The Talon

Vol. 28, No.2, February 2018



NEWSLETTER

SOUTH LAKE SIMCOE NATURALISTS

SLSN *is an incorporated not-for-profit Member of Ontario Nature*.

Post Office Box 1044 Sutton West, Ontario, L0E 1R0

Telephone 905-722-8021 (www.slsnc.ca)

Research Partner with The Zephyr Society of Lake Simcoe (<u>www.zephyrsociety.ca</u>)

Member: Rescue Lake Simcoe Coalition Member: Ontario Greenbelt Alliance

Note: Please renew your membership to receive future Newsletters

Meetings and Outings

Meetings:

All Meetings start at 7:30 p.m. at the York Region Police Building Meeting Room (Baseline Road between McCowan and Civic Centre Road) unless noted otherwise. No July or August Meetings. Members events (insurance compliance).

York Regional Police, 3 District Community Meeting Room 3527 Baseline Road, Georgina.



NOTE: Consistent with YRP recent procedures in place regarding evening use of their Community Meeting Room (CMR), attendees of SLSN meetings must be current members of SLSN in good standing, and may be asked to provide further information, as requested.

Tuesday, Feb. 13 Winter Birds in Ontario: A wide ranging conversation of winter birds in our area and beyond. Informed by the results of our Annual Sutton C.B.C. on Saturday January 30th this subject is an appropriate February subject in the depth of this cold, snowy winter. Club members research and presentation. This is the club Annual Meeting, administration review and election of the coming year officers will be undertaken.

Tuesday, March 13 Hurricanes: How are they formed and what is their impact on our lives with Bill and Doris Major, exploring personal experiences of recent hurricane Irma in Cuba.

Outings: All regular outings – Note: **Paid-up members may participate** (for insurance compliance).

2017 December

Saturday, Feb. 17 Winter Trail Outing: A traditional club afternoon adventure in a Regional Forest location in the South Lake Simcoe area. Actual details of the trip will depend on weather and existing conditions snowshoeing, skiing, or hiking. Meet at Coffee Time, Highway 48 south of Baldwin at 1:00 p.m. Dress for the weather. Phone 905-722-8021 if you plan to participate.

Saturday, March 3 Deer Census in Rouge National Urban Park: Call for more information, and to register 905-722-8021. Dress for the weather, based on winter conditions.

Members, please consider writing and submitting an article to the Talon Newsletter. Submit to one of the Executive members.

Jamie Huntley – Memorial Service

On Thursday January 25 a Memorial Service was held for long-time SLSN member Thomas Jamie Huntley, to commemorate his death on January 22, 2018. A number of SLSN members were in attendance.

Jamie, with his wife Margaret, long-time member of SLSN have an important rooted sense of place and natural heritage in this part of our world. Jamie's historical knowledge and experience of the forests of York Region was extensive and enlightening, and his past MNR work life always connected to people I had known and worked with in my distant past. Knowing, working and great conversations with him will always be strong memories on mine. He with Margaret had many surprises also, his recollections of trips to northern Ontario and Arizona are a only a few that come to mind. He will be missed.

Paul Harpley SLSN

York Region Forest News

The Region's <u>Ash Removal Harvest in the Brown Hill Tract</u> contract will commence February 7, 2018. The operation is expected to last 3 weeks.

For the safety of the public and workers please keep clear of the operation. Please feel free to forward this email to other forest users. If you have any questions regarding this operation please contact at Colin Macdonald R.P.F. at <u>1-877-464-9675 x75258</u>.

Christmas Bird Count Results - 2017

On Saturday December 30th 2017 many birders (including SLSN members) in the field and registered feeder watchers in the Georgina, East Gwillimbury and northeast Uxbridge areas participated in the 31st annual Sutton CBC. The day started off fully overcast for owling with an extreme low temperature of almost -20 degrees Celsius. As the day went on the temperature rose to -9 degrees by mid-afternoon. A light persistent wind (10 km/hour) from the southeast shifting to northwest by afternoon occurred throughout the day. Light snow off and on

throughout most of the day was followed by intense snow squalls late in the afternoon. The very cold early in the morning during the owling and relatively low winds, resulted in optimum owling conditions. Lake Simcoe was completely frozen and snow covered.

