

# NOVA SCOTIA BIRDS

A Quarterly Publication of the Nova Scotia Bird Society

A PELAGIC TRIP TO THE  
CONTINENTAL SLOPE

## Pubnico Pelagic 2017

WHAT WE'VE ALL  
BEEN WAITING FOR

## October 2017 Fallout

# TROPICAL KINGBIRD

A Provincial First





The Nova Scotia Bird Society has been a focus for birders in this province for 60 years. Serving about 600 members, we have much to offer anyone interested in wild birds. Browse through our web site ([www.nsbirdsociety.ca](http://www.nsbirdsociety.ca)) for a sample of what we do, and feel free to send us e-mail ([contact@nsbirdsociety.ca](mailto:contact@nsbirdsociety.ca)) if you would like more information.

The Nova Scotia Bird Society is a registered charitable organization that promotes the study and conservation of wild birds in Nova Scotia. Since its establishment in 1955, the NSBS has grown into the largest single Natural History group in the province.

We are a not-for-profit organization that is run entirely by volunteers!



# Board 2017-2018

## President

David Currie

## Vice President

Diane LeBlanc

## Treasurer

Dr. Gillian Elliott

## Ex-officio

Dr. Ian McLaren

## Secretary

Kate Steele

## Membership Secretary

Dr. Ulli Hoeger

## Directors

Dr. Eric Mills

Barbara Haley

Angela Millard

Tony Millard

Chris Pepper

Dr. Sylvia Craig

Dr. Helene Van Doninck

## Honorary Solicitor

Anthony Robinson, QC

## Honorary Auditor

Ruth E. Smith

## EMAIL:

[contact@nsbirdsociety.ca](mailto:contact@nsbirdsociety.ca)

## WEBSITE:

[nsbirdsociety.ca](http://nsbirdsociety.ca)

## RARE BIRD ALERT:

[groups.yahoo.com/NS-RBA/](http://groups.yahoo.com/NS-RBA/)

# Contents

- 4 Editor's Foreword
- 5 President's Report
- 6 Puffin of the Year Award - 2017
- 7 AGM Minutes, Fall 2017
- 11 Seasonal Summary
- 40 Pubnico Pelagic 2017
- 47 October 2017 Fallout
- 58 Nova Scotia's First Tropical Kingbird
- 61 The Need for More Citizen Science Volunteers
- 63 Erratum



**COVER:** Nova Scotia's first Tropical Kingbird was observed only one day in the Chebogue Point area, Yarmouth, Oct 24.

*Photo by Ervin Olsen.*

## Nova Scotia Bird Society

c/o The Nova Scotia Museum

1747 Summer Street

Halifax, NS B3H 3A6

**Records and Photo Editor:**  
Alix d'Entremont

**Production Editor**  
Andy de Champlain

**Layout Editor**  
Mohsin Khan

**Copy Editor**  
Susann Myers

**Section Editors**  
Andy de Champlain  
Alix d'Entremont  
Ross Hall  
John Loch  
Ken McKenna  
Ian McLaren  
Jake Walker  
Rick Whitman

**eBird management**  
Keith Lowe

**Photo & Records Submissions:**  
Submit photos and other items  
for publication by email to:  
***alixdentremont@hotmail.com***

For information about current  
events, visit the NSBS website at  
[nsbirdsociety.ca](http://nsbirdsociety.ca), or email Angie  
Millard at:  
***angiemillard@gmail.com***

Use of written material or photos  
from Nova Scotia Birds needs  
permission from either the Editor  
or photographer. Cost of this  
publication is partly provided by  
the Nova Scotia Museum.



# Editor's Foreword

*Alix d'Entremont*

The foreword in the last issue of Nova Scotia Birds (summer 2017) contained Ian McLaren's 'swan song' as editor. We've been fortunate to have Ian in this role since winter 2011-2012, but he has also been completing the duties of photo editor since winter 1984. His insatiable curiosity combined with knowledge gained from a lifetime of birding, an academic career, and as a member of countless conservation committees are evident in his work. Andy de Champlain and I have split these editorial responsibilities; unlike Ian, we are only human, and two can only dream to approach one.

Feedback from the Nova Scotia Bird Society Board and members as well as Nova Scotia Birds contributors, along with changes in data gathering (mostly eBird), have driven forthcoming changes in the magazine content and style, and ultimately its purpose. A member questionnaire is slated to be distributed in the near future, so please let us know what you'd like to see printed here. This issue and likely a few more to follow will be stepping stones leading to an updated publication.

