9155 • FAX (216) 231-5919 www.cmnh.org



Alan Shriver, Chairman PUCO 180 East Broad Street Columbus, OH 43215

SEP 1 6 2008

Office of Chairman

RE: Important forest/wetland corridor along Geauga County 138 kV Transhission Line Project

Dear Mr. Shriver,

Vertebrate Zoologist Dr. Timothy Matson and I surveyed four contiguous land parcels in Thompson Township, Geauga County, south of Thompson Road. The survey was conducted in response to a request to the Museum's Conservation Outreach Program by Mark and Kathleen Binnig. Any landowner, conservation organization, or city or county planner can request biological surveys of properties at no charge under our Conservation Outreach Program.

A corridor opening for a power line will likely have a negative impact on the forest birds currently utilizing the relatively intact canopy on the four properties. I would be grateful if First Energy placed the power line along an existing opening instead of fragmenting a very high quality wetland system. Several forest birds are present within the forest and many amphibians of conservation concern are present within the springs and vernal ponds on and adjacent to the proposed corridor opening.

Many forest birds only nest within contiguous unbroken forest tracts. Fragmentation of the forest currently present within the combined lands of Binnig, Noss, Zehe, and Sanzenbacher provide nesting habitats for forest birds. Wood Thrush, Scarlet Tanager, Red-eyed Vireo and Wood Peewee males were heard singing within the forest along the spring-fed creek corridor.

A very large vernal pond supporting healthy populations of Wood Frog and Spotted Salamander were found on the Zehe Tract, 175 feet west of the Sanzenbacher line and south of the golf course. Wood Frog and Spotted Salamander are sensitive to many herbicides. Drift from the herbicide in the proposed corridor could enter the pond. Wood Frogs are suffering a regional decline within the Cleveland region.

A report on animal species within the corridor completed by Dr. Timothy Matson is attached. My observations of native plants within the proposed power line opening is also enclosed. If anybody has further questions about our concerns, they can contact me by calling 1-800-317-9155 extension 3219.

Sincerely,

Dr. James K. Bissell Director of Conservation

Enclosure: Animal Report from Dr. Timothy Matson CC: Mark and Kathleen Binnig



This is to cartify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business. Technician Mar Date Processed 9/18/08 Property of Kathleen and Mark Bennig, Thompson, OH

Second order stream with headwaters on the west side of Thompson Ledges and flowing NE; clear, very cool, flowing water with shallow pools to about 0.7 m deep; substrate of sand gravel with Berea Sandstone cobble and slabs.

Fishes <u>29 Ju</u>	ly 2008 [dip-r.	etted only]		
Semo	tilus atromaculatus	Creek chub	Uncommon-	–Common
	igust 2008 [seine	5		
	tilus atromaculatus	Creek chub	Common	
Rhinichthyes atratulus		Blacknose dace	Abundant	
Clinostomus elongatus		Redside dace 4, none mature		e
	nis macrochirus	Bluegill sunfish	•	
Catos	tomus commersoni	White sucker	1, subadult	
Amphibians	<u>29 July 2008</u>			
-	ea bislineata	Northern Two-lined S	alamander	Common
-	ognathus fuscus	Northern Dusky Salan		Common
	ognathus ochrophaeus	Mountain Dusky Salamander		Common
	bates clamitans	Green Frog		Common
Anaxy	yrus americanus	American Toad		Common
Crayfishes	29 July 2008 and <u>14 A</u>	ugust 2008		
Camb	arus carinirostris	Rock crayfish	Comm	non
Orcon	ectes propinquus	Northern clearwater ci	rayfish Comm	10n-Abundant
Amphibians	14 August 2008			
Euryc	ea bislineata	Northern Two-lined Sa		Common,
		larvae numero	us	
Desmo	ognathus fuscus	Northern Dusky Salan		Common
	ognathus fuscus ognathus ochrophaeus		nander	Common Common
Desmo	÷ .	Northern Dusky Salam	nander mander	
Desmo	ognathus ochrophaeus	Northern Dusky Salan Mountain Dusky Salar	nander mander nder	Common
Desmo	ognathus ochrophaeus	Northern Dusky Salan Mountain Dusky Salan Northern Red Salamar	nander nander nder 2 nd year larva	Common
Desmo	ognathus ochrophaeus	Northern Dusky Salam Mountain Dusky Salam Northern Red Salamar 1 st year larva, 2	nander mander nder 2 nd year larva nile	Common
Desmo Pseud	ognathus ochrophaeus	Northern Dusky Salar Mountain Dusky Salar Northern Red Salamar 1 st year larva, 2 3 year old juve	nander mander nder 2 nd year larva nile	Common
Desmo Pseud Lithob	ognathus ochrophaeus otriton ruber	Northern Dusky Salam Mountain Dusky Salam Northern Red Salamar 1 st year larva, 2 3 year old juve 4-5 year old juve	nander mander nder 2 nd year larva nile	Common Common
Desmo Pseud Lithob	ognathus ochrophaeus otriton ruber oates clamitans	Northern Dusky Salam Mountain Dusky Salam Northern Red Salaman 1 st year larva, 2 3 year old juve 4-5 year old juve Green Frog	nander mander nder 2 nd year larva nile	Common Common Common