Sutton C.B.C. Bird List - 2017-12-30

Revised 2018-01-10

| Species | Number of Individuals |
|-------------------------|------------------------------|
| American Black Duck | 2 - |
| Ruffed Grouse | 5 |
| Wild Turkey | 71 - |
| Sharp-shinned Hawk | 2 |
| Cooper's Hawk | 2 |
| Bald Eagle | 2 |
| Red-tailed Hawk | 10 |
| Ring-billed Gull | 1 - |
| Rock Pigeon | 64 |
| Mourning Dove | 293 |
| Eastern Screech-Owl | 4 |
| Great Horned Owl | 2 |
| Snowy Owl | 2 |
| Barred Owl | 1 |
| Red-bellied Woodpecker | 20 |
| Downy Woodpecker | 44 |
| Hairy Woodpecker | 22 |
| Northern Flicker | 2 |
| Pileated Woodpecker | 2 |
| Blue Jay | 196 |
| American Crow | 146 |
| Common Raven | 11 |
| Horned Lark | 12 |
| Black-capped Chickadee | 358 |
| Red-breasted Nuthatch | 19 |
| White-breasted Nuthatch | 41 |
| Brown Creeper | 8 |
| Golden-crowned Kinglet | 2 |
| American Robin | 27 |
| Northern Mockingbird | 1 |
| European Starling | 315 |
| Cedar Waxwing | 21 |
| Lapland Longspur | 2 |
| Snow Bunting | 500 |
| American Tree Sparrow | 144 |
| Dark-eyed Junco | 275 |
| White-crowned Sparrow | 1 |
| Northern Cardinal | 65 |
| Red-winged Blackbird | 1 |
| House Finch | 16 |
| Purple Finch | 10 |
| Pine Siskin | 2 |
| American Goldfinch | 173 |
| House Sparrow | 46 Total Individuals – 2,943 |

Count Week Birds: Canada Geese, Tundra Swan, Northern Goshawk, Peregrine Falcon

Compilers: Paul and Debra Harpley

A total of 44 species on the day (lower than most years – not unexpected given the weather), and four count week bird species were recorded. With a lot of December snow before the count it was noted by birders that some birds were generally hard to find away from feeders. Highlights for the count day were a count high of three Owl species heard (Great Horned (2), Barred (1) and Screech (4) and one Snowy owl (1) seen. Two Bald eagles were recorded, down from 12 last year when the lake was still open. Almost no waterfowl or gulls were seen on count day (because most all water was frozen, except fast moving streams). However, two Black ducks were found and one Ring-billed gull seen by field birders. Southern birds still in our count area were limited, but Golden-crowned kinglet (2), Mockingbird (1), White-crowned sparrow (1), and Red-winged blackbird (1), three of them at separate feeders were of note and considerable interest. The much talked about northern finches irruption predicted across southern Canada did not appear in the Sutton Count area. House finch (16), Purple finch (10) and Pine siskin (2) were considered low for expectations. Interestingly, Lapland longspur (2), Horned lark (12) and Snow bunting (500) were welcome, but not rare winter species additions to the count. The four significant Count Week birds (not seen on count day) were Canada geese, Tundra swan, Northern goshawk and Peregrine falcon. Thanks to all field birders and feeder watchers who participated in the count.

The 31st Sutton Christmas Bird Count, is one of hundreds of Official Counts (C.B.C.'s) in North America and the world under the auspices of the National Audubon Society. The results of these bird surveys over many years have been essential to scientific research on many aspects of avian ecology, populations and particularly to climate change impact and related critical science. The Sutton Count is supported by the Zephyr Society of Lake Simcoe Research Foundation (www.zephyrsociety.ca) and the South Lake Simcoe Naturalists (www.slsnc.ca).