Mailed-in reports from sparsely scattered locations have been replaced by the continually expanding coverage of eBird data, which totalled over 25,000 birding hours in our province during 2016. While crowdsourced datasets aren't perfect, ongoing research – some by society members from Acadia University – will continue to better define best practices for their use. Attempts will be made to lessen feather ruffling of long-time readers, but 'Species Accounts' will be much condensed and more emphasis will be placed on 'Other Reports'.

Some information that used to be contained in the magazine will be made available through our recently overhauled website, featuring "all kinds of new", as described by our website administrator Peter Brannon. The Nova Scotia Bird Society has a duty to promote good data captured through citizen science and especially via structured projects (see The Need for More Citizen Science Volunteers, p.61). We hope that the evolution of this publication will retain current readers and entice new ones to enjoy writings on the birds of Nova Scotia.



# Pubnico Pelagic 2017: The Big One

**In 2017 it was decided that we would attempt the over 400-kilometre round trip to the continental slope – the only place in Canada where you could hope to see certain warm-water species.**

*Alix d'Entremont*

**I**n common with other bird species, seabird distribution and occurrence are tightly linked to habitat. Unlike terrestrial habitats that are relatively stable, those of the oceans are variable both temporally and spatially and our understanding of this complex instability is actually very limited. Productivity of a given volume of water is influenced by factors like temperature, salinity, wind strength and direction, thermocline depth, stratification characteristics, upwelling and fronts. Ocean habitats are mainly defined by the water's biological productivity which depends in part on processes like upwelling to bring nutrient-rich cooler waters into the zone where photosynthesis can occur (Howell, 2012).

The predominant influence on Nova Scotia's coastal water is the cold and nutrient-rich Labrador Current that, once mixed with the fresher St. Lawrence waters, hugs our province's southern coast as the Nova Scotia Current (Thurston, 2011).

The tubenoses most commonly associated with this cold nearshore water, spring through autumn, are Sooty, Great and Manx, plus Northern Fulmar as well as Wilson's and Leach's Storm-petrels. In comparison, the warmer waters of the Gulf Stream showcase species like Cory's and Audubon's Shearwaters, Black-capped Petrel and Band-rumped Storm-Petrel (Howell, 2012). Although nearshore sightings of Cory's Shearwater were rare only 5 years ago, it has now become a much more common species, especially during October – likely a result of the globally extreme rate of warming of the Gulf of Maine (Pershing et al., 2015).

The 100-kilometre-wide Gulf Stream veers away from the coastline north of Cape Hatteras where it starts to meander. Warm-core rings can break off from the main stream and bring warm waters to the continental slope south of Nova Scotia (Davis and Brown, 1998). Tidally-induced upwelling at the





**This photo shows the twelve birders and one of the captains, Stephen d'Entremont, at Dennis Point Wharf in Lower West Pubnico, Yarmouth. From left to right are Keith Lowe, Alix d'Entremont, Paul Gould, Mark Dennis, Mike King, Michael Bentley, Richard Stern, Eric Mills, Jake Walker, Ronnie d'Entremont, Ken McKenna, Stephen d'Entremont and David Currie. Photo by Ellis d'Entremont**

Scotian Slope and mixing at the front between the warm-core water and the cold and nutrient-dense continental shelf waters are some of the driving forces that make the slope a productive place, where species normally associated with the Gulf Stream can be found.

Private pelagic birding trips run out of various ports in the province are the yearly highlight for many birders. They offer up-close viewing opportunities of species that, from land, are typically mere specs on the horizon. None of these offshore trips had previously gone to the continental slope, but there have been recent reports of Audubon's Shearwaters, Black-capped Petrels, Band-rumped Storm-Petrels and White-faced Storm-Petrels in warm waters in this area from government research initiatives such as cruises by the USA's National Oceanographic and Atmospheric Administration's National Marine Fisheries Service, and Canadian Wildlife Service's East Coast Seabirds at Sea. Birders in North Carolina, where there are frequent pelagic cruises year-round, are fortunate in that the continental slope and the Gulf Stream are just 40 km from land, compared to the 125 km that separate Nova Scotia from the slope and even more from the Gulf Stream proper.

## **PUBNICO PELAGIC 2017**

Ronnie d'Entremont has been organizing a pelagic trip out of Pubnico each autumn since 2012, with the exception of 2013 when no trip was run. The destinations have been to productive areas on the Scotian Shelf, namely Southeast Bank (~50 km south of Pubnico) and German Bank (~50 km west of Pubnico). In 2017 it was decided that we would attempt the over-400-kilometre round trip to the continental slope – the only place in Canada where you could hope to see certain warm-water species.

