

Stantec

AMHERST ISLAND WIND ENERGY PROJECT

NATURAL HERITAGE ASSESSMENT & ENVIRONMENTAL IMPACT STUDY

Appendix D

Staff Summaries

Alan Wormington is an ornithologist with extensive experience in conducting avian surveys, data analysis and reporting. Alan has served as a researcher, data collector, contributing author and editor for a variety of technical journals, books, newspapers and newsletters, writing articles pertaining to the biological sciences, specifically with regard to birds, butterflies and moths, and natural history. He is a founding member and member of various birding and field naturalist associations, and has conducted interpretive birding tours for various groups in Ontario and other provinces of Canada, various states in the USA, and Mexico. Over the years Alan has provided technical field skills to both private and public organizations, including various environmental consultancies, the Ontario Ministry of Natural Resources, and Parks Canada.

Alan has provided technical support on contract to Stantec Consulting for various renewable energy wind power projects, primarily performing seasonal avian surveys at various project sites throughout Ontario. A brief summary of Alan's projects is listed below.

EDUCATION

Tech. Dipl., Seneca College / Historical/Natural Interpretive Services, Toronto, Ontario, 1979

Tech. Dipl., Sheridan College of Applied Arts and Technology / Applied Photography, Oakville, Ontario, 1976

Amherst Island Wind Power Project, Amherst Island, Ontario (Field Technician)

Conducted avian field surveys for breeding birds including species at risk.

Port Alma Wind Power Project, Municipality of Chatham-Kent, Ontario (Field Technician)

Conducted avian field surveys as part of the Post-construction disturbance monitoring.

MEMBERSHIPS & VOLUNTARY SERVICE

Voting Member (2011), Ontario Bird Records Committee (Ontario Field Ornithologists)

Associate Editor (2011), North American Birds Journal (American Birding Association)

Volunteer (1978-2010), Point Pelee volunteer compiler of bird observations for the North American Birds Journal (American Birding Association)

Natural Sciences & Heritage Resources

Seasonal Avian Surveys for a Private Consultancy*, Various Sites, Canada (1973, 2001) (Biologist)

Performed wildlife surveys in the Yukon and Northwest Territories to assess environmental impacts of the proposed Mackenzie Valley Oil Pipeline

Seasonal Data Collection and Analysis at the Lake Erie Fisheries Research Station for the Ministry of Natural Resources*, Ontario (1987-1997) (Resource Technician)

Responsible for field collection and lab analysis of various samples, including fish, water, zooplankton, and Zebra Mussels

PROJECT EXPERIENCE

Renewable Energy

Mica Bay Wind Power Project, Ontario (Field Technician)

Conducted avian field surveys in northern Ontario as part of the pre-construction monitoring.

Seasonal Avian Surveys and Reporting for Southpoint Wind Ontario Limited*, Leamington, Ontario (2009) (Consultant)

Extensive avian surveys of spring and fall migration for wind turbine projects proposed for offshore waters of Lake Erie

* denotes projects completed with other firms

Alan Wormington Tech. Dipl.

Ornithologist

Seasonal Avian Surveys for a Private Consultancy*, Various Sites, Ontario (2003-2010) (Consultant)
Performed various assessments of breeding birds and their habitats for multiple construction projects, including those associated with highways, bridges, railway corridors, and wind turbine projects

Seasonal Avian Surveys and Reporting for Wind Projects Incorporated*, Milton, Ontario (2007-2008) (Consultant)
Completed a comprehensive assessment of bird populations for the Oxley Wind Farm, Essex, as part of the environmental review process; bird surveys conducted included winter, spring migration, summer breeding, and fall raptor migration

Expert Review of Species at Risk Documents for Point Pelee National Park*, Leamington, Ontario (2006-2008) (Consultant)
Performed expert review of various documents related to species at risk

