

# Fact Sheet

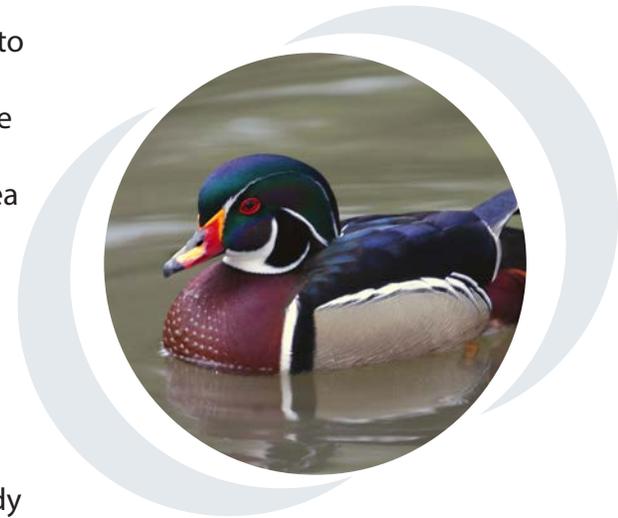


## Tar Sands: Endangering North America's Shared Bird Heritage

*Millions of migratory waterfowl and songbirds migrate from the United States through the tar sands region in Alberta's extremely productive boreal forest and then back to the United States. This lush boreal forest area is critical to our shared wildlife heritage. It is North America's bird nursery. And it is under siege.*

Currently, tar sands – a thick, asphalt-like substance that is refined into a carbon pollution intensive fuel – is causing millions of acres of vital habitat to be strip-mined or drilled, and the surrounding waters to be polluted. The result is that much of this nursery will be turned from bird haven to bird death zone. As industry eyes developing of an area the size of Florida, America's shared wildlife heritage is at severe risk. These expansion plans must be halted. More tar sands means less wildlife for Americans to observe, hunt and enjoy.

Already, 43 species of birds, including mallard, common goldeneye, northern shoveler, lesser scaup, American coot, grebes, mergansers, geese, and shorebirds, have died from exposure to tar sands tailings ponds.<sup>i</sup> Many of the species that rely on the tar sands area are already under stress. At least nine migratory bird species at risk have lost over 50 percent of their population over the past 40 to 50 years, including: horned grebe, lesser yellowlegs, short-billed dowitcher, boreal chickadee, olive-sided flycatcher, evening grosbeak, lesser scaup, greater scaup, and northern pintail.<sup>ii</sup> These species cannot afford further threat from tar sands.



### Why More Tar Sands Means Less Wildlife

Tar sands mining in Canada is destroying huge areas of important habitat and releasing toxic pollutants that poison migratory birds and other wildlife, like woodland caribou. The resulting harm to these species undermines international protections for our shared wildlife heritage and impairs U.S. conservation efforts to conserve these treasured migratory species.

Tar sands exploitation harms our shared wildlife in many ways. Extraction and drilling destroys area forest and wetlands. Strip-mining of over one million acres of forests and wetlands in Alberta's boreal forest—an area the size of Delaware – would result in the loss of important breeding habitat for millions of birds.<sup>iii</sup>



Tar sands production uses an immense amount of water and the generated waste results in toxic wastewater pits up to three miles wide. Waterfowl and shorebirds, mistaking these pits for natural ponds, land in them and become oiled.<sup>iv</sup> They then drown, die from hypothermia, or suffer from ingestion of toxins.<sup>v,vi</sup>

Toxic chemicals from tar sands operations also leak into nearby wetlands and forests, contaminating habitat for migratory birds. The leaching of mercury, lead, and cadmium further interfere with birds' health, reproduction, and behavior. These effects increase risk of death for adult birds, as well as embryo malformations, reduced egg weights, and reduced chick survival.<sup>vii</sup>

Noise pollution from compressor stations also impacts bird breeding success. The 5,000 existing compressor stations may have reduced local bird populations in Alberta by 27,000 birds due to habitat loss, and an additional 85,000 birds from noise effects.<sup>viii</sup> Expansion of drilling as planned could eliminate another 425,000 birds from the noise effects of compressor stations alone.<sup>ix</sup>

Additionally, as a significant contributor to global warming, tar sands operations and the use of tar sands fuel impact migratory birds and caribou by increasing pests, disease, wildfires, droughts, and by causing critical shifts in vegetation, food sources, and predators that upset the natural systems these birds and waterfowl depend on.<sup>x,xi</sup>

## Canada Must Fulfill its Obligations to Protect Our Shared Wildlife

Canadian regulation of tar sands is non-existent or extremely lax. The Canadian Government is beholden to the oil industry, gutting its own environmental laws and dropping out of its climate commitments to enable this destructive industry to profit at the expense of our shared wildlife.<sup>xii</sup> It is time for the United States to call on Canada to live up to its agreements to protect our shared wildlife heritage.

An American law known as the Pelly Amendment requires the Secretary of the Interior to determine whether foreign activities are weakening treaties that protect threatened species like migratory waterfowl, songbirds and woodland caribou.