Pools in wooded creek valley and adjacent upland forest.

Amphibians 29 July 2008

Pseudacris crucifer	Northern Spring Peeper	1 transforming
		tadpole

Lithobates sylvaticus	Woodfrog	Numerous juveniles
Birds 29 July 2008 Heard singin	g/calling	
Piranga olivacea	Scarlet Tanager	
Cardinalis cardinalis	Northern Cardinal	
Passerina cyanea	Indigo Bunting	
Contopus virens	Eastern Wood Pewee	
Vireo olivaceous	Red-eyed Vireo	
Hylocichla mustelina	Wood Thrush	
Amphibians <u>14 August 2008</u> Lithobates sylvaticus Anaxyrus americanus	Woodfrog American Toad	Numerous juveniles Common
Upland woodland pool SW of the southern Amphibians 29 July 2008	terminus of the golf course.	
Lithobates sylvaticus	Woodfrog	Numerous tadpoles,
Ambystoma maculatum	Spotted Salamander	transforming tadpoles, and metamorphs Rare, captured only one larva.

Forested first order stream with headwaters on the west side of Thompson Ledges and flowing NE; clear, very cool, shallow flowing water.

Lithobates sylvaticusWoodfrogNumerous juvenilesOrconectes propinquusNorthern clearwater crayfishCommon

OBSERVATIONS OF PLANT COMMUNITIES AND PLANT SPECIES OF INTEREST ALONG PROPOSED POWER LINE CORRIDOR ALONG BINNIG, NOSS, ZEHE AND SANZENBACKER TRACTS BORDERING HIGH QUALITY HEADWATER STREAM:

The observations below are arranged in directional sequence from the northern section of the proposed power line corridor just south of Thompson Road south to the southern boundary of the Zehe and Sanzenbacker lines approximately four-tenths mile south of Thompson Road.

The stream flowing along and draining east within the proposed corridor onetenth mile south of Thompson Road supports good populations of a local pondweed, Nuttal's pondweed (Potamogeton epihydrus) and narrow-leaf pondweed (Potamogeton foliosus). Nuttal's pondweed is a local species of glacial lakes and rivers and some man-made ponds. Nuttal's pondweed was tracked by the Ohio Natural Heritage Program as a rare species within Ohio when the first rare plant list was compiled because the species is relatively uncommon within Ohio. The Cleveland Museum of Natural History located enough populations to delist Nuttal's pondweed during the middle 1980s. However, the species has disappeared from several of the sites where the Museum mapped it in the late 1970s and early 1980s due to decline in water quality at some of its former sites. The populations in the stream along the Binnig/Noss line are exceptionally robust. The Museum Botany Department has considered recommending the relisting of the species at the 2010 Rare Plant Meeting due to disappearance of the plant from several lakes and streams where it thrived 25 to 30 years ago.

Brookside sedge (Carex torta) is frequent along the clear, cold spring fed creek flowing through the Noss property onto the Binnig property. This sedge is common along undisturbed, high quality headwater streams throughout northeastern Ohio. The sedge is frequent along both tributary streams flowing along the proposed power line corridor, the Binnig/Noss tributary just south of Thomspon Road, and the Binnig/Noss/Zehe/Sanzenbacher tributary that is located along the power line corridor between .25 mile and .4 mile south of Thompson Road. Both tributaries join within open meadows on the Binnig property southwest of the junction of Sidley Road and Thompson Road.