Seasonal Avian Surveys and Reporting for Point Pelee National Park*, Leamington, Ontario (2005) (Consultant)
Intensive breeding bird survey conducted, and completion of 'The Breeding Birds of Point Pelee National Park, with an Emphasis on Species at Risk' (77 page report)

Seasonal Avian Surveys and Reporting for Various Private Consultancies*, Various Sites, Ontario (1984, 1986, 2000-2004) (Consultant)
Completed specific, short-term projects that generally involved intensive biological fieldwork at a site, followed by writing and submission of a report, often pertaining to environmental assessments in advance of proposed development projects

Seasonal Avian Surveys and Reporting for Joint Study*, Gulf of Mexico (1999-2000) (Ornithologist)
Three seasons (fall / spring / fall) avian studies for the "Migration-Over-The-Gulf Project", a joint study by Louisiana State University (Baton Rouge, LA) and Minerals Management Service (US Department of Interior). Stationed on offshore oil platforms to study the migration of birds crossing the Gulf of Mexico

Seasonal Avian Surveys for a Private Consultancy*, Various Sites, Ontario (2007, 2008) (Field Scientist)
Conducted seasonal avian surveys for various wind power projects in Essex, Chatham-Kent, and Lambton, Ontario. Field survey types included point counts for spring and fall migration and breeding birds, roadside surveys for waterfowl and shorebird staging, and fall migration studies for raptors

Seasonal Avian Survey and Reporting for Ivory-billed Woodpecker Joint Study*, Louisiana, USA (2002) (Ornithologist)
Expert birder in search of Ivory-billed Woodpecker in southeast Louisiana for a joint project of Zeiss Optics Inc., Louisiana State University (Baton Rouge, LA), and Louisiana Department of Natural Resources

Wildlife Habitat Assessment Project for the Ministry of Natural Resources*, Various Sites, Ontario (1990) (Field Crew Biologist)
Served as field crew biologist for the Wildlife Habitat Assessment Project on Hudson Bay and James Bay

Ontario Wetland Identification Program for the Ministry of Natural Resources*, Chatham, Ontario (1985) (Wetlands Crew Leader)
Served as wetlands crew leader for the provincial wetland identification program

Seasonal Expert Birder on Occasion for Two National and Provincial Parks*, Various Sites, Ontario (1978-2005) (Expert Birder)
*1978-1982, 1999-2002, 2004-2005 – Point Pelee Provincial Park
2003 – Rondeau Provincial Park*

Environmentally Significant Areas Projects*, Various Sites, Ontario (1976-2004) (Field Biologist)
Gathered life science information for designated natural areas and, in most cases, submitted reports, which generally spanned the period of April to September, inclusive:
*2003-2004 – Halton Region (Conservation Halton)
2001-2002 – Hamilton Region (Hamilton CA)
1991 – Hamilton Region (Hamilton Naturalists Club)
1986 – Kent/Elgin Counties (World Wildlife Canada)
1977 – North Wellington County (University of Guelph, Centre for Resources Development)
1976 – Hamilton Region (Hamilton Region CA)*

* denotes projects completed with other firms

Brandon Holden

Environmental Scientist



Stantec

Brandon joined Stantec in 2008. He has been birding extensively in Ontario and Eastern North America since 1997. Having recorded 344 species in Ontario, Brandon has a keen personal interest in finding vagrant bird species; highlighted last year by finding and photographing the first Black-tailed Gull (*Larus crassirostris*) for the province. A recent accomplishment was being voted onto the Ontario Bird Records Committee; the youngest member in its 30 year history. At Stantec, Brandon is responsible for carrying out seasonal bird and wildlife field surveys throughout Ontario, including some lengthy programs at remote sites.