Canadian Wildlife News

2018-01-28

National Observer

The grizzly bear hunt in B.C. was killed after two decades of pressure from First Nations, civil society and nature conservation groups. How did that campaign evolve and what led to victory for the conservationists?

You'll see below that we mapped out the key actors, reporting, and moments that led to the BC NDP's decision to protect the remaining grizzlies from sport hunters.

Who killed the grizzly trophy hunt?

A timeline on the fight to protect grizzly bears in British Columbia

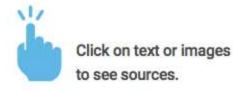
2001

FEBRUARY. BC NDP government under Ujjal Dosanjh announces three-year moratorium on grizzly bear trophy hunting, responding to overwhelming scientific evidence showing a decline in grizzly bear populations.



2002

Bill Bennett, hunting advocate and newly-elected BC Liberal MLA, introduces The Hunting and Fishing Heritage Act to protect hunting as part of the cultural heritage of B.C. The sustainable hunting lobby group B.C. Wildlife Federation (BCWF) awards him a life membership.



2001

JULY. Just one month after being sworn in, BC Liberal Premier Gordon Campbell, overturns the trophy hunt moratorium.



2003

ECONOMICS: study from Raincoast Conservation Foundation finds that bearviewing generates twice as much revenue as hunting.



2x



As you read through the timeline, you'll notice that journalism played an essential role on this issue, informing lawmakers and empowering the public with facts and political

exposed the connections between hunting lobby groups and B.C. Liberal officials, revealing the lack of scientific research behind government decisions on the trophy hunt throughout the province.

Thanks to consistent reporting, and the actions from First Nations, civil society and conservation organizations, the grizzly bear trophy hunt became an important issue leading up to the 2017 provincial election. The BC NDP and Greens incorporated the issue into their platforms which led to today's total ban.

But as the last paragraph on the timeline says, the fight to protect grizzlies is not over. Many questions remain about the impact of proposed natural gas developments on grizzly habitats.

Winter Birding Tradition Fuels Conservation

By Liz Purves, Canadian Christmas Bird Count Coordinator, Bird Studies Canada



Great Gray Owl Photo: Ron Ridout

Bird and winter enthusiasts across the continent are gearing up for the 118th Christmas Bird Count (CBC) season. This winter birding tradition took root in 1900, making it North America's longest-running Citizen Science project. Each year, upwards of 2000 counts in the Western Hemisphere are conducted by volunteer groups on a day between December 14 and January 5. Last year in Canada alone, 14,000 participants counted over 3 million individual birds in nearly

500 counts across the country. Thank you to the many participants, compilers, and regional editors who make the Canadian CBC possible each year.

Young or old, novice or experienced, the CBC is for everyone, and offers diverse opportunities for participation. Some wake before sunrise and count birds in the field through to sunset, armed with several pairs of warm socks. Others prefer to tally feeder birds from the comfort of their living room with a warm mug in hand. No matter how you participate, it is all contributing to this important project for birds. Data collected by dedicated CBCers are used to study the health of winter bird populations over time, and guide conservation strategies to help birds and their habitats. For example, CBC data were used to help predict how climate change could influence distributions of North American birds in Audubon's 2014 Birds and Climate Change Report. Many counts have been run for decades and contribute valuable local knowledge of winter birds. This year, participants and compiler of the Peterborough, Ontario CBC were recognized by the City of Peterborough for their 65 years of bird monitoring efforts.

A huge thanks and congratulations to both the long-standing and new CBCs on their accomplishments for birds thus far!

The Christmas Bird Count is considered a winter highlight for many people. The count is a great way to bring friends and family together for a day outside or to meet fellow bird and nature enthusiasts in your community. Whether it's admiring a Great Gray Owl at sunset with your child, spotting a seasonally-rare, lingering migrant to boast about later, or celebrating the triumphs (and tribulations) of the day with other participants at an end-of-count-day potluck, CBCers always have memorable stories to tell. You can read the summaries for Canada and its regions from last year's count on Audubon's website.