National Wildlife Federation, partnering with other organizations and represented by Earthjustice, have petitioned the U.S. Department of the Interior to report to President Obama that Canada's destructive tar sands exploitation is undermining international efforts to protect at risk species.

The petition documents how tar sands mining and drilling in Alberta is harming at least 130 migratory bird species, including endangered whooping cranes. If the agency finds that tar sands development does diminish the effectiveness of these treaties, the Secretary must certify Canada to the President. The President is then authorized to take action such as trade sanctions to discourage harmful tar sands extraction.

It is time to tell Canada that is unacceptable and that we won't destroy our shared wildlife heritage for polluting fossil fuels. It is time to say no to polluting tar sands that endanger wildlife, and yes to a wildlife-friendly, clean energy future.

### The Boreal Forest: Our Shared Wildlife's Nursery

The boreal forest of northeast Alberta is an important breeding area for over almost 300 species of birds, at least 130 are protected migratory species shared by the U.S. and Canada that use the tar sands region.<sup>xviii</sup>

- One square mile of forest in the tar sands region can support as many as 500 breeding pairs of migratory birds, some of the highest densities anywhere within Canada's boreal forest.<sup>xix</sup>
- Between 22 million and 170 million birds breed each year in the tar sands area.<sup>xx</sup> Tar sands operations on habitat have caused the loss of 58,000 to 402,000 birds.<sup>xxi</sup>



## Tar Sands: An Immense Threat to Migratory Birds and Waterfowl

The industrial footprint of the tar sands may double in the next 15 years unless expansion is curtailed. This habitat loss will continue to increase mortality rates of migratory birds.<sup>xiii</sup> The potential impacts are staggering:

- The effects of tar sands mining and drilling on bird habitat are projected to reduce the forest-dependent bird population by between 10 to 50 percent.<sup>xiv</sup>
- Strip mining of the 1,200 square miles already allocated for mines will destroy habitat for an estimated 480,000 to 3.6 million adult birds.<sup>xv</sup>
- Drilling infrastructure could eliminate or fragment another 19,000 square miles of migratory bird habitat – an area about the size of Delaware.<sup>xvi</sup>
- Tar sands operations will also reduce bird births, with one estimate ranging from 9.6 million to 72 million fewer birds being born over a 40-year period.<sup>xvii</sup>

### Species of Migratory Birds Impacted by Tar Sands:

American Avocet, American Bittern, Bobolink, Bufflehead, Canvas-back, Boreal Chickadee, American Coot, Sandhill Crane, Whooping Crane, Short-billed Dowitcher, American Black Duck, Harlequin Duck, Ring-necked Duck, Ruddy Duck, Wood Duck, Great Egret, Alder Flycatcher, Great-crested Flycatcher, Least Flycatcher, Olive-sided Flycatcher, Yellow-bellied Flycatcher, Gadwall, Marbled Godwit, Barrow's Goldeneye, Common Goldeneye, American Goldfinch, Canada Goose, Ross' Goose, Snow Goose, Eared Grebe, Horned Grebe, Pied-Billed Grebe, Red-necked Grebe, Western Grebe, Evening Grosbeak, Bonaparte's Gull, California Gull, Franklin's Gull, Glaucous Gull, Herring Gull, Iceland Gull, Mew Gull, Ring-billed Gull, Great Blue Heron, Dark-eyed Junco, Killdeer, Eastern Kingbird, Ruby-crowned Kinglet, Arctic Loon, Common Loon, Red-throated Loon, Mallard, Common Merganser, Hooded Merganser, Red-breasted Merganser, Common Nighthawk, Red-breasted Nuthatch, Oldsquaw or Long-tailed Duck, Northern Oriole, Red Phalarope, Red-necked Phalarope, Wilson's Phalarope, Eastern Phoebe, Say's Phoebe, Northern Pintail, American Pipit, Redhead, Common Redpoll, American Robin, Buff-breasted Sandpiper, Least Sandpiper, Semipalmated Sandpiper, Solitary Sandpiper, Spotted Sandpiper, Upland Sandpiper, Greater Scaup, Lesser Scaup, Surf Scoter, White-winged Scoter, Northern Shoveler, Pine Siskin, Common Snipe, Sora, American Tree Sparrow, Chipping Sparrow, Clay-colored Sparrow, Fox Sparrow, LeConte's Sparrow, Lincoln's Sparrow, Savannah Sparrow, Sharp-tailed Sparrow, Song Sparrow, Swamp Sparrow, Vesper Sparrow, White-crowned Sparrow, White-throated Sparrow, Bank Swallow, Barn Swallow, Cliff Swallow, Tree Swallow, Trumpeter Swan, Tundra Swan, Western Tanager, Blue-winged Teal, Cinnamon Teal, Green-winged Teal, Arctic Tern, Black Tern, Caspian Tern, Common Tern, Hermit Thrush, Swainson's Thrush, Philadelphia Vireo, Red-eyed Vireo, Solitary Vireo, Warbling Vireo, Bohemian Waxwing, Cedar Waxwing, American Wigeon, Eurasian Wigeon, Willet, Black-backed Woodpecker, Pileated Woodpecker, Three-toed Woodpecker, Western Wood-Pewee, House Wren, Marsh Wren, Winter Wren, Greater Yellowlegs, Lesser Yellowlegs





## Whooping Cranes

Critically endangered whooping cranes are particularly vulnerable to the risk of landing in a tailings pond. The entire global population of wild, migratory whooping cranes migrates through the tar sands region twice each year. This species once dwindled to 15 individuals. There are now only about 400 cranes in the wild.