A globally declining tree, butternut (Juglans cineria), is widely scattered on the Noss tract within wetlands adjacent to the spring fed stream about .12 mile south of Thompson Road. This tree is globally declining throughout its range due to an introduced fungus. The tree is still fairly secure within northeastern Ohio and northwestern Pennsylvania. However, many populations are represented by a single tree. Several live butternut trees are present within the wetlands on the Noss tract. Butternut was recently delisted by the Ohio Natural Heritage program because the Cleveland Museum of Natural History and other field researchers have documented several dozen populations during the last couple decades. The butternut stand on the Noss tract is outstanding compared to many populations in northeastern Ohio.

Notable wetland species within forests adjacent to Creek on Noss property observed between .1 mile and .15 mile south of Thompson Road:

Swamp rose (Rosa palustris)

Prairie rose (Rosa setigera)

Swamp agrimony (Agrimonia parviflora)

Fringed loosestrife (Lysimachia ciliata)

Manna grass (Glyceria striata)

Spinulose wood fern (Dryopteris carthusiana)

Northern arrow-wood (Viburnum recognitum)

Rice cut-grass (Leersia oryzoides)

Elderberry (Sambucus Canadensis)

A very high quality vernal pond system fed by springs is located within the proposed transmission line corridor on the Noss tract .15 mile south of Thompson Road. Spring fed vernal ponds similar to the Noss vernal pond often support rare species in northeastern Ohio. Dr. Matson observed several Wood Frogs adjacent to the vernal ponds. Notable species within the Noss vernal pond include:

Seepage sedge (Carex prasina)

Witch hazel (Hamamelis virginiana)

Marsh violet (Viola cucullata)

Wood anemone (Anemone quinquefolia)

Spicebush (Lindera benzoin)

Turtlehead (Chelone glabra)

Seepage manna grass (Glyceria melicaria)

Cinnamon fern (Osmunda cinnamomea) - very common

Jewel weed (Impatiens capensis)

Royal fern (Osmunda regalis)

American beech (Fagus grandifolia)

Partridgeberry (Mitchella repens)

Weak sedge (Carex debilis var. *rudgei*) – a local and uncommon species formerly tracked by the Ohio Natural Heritage Program

Sessile bellwort (Uvularia sessilifolia)

Greenbriar (Smilax rotundifolia)

There is another high quality seepage wetland on the Binnig property along the east side of the proposed power line corridor along the west valley wall of the other tributary stream. Several interesting wetland plants are present within the seepage wetland:

Jewel weed (Impatiens capensis)

Seepage sedge (Carex prasina)

Scabrous sedge (Carex scabrata) – a species formerly tracked by the Ohio Natural Heritage Program

Marsh violet (Viola cucullata)

Manna grass (Glyceria striata)

Golden saxifrage (Chysosplenium americanum)

Seepage manna grass (Glyceria melicaria)

The Binnig "Sugar Bush" along the east side of the proposed corridor to the east of the creek valley has some very high quality American Beech and Sugar Maple trees. Opening of the corridor through the creek will not only cause forest fragmentation and reduce the probability that the forest birds will continue to nest within the now connected forest canopies of the Binnig/Zehe/Noss and Sanzenbacker tracts but will likely cause the die back of the large beech trees. Large beech trees often die when an adjacent forest is removed. The deterioration of the beech bark is called sun scald.

The Zehe tract south of the golf course opening and west of the Sanzenbacker line has a continuous, unbroken canopy dominated by red maple, silver maple and red oak. Beech and black cherry are locally common within the canopy of the forest along the boundary between the Zehe tract and Sanzenbacker tract. Spicebush is abundant within the understory of the Zehe forest. The large vernal pond supporting a good population of Wood Frog and Spotted Salamander is located 175 feet west of the Sanzenbacker line and 250 feet south of the golf course opening. Notable species observed on the Zehe tract: New York fern (Thelpyteris noveboracensis) Hornbeam (Carpinus caroliniana) Spicebush (Lindera benzoin) Sessile Bellwort (Uvularia sessilifolia) Blackgum (Nussa sylvatica) Silver maple (Acer saccharinum) Red maple (Acer rubrum) Black cherry (Prunus serotina) Partridgeberry (Mitchella repens)

Wood reed (Cinna arundinacea)

The canopy of the Sanzenbacker tract east of the Zehe tract has canopy dominants similar to the dominant trees on the Zehe tract. The majority of the Sanzenbacher tract is dominated by a secondary forest of red maple and red oak. Beech and Black Cherry are frequent within the canopy adjacent to the Zehe and Binnig property.