Are you interested in joining the CBC flock? Visit Bird Studies Canada's website to find a count near you. If you'd like to start a new count in your area, contact Liz Purves, Canadian Christmas Bird Count Coordinator.

However you participate, don't forget to take pictures! For the first time, we'll be running a CBC photo contest. Submit a photo of your favourite moment from the 118th CBC to cbc@birdscanada.org to enter a random draw for a prize, which will occur after the count period (prize TBA).

Bird Studies Canada relies on donations to make the Christmas Bird Count possible in Canada. Your generous gift supports national coordination, data collection, and analysis – and you'll receive a charitable tax receipt. We appreciate your support!

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New IBA Abounds with Birds

By Amanda Bichel, Ontario IBA Coordinator, Bird Studies Canada



Photo: Mike Burrell

Bird Studies Canada and partners are thrilled to announce the designation of a new **Important Bird and Biodiversity Area** (IBA) in the southwestern James Bay region! The new site amalgamates seven former IBAs, covers an additional 716 km², and was created to better reflect bird habitat use and movements within this unique area. The new IBA is named **Pei lay sheesh kow**, which in Cree means 'an area that abounds with birds' – a description it certainly lives up to!

The area has been identified as an IBA because it hosts large congregations of birds, serving as an important stopover point for shorebirds and staging area for waterfowl between the Arctic and Atlantic oceans. More than 25 species of shorebirds depend on the James Bay while on their way south in late summer and fall (including juvenile birds making their first migration). In spring and fall, many waterfowl species gather off-shore; some, like the Black Scoter, undergo flight feather moult at this time.

The table below highlights some of the impressive waterbird populations that depend on Pei lay sheesh kow. Remember that IBAs like this one are designated when at least 1% of a bird species' global or continental population uses them regularly. Also keep in mind that these are <u>daily</u> totals. The seasonal totals are even more staggering!

| Species name | Number observed (daily maximum) | Percent of global population |
|--------------|---------------------------------------|------------------------------|
| Black Scoter | 39,102 | 1.7 |
| Brant | 24,100 | 4.3 |

| Hudsonian Godwit | 3295 | 4.7 |
|---------------------------|--------|-------|
| Pectoral Sandpiper | 1584 | 2.5 |
| Red Knot | 6200 | 5.6 * |
| White-rumped Sandpiper | 35,000 | 3.1 |

^{*}Percent of continental population

The Moose Cree First Nation (MCFN), whose traditional territory completely encompasses the IBA, played a major role in defining the new site by applying local knowledge of birds, habitats, and land use. Members of MCFN are also watching over the site as IBA Caretakers.

Shorebirds are in steep decline, and are considered a priority for conservation action in the Western Hemisphere. Thankfully, the James Bay Shorebird Project was initiated in 2009 to better understand shorebird abundance and habitat use in the region. Bird Studies Canada is pleased to be a part of it, along with partners Canadian Wildlife Service, Ontario Ministry of Natural Resources and Forestry, the Royal Ontario Museum, MCFN, and Nature Canada. Work done within the IBA by participants in the James Bay Shorebird Project has included setting up **Motus** towers, deploying transmitters on a variety of shorebirds, and advocating for this candidate site to be designated a Western Hemisphere Shorebird Reserve Network site.

Exciting conservation work is ongoing at this IBA, so check back with the Bird Studies Canada blog for updates.

What monarch butterflies prefer

By Shireen Gonzaga in EARTH | HUMAN WORLD | November 21, 2017

Will our survival strategy for monarchs work? Initiatives emphasize milkweed plantings along roadsides. New research shows egg-laying monarchs much prefer off-road farmlands.



Monarch butterfly on a milkweed flower. Image courtesy of Ryan Norris, University of Guelph.