EDUCATION

Lambton College, Sarnia, Ontario, 2007

PROFESSIONAL ASSOCIATIONS

Voting Member, Ontario Bird Record Committee (OBRC)

Member, Bird Studies Canada

Member, Ontario Field Ornithologists

Member, American Birding Association

AWARDS

Finalist, Veolia Wildlife Photographer of the Year, London England, 2009

NatureScapes.net Image of the Week - Multiple Weeks, 2006-2009

Ross Thompson Trophy for Proficiency in Ornithology - 2004

Doug Tarry Young Ornithologist Award - 2002

Hamilton Civic Award - 2002

Ross Thompson Trophy for Proficiency in Ornithology - 2002

PROJECT EXPERIENCE

Research

Port Alma Wind Project, Municipality of Chatham-Kent, Ontario (Environmental Scientist)

Brandon conducted migratory bird surveys.

Sault Ste. Marie Wind Power Project, Algoma District, Ontario (Environmental Scientist)

Brandon conducted migratory bird surveys.

Thunder Bay Wind Power Project, Thunder Bay District, Ontario (Environmental Scientist)

Brandon conducted migratory bird surveys.

Melancthon Wind Project, Dufferin County, Ontario (Environmental Scientist)

Brandon conducted breeding bird surveys.

Ostrander Point Wind Energy Park, Prince Edward County, Ontario (Environmental Scientist)

Brandon conducted surveys on breeding, migratory and wintering birds.

Wolfe Island Wind Project, Wolfe Island, Ontario (Environmental Scientist)

Brandon conducted surveys on breeding, migratory and wintering birds.

* denotes projects completed with other firms

Brandon Holden

Environmental Scientist

Sports, Recreation & Leisure

Volunteer Work, Multiple Locations* (Volunteer)

Annual leader of guided hikes for the Ontario Field Ornithologists, including a featured hike leader for two of the past three annual conventions. Brandon continues to volunteer by donating photographs to various provincial and local organizations. He also volunteers with the Hamilton Naturalists Club assisting with the Fall Bird Counts since 2001, and worked with the Haldimand Bird Observatory with bird banding.

Peregrine Prints, Multiple Locations* (Photographer)

Brandon established and maintains his own website, www.peregrineprints.com, showcasing his natural history photography and information. In 2010 the site has attracted over 23,000 visits and captured 800,000 hits as of June 1, 2010.

Emergency Planning / Response

Emergency Medical Care Training, Multiple Locations*

Brandon has taken extensive medical training; starting with general First Aid many years ago. He has upgraded this to Standard First Aid, First Responder and in 2008 obtained certification as an Emergency Medical Responder - the highest level available below Paramedic. Brandon also holds a (60 hour) Emergency Patient Care certificate from Lambton College.

** denotes projects completed with other firms*

Pete Read is a knowledgeable biologist and project manager with a wealth of experience in both the public and private sector, conducting various faunal surveys throughout Ontario. Since 1975 he has organized, coordinated, and participated as a volunteer in notable bird-related projects, organizations, atlases and committees, and field naturalist groups, where he has honed and shared his field skills and knowledge of natural heritage resources in Ontario and elsewhere. Pete is an expert birder, and has served as an expert interpreter and group leader for various wildlife tours within Ontario and outside Canada. Pete is knowledgeable about bird species at risk, and has consulted, designed and constructed enclosures for the Loggerhead Shrike, as well as collected nest records, performed habitat studies, banding, and blood sampling of Acadian Flycatchers for a research program in southwestern Ontario. He has a great deal of experience conducting various types of avifaunal survey programs for wind turbine projects throughout Ontario. Pete has also served as crew leader for boreal bird inventories for a joint study in various locations of northwestern Ontario, where he was responsible for programming and logistics, including coordination of communications with stakeholders, including First Nations representatives.

Pete has provided technical support on contract to Stantec Consulting for various projects, primarily performing seasonal avian surveys, including spring and autumn raptor and migratory bird surveys, waterfowl, amphibian, and other wildlife surveys, at various project sites throughout Ontario. In addition to collecting data in the field, Pete has provided data analysis and reporting services to Stantec in support of several of our projects, including wind farm planning and post-construction monitoring projects. A brief summary of his recent projects is listed below.