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### References

- <sup>i</sup>Timoney and Ronconi 2010 at 569.
- <sup>ii</sup>Wells et al. 2008 at 3, 17; Migratory Bird Convention, Protocol updating Article I at <http://www.treaty-accord.gc.ca/text-texte.asp?id=101587>.
- <sup>iii</sup> Bruno, Kenny, Bruce Balzel, Susan Casey-Lefkowitz, Elizabeth Shope, and Kate Colarulli. Tar Sands Invasion: How Dirty and Expensive Oil from Canada Threatens America's New Energy Economy. Issue Brief. Corporate Ethics International, Earthworks, Natural Resources Defense Council, Sierra Club. Print. May 2010.
- <sup>iv</sup> K. Timoney and R. Ronconi, Annual Bird Mortality in the Bitumen Tailings Ponds in Northeastern Alberta, Canada, 122 *The Wilson Journal of Ornithology* 3, 569, 570 (2010), <http://www.bio-one.org/doi/full/10.1676/09-181.1>; E. Butterworth et al., Peace-Athabasca Delta Waterbird Inventory Program: 1998-2001 Final Report, Ducks Unlimited Canada (2002), <http://www.ducks.ca/conservation/programs/boreal/pdf/pad2001.pdf>; see also Wells et al. 2008; and Timoney and Lee 2009.
- <sup>v</sup> Ronconi and St. Clair 2006; see also R. v. Syncrude Canada Ltd., 2010 ¶ 12
- <sup>vi</sup> Wells et al. 2008 at 15.
- <sup>vii</sup> Wells et al. 2008 at 15-16. citing N. Fimreite, Accumulation and Effects of Mercury on Birds in The Biogeochemistry of Mercury in the Environment, Elsevier Press (1979) at 601-627; R. Eisler, Mercury Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review. U.S. Fish and Wildlife Service: Biological Report 85 (#1.1) (1987); D. Thompson, Mercury in birds and terrestrial mammals in Environmental Contaminants in Wildlife: Interpreting Tissue Concentrations, W.N. Beyer et al., eds., (1996) at 341-356; D. Evers, and T. Clair, eds., Biogeographical Patterns of Environmental Mercury in Northeastern North America, 14 *Ecotoxicology* (2005).
- <sup>viii</sup> E. Bayne et al, Impacts of Chronic Anthropogenic Noise from Energy-Sector Activity on Abundance of Songbirds in the Boreal Forest, 22 *Conservation Biology* 5, 1186 (2008) at 1192.
- <sup>ix</sup> Wells et al. 2008 at 13.
- <sup>x</sup> Wells et al. 2008 at 21-22.
- <sup>xi</sup> Intergovernmental Panel on Climate Change, AR4 Working Group II, (2007), Freshwater wetlands, lakes and rivers, [http://www.ipcc.ch/publications\\_and\\_data/ar4/wg2/en/ch4s4-4-8.html](http://www.ipcc.ch/publications_and_data/ar4/wg2/en/ch4s4-4-8.html) ("The seasonal migration patterns and routes of many wetland species will need to change and some may be threatened with extinction.").
- <sup>xii</sup> "Barriers to Mitigating the Climate Impacts of the Tar Sands." Environmental Defence. N.p., n.d. Web.
- <sup>xiii</sup> Timoney and Ronconi 2010 at 574.
- <sup>xiv</sup> Wells et al. 2008 at 13.
- <sup>xv</sup> Wells et al. 2008 at iv.
- <sup>xvi, xvii</sup> Wells et al. 2008 at 12.
- <sup>xviii</sup> Wells et al. 2008 at 2, 4-5; Migratory Bird Treaty Act List, <http://www.fws.gov/migratorybirds/regulationspolicies/mbta/mbtandx.html>; Migratory Bird Convention, Protocol updating Article I at <http://www.treaty-accord.gc.ca/text-texte.asp?id=101587>.
- <sup>xix</sup> Wells et al. 2008 at iv, 2.
- <sup>xx, xxi</sup> Wells et al. 2008 at iv.

### Photos

Short-billed Dowitchers, Flickr: Britta Heise  
Boreal Chickadee, Flickr: CalgaryBirder  
Banff Wetlands, Flickr: Dave Bezaire and Susi Havens-Bezaire  
Common Goldeneye, Flickr: Stephan Berndtsson  
Tree Swallow, Flickr: Corvidaceous

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