In the past 20 years, the eastern North American monarch butterfly population — a beautiful and majestic butterfly species, beloved by many throughout North America — has plunged by 95%, bringing them dangerously closer to extinction. One strategy to help save the butterflies has been to plant more milkweeds. That's because, each spring in North America, as monarch butterflies venture north from their wintering grounds, they lay their eggs exclusively on milkweeds, which are the only plants that their caterpillars can eat. But the strategy for milkweed planting has involved roadside parks. And new research reveals that eastern North American monarch butterflies lay three-and-a-half times more eggs on milkweeds located on farmland, in contrast to milkweeds growing along roadsides or in natural areas or urban gardens.

The same new research also shows that the butterflies prefer laying their eggs in small milkweed patches over large ones.

These findings are published in the peer-reviewed journal Biological Conservation. They stem from a two-year survey of monarch egg-laying preferences by graduate student Grace Pitman and her professor, ecologist Ryan Norris at the University of Guelph in Ontario, Canada, and by conservation biologist Tyler Flockhart at the University of Maryland.

Pitman, the paper's lead author, said in a press release:

Female monarchs are likely attracted to agricultural lands because it is easier for them to locate the milkweed growing there. Monarchs use chemical receptors in their antennae to detect milkweed. It may be easier for them to locate the plant in croplands where it is surrounded by monocultures so there is lower diversity.

She also suggested that smaller milkweed patches had higher egg densities because female monarchs likely used them to avoid male monarchs:

The males like to hang out in the larger patches and wait for the females. They tend to harrass them, and if the females are looking to lay their eggs, they don't want to be harassed.

Roadside milkweeds, on the other hand, were found to have the *lowest* number of eggs. Ryan Norris commented that the reasons for this were not clear; did the butterflies simply avoid urban roadsides or was it due to the harsher conditions of those locations? He said:

There are a lot of factors that put the monarchs and their eggs and adult females at risk, including getting hit by cars, road salt and the frequent cutting of vegetation.

Norris also remarked, about the team's discovery that monarchs prefer small milkweed patches in farmland:

These findings are significant given that there are currently initiatives under way that involve planting milkweed to help the survival of this butterfly. In some cases, the focus is on roadside planting, which based on these findings is not an ideal location.

A more effective strategy would be to develop incentive programs with landowners to plant and maintain milkweed within agricultural landscapes.

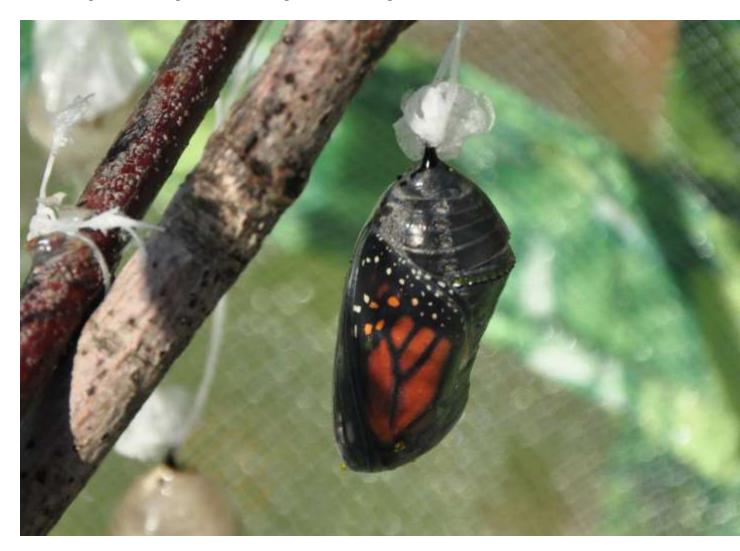


Monarch caterpillar on swamp milkweed. Image by Shireen Gonzaga.

Monarch butterflies in eastern North America undergo long migratory journeys, as much as 3,000 miles. Most overwinter in forests in central Mexico.