EDUCATION

Hons. B.Sc. Zoology/Ecology, B.Ed. / University of Western Ontario, London, Ontario

Friends of Point Pelee, Point Pelee National Park*, Ontario (2001-2010) (Biologist)

Served seasonally as 'expert' bird hike leader at Point Pelee National Park, a popular birding destination due to its diversity of avifauna.

PROJECT EXPERIENCE

Natural Sciences & Heritage Resources

Wind Turbine Projects*, Various Sites, Ontario (2006-2010) (Biologist)

Performed faunal studies, including avian location, migration, and roadside surveys, for wind turbine projects in Middlesex, Bruce, Grey, Haldimand and Norfolk, Chatham-Kent, Lampton, Dover, Amherstberg.

Loggerhead Shrike Recovery Program for Wildlife Preservation Canada and Canadian Wildlife Service, and Metropolitan Toronto Zoo*, Toronto, Ontario (2004-2010) (Biologist)

Designed and constructed enclosures, and provided ongoing consulting services for the Loggerhead Shrike, an avian species at risk.

Woodlot Faunal Surveys*, Various Sites, Ontario (2009) (Biologist)

Performed faunal surveys in 37 woodlots in Tecumseh, Essex County.

Boreal Bird Inventories for Federation of Ontario Naturalists (Ontario Nature), Boreal Initiative, and Atlas of Breeding Birds Joint Study*, Various Sites, Ontario (2004-2005) (Biologist)

Served as field crew leader, and was in charge of program, logistics, and communications with stakeholders, including First Nations representatives.

Location, Habitat, and Point Count Bird Surveys for Atlas of Breeding Birds of Ontario*, Various Sites, Ontario (2005) (Biologist)

Served as field crew leader for location, habitat, and point count bird surveys in area near Algonquin Provincial Park.

* denotes projects completed with other firms

Pete Read Hons. B.Sc. Zoology/Ecology, B.Ed. (UWO)

Biologist

Acadian Flycatcher Research Program*, Various Sites, Ontario (2004) (Biologist)

Collected nest records, performed habitat studies, banding, blood sampling of Acadian Flycatchers, a species at risk, for a research program run by Dr. Bonnie Wolfenden, York University.

Location, Habitat, and Point Count Bird Surveys for Atlas of Breeding Birds of Ontario*, Various Sites, Ontario (2003) (Biologist)

Performed location, habitat, and point count bird surveys in area near Temagami, North Bay, Sudbury regions.

Faunal Surveys for Nature Conservancy Canada*, Various Sites, Ontario (2002) (Biologist)

Performed faunal surveys at Clear Creek, Chatham-Kent.

Faunal Surveys for Ontario Ministry of Natural Resources*, Various Sites, Ontario (2002) (Biologist)

Performed faunal surveys at Bickford Oak Woods, Lambton.

Amphibian Surveys*, Ontario (2002) (Biologist)

Performed amphibian surveys at Komoka Provincial Park Reserve.

Acadian Flycatcher and Hooded Warbler Surveys for Canadian Wildlife Service*, Various Sites, Ontario (2000, 2002) (Biologist)

Performed surveys for Acadian Flycatcher and Hooded Warbler, species at risk, at southwestern Ontario core sites.

Acadian Flycatcher Habitat Assessment and Nest Productivity for Canadian Wildlife Service and Ontario Ministry of Natural Resources*, Various Sites, Ontario (2001) (Biologist)

Performed habitat assessment and nest productivity studies for Acadian Flycatcher, a species at risk.

Faunal Surveys, Komoka Provincial Park*, Ontario (2001) (Biologist)

Performed faunal surveys for Komoka Provincial Park.