In spring, the year's founding generation moves northward, mating, laying their eggs, then dying. The next generation picks up the next leg of the journey, repeating the butterfly's life cycle: hatching from an egg, going through its caterpillar stage, undergoing its dramatic transformation in its chrysalis, and finally emerging as a butterfly. This goes on up until the fourth generation.

The first, second, and third generations each have a two- to six-week lifespan, depending on weather conditions. The fourth generation, the final generation of the year, has a nine month lifespan. In late summer, this generation undertakes an extraordinary southward migration over thousands of miles, returning to the wintering grounds of their great-great-great-great grandparents; many of these monarchs spend the winter months roosting in dense colonies in a small area in the mountain forests of central Mexico. On the west coast, monarchs embark on a similar long-distance migration, wintering in forests along the southern California coast.



Monarch butterfly just hours from emerging from its chrysalis. Image by Shireen Gonzaga.

Monarch populations in eastern and western North America have undergone significant decline in the past two decades. Habitat loss, due to logging in their Mexico wintering grounds and development in southern California, is one reason. Along their migratory paths, monarch caterpillars face food shortages due to the destruction of milkweed plants in farmlands that use herbicide-resistant crops, and the butterflies themselves are killed by pesticides. There is also concern about the effect that climate change has on the breeding cycle and winter survival of monarch butterflies.

Swamp milkweed seeds, attached to white filament tufts that easily make them airborne. Image by Shireen Gonzaga.

Bottom line: A recent study shows that eastern North American monarch butterflies lay three-and-a-half times more eggs on milkweeds in farmland compared to milkweeds in roadsides, natural areas, and urban gardens. An effective strategy to help save the butterflies from extinction might be to develop incentive programs with landowners to plant and maintain milkweed within agricultural landscapes.

45% of Arctic shorebirds are disappearing - here's the plan to save them

21 Apr 2017

Across the globe, 45% of Arctic-nesting shorebirds are decreasing. The Pacific Americas Shorebird Conservation Strategy aims to identify the threats and develop strategies to save them.



Rufous-chested Dotterel Credit © Jorge Martin Spinuzza/avespampa.com.ar By Pacific Shorebirds

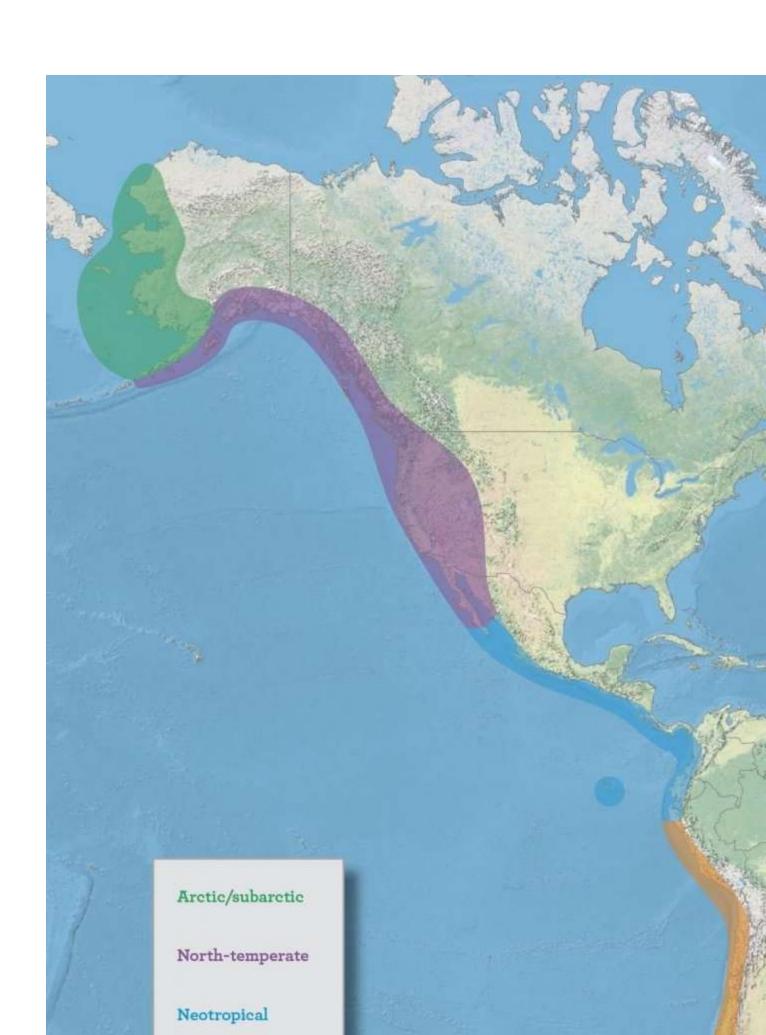
Across the globe, 45% of Arctic-nesting shorebirds are decreasing. The new Pacific Americas Shorebird Conservation Strategy aims to identify the threats and develop strategies to save them.

Shorebirds—plovers, oystercatchers, sandpipers, godwits, curlews—can be found along the entirety of the Pacific coast of the Western Hemisphere during some time of the year.

Many species travel from Arctic breeding areas to spend their winter on the beaches and mudflats of North America, Central America and South America, where they share the environment with resident species.

Whether migrants or residents, shorebirds and the habitats they depend upon are exposed to an increasing myriad of anthropogenic threats. Within the Pacific Flyway, 11% of shorebird populations face long-term declines; none are known to be increasing.

Although the challenges are great, they are not without solutions. Across the Western Hemisphere, shorebird scientists, conservationists and managers have come together to tackle the conservation issues across the annual life cycle of this incredible group of birds.



Although there is no doubt that successful conservation depends upon actions initiated locally, isolated interventions will have the best chance for positively affecting populations if coordinated at a flyway scale.

The Strategy follows a logical sequence of setting shorebird conservation targets, identifying major threats and identifying highly effective actions to restore and maintain shorebird populations throughout the Pacific Americas Flyway.

The Strategy is being led by an international group of more than 85 experts in 15 countries, including BirdLife and some of its Partners.

The intent is to assemble and synthesize information to present a comprehensive approach and to address the most pressing conservation needs in the flyway from Alaska to Patagonia, while considering the human communities that interact with shorebirds. Only with investments in the portfolio of strategies and actions will conservation of this extraordinary group of birds be achieved.

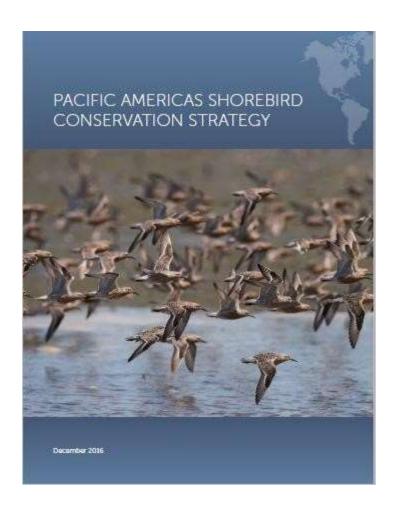
The strategy is not a step-by-step recipe for conservation success but rather a framework for ceaseless collaboration, innovation and accomplishment.

"Shorebirds form a valuable natural resource, and it is the plain duty of the present generation to pass on to posterity this asset undiminished in value" Wells Cooke, U.S. Biological Survey 1910.

Extensive partner involvement in the development of the Pacific Americas Shorebird Conservation Strategy will need to be sustained and augmented to achieve success across the flyway and to mold the broad strategies presented here into tangible, spatially explicit actions.

A well-coordinated, collective effort will be needed to achieve overall strategy success; thus, people, and transparent communication among them, are crucial for success.

Readers are encouraged to engage with the strategy's partners to endeavor to sustain shorebird populations along the Pacific Americas Flyway well into the future.