Acadian Flycatcher Surveys for Bird Studies Canada*, Various Sites, Ontario (1999) (Biologist)

Performed searches for Acadian Flycatchers, a species at risk, at ravine and upland forest sites in Elgin, Middlesex, and Lambton Counties.

Acadian Flycatcher, Hooded Warbler, and Other Species at Risk Breeding Bird Surveys for Bird Studies Canada, Canadian Wildlife Service, World Wildlife Fund Canada*, Various Sites, Ontario (1998) (Biologist)

Searched for breeding Acadian Flycatcher, Hooded Warbler and other species at risk, at known sites in southwestern Ontario, and noted habitat features at breeding territories.

Acadian Flycatcher, Hooded Warbler, Prothonotary Warbler, and Other Species at Risk Breeding Bird Surveys for Bird Studies Canada, Canadian Wildlife Service, World Wildlife Fund Canada*, Various Sites, Ontario (1997) (Biologist)

Searched for breeding Acadian Flycatcher, Hooded Warbler, Prothonotary Warbler and other species at risk, at known sites in southwestern Ontario, and noted habitat features at breeding territories.

* denotes projects completed with other firms

Zoé Lebrun-Southcott is a biologist with experience in the field of avian research and conservation. She has extensive experience in avian research methods, including point counts, nest searching and nest monitoring, territory mapping, habitat assessment, banding, mist net extraction, radio-transmitter and geolocator attachment, and is proficient at navigation, data collection and analyses using GPS and GIS technologies. Zoé has been involved in recovery efforts and research pertaining to avian Species at Risk in Ontario and beyond, with over five years' experience working in the field of avian conservation in North America, contributing to research, recovery, and policy initiatives. She has facilitated multi-partner projects, working with private landowners, and has coordinated volunteer projects. Additionally, Zoé has managed and coordinated field projects, including reviewing protocols and the training and supervision of field staff.

Zoe has provided technical support on contract to Stantec Consulting for various projects, primarily performing seasonal avian surveys, including spring and autumn raptor and migratory bird surveys, waterfowl, amphibian, and other wildlife surveys, at various project sites throughout Ontario. A brief summary of her recent projects is listed below.

EDUCATION

M.Sc., York University / Environmental Studies, Toronto, Ontario, 2005

B.Sc. (Hons.), McMaster University / Biology (Major) / Biochemistry (Minor), Hamilton, Ontario, 2002

AWARDS

2003 York University Graduate Assistantship (\$6000)

1998 McMaster University Scholar Award (\$3000)

PROJECT EXPERIENCE

Natural Sciences & Heritage Resources

Eastern Loggerhead Shrike Program, Wildlife Preservation Canada*, Ontario (2010-2011) (Biologist)

Prepared 2010 Eastern Loggerhead Shrike (ELOSH) Recovery Program end-of-season reports for Environment Canada.

Performed banding data entry and management, reviewed field data and necropsies for all deaths of adult and juvenile shrikes in the captive breeding program since 2005; prepared and organized data, graphs and additional information for analysis by an epidemiologist. Interviewed and selected field staff.

Assisted the species recovery biologist with additional program activities and field season preparation

Research, Data Collection and Analysis, Reporting, and Handling of Avian Species at Risk (SAR) for Canadian Wildlife Service*, Various Sites, Ontario (2011) (Contract Biologist)

Conducted research on Bank Swallows, Barn Swallows, and Whip-poor-wills in the Guelph, Ontario area. Data collection and analysis included monitoring of colony size, disturbance, and nest occupancy of Bank Swallows in various sand and gravel pits and along Saugeen River. Monitoring nest productivity included monitoring nest contents of a subset of burrows in accessible colonies. Monitoring reproductive success of Barn Swallows in 15 barns in Wellington County included banding of nestlings and adults, mist-netting, and attachment of geolocators. Assisted with attachment of geolocators onto Whip-poor-wills in the Long Point area

Tundra-nesting Bird Monitoring for Wildlife Conservation Society*, Alaska, USA (2010) (Crew Leader)

Led the 2010 nest monitoring research project on tundra-nesting birds in the Prudhoe Bay region of Alaska. Established study plots and nest searched for all species using rope dragging and single-person searching techniques; floated eggs to determine hatch dates and monitored nest success. Collected habitat data at nest sites and examined nests for egg fragments to confirm successful hatch or predation. Set up remote cameras at select nests to record any predation events and activity. Performed data entry and management

* denotes projects completed with other firms

Zoé Lebrun-Southcott B.Sc. (Hons.), M.Sc.