Project contact information:

Isadora Angarita-Martínez, BirdLife International

Stan Senner, National Audubon Society (BirdLife in the US)

Brad Andres, US Fish and Wildlife Service

Sponsors and participating organizations

Development of the Pacific Americas Shorebird Conservation Strategy involved more than 53 unique institutions from the Western Hemisphere including 60% nongovernmental conservation organizations, 23% government, 13% academic institutions and independent individuals (4%). The David and Lucile Packard Foundation provided financial support along with the National Audubon Society, U.S. Fish and Wildlife Service, Canadian Wildlife Service, MUFG Union Bank Foundation, Pacific Birds Habitat Joint Venture, USDA Forest Service, and private individuals.

Ocean Plastic Killing Marine Turtles

2018-01-08

Live Science - Planet Earth

Ocean plastic killing marine turtles

By EarthSky in EARTH | HUMAN WORLD | January 7, 2018 Hundreds of marine turtles die every year after getting tangled in trash – such as plastic 'six pack' holders and discarded fishing gear – in oceans and on beaches.



Image via inspiredartblogger.com.

The increase in plastic pollution in Earth's oceans and on beaches is killing turtles of all species, with a disproportionate impact on hatchlings and young turtles, according to research published December 11, 2017 in the journal *Endangered Species Research*.

The study, a world-wide survey covering the major oceans where turtles live, discovered that 91 percent of the entangled turtles were found dead. They also suffered serious wounds from entanglement, leading to maiming, amputation or choking. Others that survived were forced to drag discarded rubbish or debris with them.

The survey found turtles are being tangled up in lost fishing nets, plastic twine and nylon fishing line, as well as six-pack rings from canned drinks, plastic packaging straps, plastic balloon string, kite string, plastic packaging and discarded anchor line and seismic cable. Turtles were also discovered entangled in discarded plastic chairs, wooden crates, weather balloons and boat mooring line.



Image via Red Pegasus/YouTube.

An additional threat of plastic pollution to marine turtles, other research has shown, is that turtles eat plastic rubbish and marine creatures caught up in it.

Hatchlings and young sea turtles are particularly susceptible to getting tangled up in lost or discarded fishing gear or floating debris. Juvenile turtles ride on ocean currents to zones where floating rubbish and debris is concentrated. They also can set up home near floating debris and remain there for years.

Brendan Godley, Professor of Conservation Science at the University of Exeter, is the study lead author. He said that mortality from entanglement has increased substantially over the last century, not just for

turtles but for other marine mammals and birds, and as plastic pollution increases, more and more turtles are likely to become entangled.

Godley said the mortality rate from becoming tangled up in human refuse was, in practice, likely to be far higher than 1,000 turtles a year estimated by the study:

Plastic rubbish in the oceans, including lost or discarded fishing gear which is not biodegradable, is a major threat to marine turtles. We found, based on beach strandings, that more than 1000 turtles are dying a year after becoming tangled up, but this is almost certainly a gross underestimate. Young turtles and hatchings are particularly vulnerable to entanglement.

Experts we surveyed found that entanglement in plastic and other pollution could pose a long term impact on the survival of some turtle populations and is a greater threat to them than oil spills. We need to cut the level of plastic waste and purse biodegradable alternatives if we are to tackle this grave threat to turtles' welfare.

All species of turtle were found entangled, but Olive Ridley turtles are the most likely species to get tangled up. The species nests in the hundreds of thousands. It forages in areas where marine debris can aggregate. It may also be attracted to feeding on marine rubbish, including discarded fishing tackle.

Most entanglements recorded were in lost or discarded fishing gear known as *ghost fishing* rope, nets and lines. Since the 1950s the fishing industry has replaced natural fibres such as cotton, jute and hemp with synthetic plastic materials such as nylon, polyethylene and polypropylene which doesn't biodegrade in water.

Bottom line: A new study by researchers at University of Exeter found that plastic pollution is Earth's oceans is killing marine turtles.