Biologist / Ecologist

Eastern Loggerhead Shrike Research on Carden Plain*, Ontario (2008-2010) (Biologist)

Supervised a small team of field staff and coordinated all Eastern Loggerhead Shrike monitoring for both wild population and captive breeding activities at the Carden field site. Surveyed for wild pairs and collected nesting and productivity data during two breeding seasons. Conducted point counts, juvenile captive shrike banding and attachment of radio-transmitters and geolocators. Managed communications with private landowners and collaborated on habitat stewardship initiatives. Produced monthly and end-of-season reports for both wild and captive shrike programs, and aided with review of protocols and field season preparation of materials for field staff. Aided with interviewing, hiring, and training of field staff. Developed an 'Adopt-a-site' volunteer survey program

Eastern Loggerhead Shrike Surveys for Environment Canada*, Various Sites, Ontario (2008) (Biologist)

Collected nest site data at known and accessible nesting sites, including habitat characteristics and micro-habitat vegetation data. Data entry, management and analysis from field data collected. Prepared a final report with results and recommendations for refining the data collection protocol for future use

Avian Species Studies on Private Ranches for Texas A&M University*, Texas, USA (2007) (Biologist)

Conducted point count surveys for all avian species on private ranches in central Texas. Surveyed for endangered Golden-cheeked Warblers and Black-capped Vireos using audio playbacks; located and monitored nests of White-eyed Vireos and Black-capped Vireos; assessed habitat characteristics of Black-capped Vireo nesting areas; collected GPS data on territory size and managed point count and nest searching data

Piping Plover Research for Sleeping Bear Dunes National Lakeshore, National Park Service*, Michigan, USA (2006) (Research Intern)

Surveyed shoreline for nesting pairs and established nest locations; built enclosures around nests; monitored adults and chicks daily; assisted with banding of chicks and adults; collected GPS data and produced maps of nesting areas; researched effects of increasing nest density and presented findings at a multi-agency end-of-season meeting; co-authored an article published in the National Park Service

Site Surveys and Environmental Assessments for Ontario Heritage Trust*, Various Sites, Ontario (2003) (Natural Heritage Assistant)

Conducted site visits and environmental assessments of ecologically significant natural areas in southern Ontario; monitored and documented invasive and endangered plant species; maintained database on protected areas and researched ecological information on properties using the MNRs NHIC database

Research / Laboratories

Wildlife Research for Sierra Club of Canada*, Ottawa, Ontario (2006) (Research Intern)

Researched wildlife management policies and programs implemented by forestry companies certified under the Sustainable Forestry Initiative (SFI) to protect species at risk and critical habitat. Researched numerous species under consideration for addition to the list of species at risk under the Species at Risk Act. Helped plan and participated in public outreach campaigns to raise awareness of Canada's endangered species

Graduate Research*, Toronto, Ontario (2003-2005)

Researched the microbial ecology of Avian influenza A H5N1, E. coli 0157:H7, and antimicrobial resistance; conducted advanced analysis of the spread of West Nile virus throughout North America and the outbreak of E. coli 0157:H7 in Walkerton, Ontario using hierarchy theory and panarchy theory; researched and analyzed the effects of climate change on emerging waterborne diseases; performed policy research to assess the effects of relevant legislation on the emergence of new diseases

* denotes projects completed with other firms