At 5 pm on August 3, 12 birders and two captains set off from Dennis Point Wharf in Lower West Pubnico on Rebecca Lynn I, a 50-foot lobster fishing vessel. The two captains, brothers Stephen and Gerald d'Entremont, took turns at the wheel and we motored through the night. Of those onboard, the fortunate ones got to sleep inside on a bunk, but the rest had to sleep outside on the deck in cots. While sleeping under the stars is often romanticised, those on the deck had to deal with the loud rumble of the diesel engine and the pea-soup-thick fog that soaked everything and everyone.





**These two Long-tailed Jaegers show checkered underwings, strongly barred undertail coverts and a dark bill tip of first-cycle birds. Both birds appear to be missing both central tail feathers (R1), so that their tails lack the slightly elongated centres. The individual at left is relatively paler, showing a less extensive breast band and less extensive and narrower flank and undertail barring. This photo is a composite of two separate photos. Photos by Alix d'Entremont**

incredible 27.7 degrees Celsius. Five minutes later we had two immature Long-tailed Jaegers following the boat (see “Aug 4:6 am” on the map below for approximate location).

We kept moving south into the warm water and by 8:09 am were looking at a small black-and-white shearwater sitting on the water (see “Aug 4:8 am” on the map below for approximate location). Some of the birders looked through their binoculars while others (including me) madly snapped away at it with their cameras. We knew full well that Audubon’s was a possibility; in fact that species was one of the main reasons for making the trip. There was a short discussion about the bird once it disappeared. Manx and Audubon’s Shearwaters are quite similar and some noted the appearance of dark undertail coverts while others mentioned that they had seen more extensive white on the face than on the typical Manx. The images of the bird on the LCD screens on the back of cameras seemed to show that the bird had white undertail coverts, which didn’t fit most of our expectations for Audubon’s. Other birds were to be seen, so the group decided to leave it as Manx for the time being. It was not until two days later that its identification as an Audubon’s Shearwater was confirmed.

Undertail covert colour in Audubon’s Shearwater actually varies from the less common solidly blackish to extensively white basally which is most common. Audubon’s is slightly smaller



We were south of Browns Bank as dawn broke. Given that the goal of the trip was to reach the warm waters past the slope, we kept an eye on the sea surface temperature as displayed by the boat’s electronics throughout. The nearshore water temperature was about 9 degrees Celsius, but Browns Bank waters were much warmer at about 17 degrees Celsius. We quickly organized ourselves and began a drip feed of fish oil, attracting Great and Cory’s Shearwaters and both usual storm-petrels. Our handout resources consisted of 160 lbs of herring and five buckets of frozen fish meal, fish oil, and Rice Krispies.

Abruptly, at 6:20 am, the humidity and air temperature spiked, causing our binoculars and camera lenses to steam up – we had reached the warm waters! The water temperature was an

**This Audubon’s Shearwater south of Browns Bank, in relation to a Manx, shows a longer tail (projecting past the feet), whiter face and a wider dusky trailing edge to broader wings. The undertail coverts are mostly whitish except for a small dusky area.**

*Photo by Alix d'Entremont*

**The Sargassum Midget, a flying fish species, has intricate patterns that serve as camouflage amid the patches of Sargasso weed that they inhabit (Howell, 2014). Photo by Alix d'Entremont**



than Manx and has relatively short and broad and blunt-tipped wings as well as a longer tail. Manx is darker-faced with a white hook around the auriculars, whereas Audubon's lacks the hook and is whiter faced (Howell, 2012).

The province's first report of Audubon's Shearwater was an observation at Western Bank on 7 October 1979 by an experienced observer (Nova Scotia Birds, 1980, Vol. 22, issue 1, p.8). Another four were reported before our first photographically confirmed was found by Tom Johnson south of Browns Bank on 17 August 2012 (Nova Scotia Birds, 2013, Vol. 55, issue 1). Prior to the 2017 record, there had been a total of 42 reports, but many, especially the earlier ones were by a single observer or lacked details.

The warm waters of the Gulf Stream were an exceptionally vibrant blue in contrast to our regular ocean waters which are a dull greyish or greenish. Our resident oceanographer, Dr. Eric Mills, explained that the colour of the water is a function of its contents and that the unbelievable blue colour all around us was in fact the apparent natural colour of water without any substantial amounts of particulates such as plankton. Marine species included Short-beaked Common Dolphins, Pilot Whales, Humpback Whales, tuna, Basking Sharks and even a species of flying fish identified by the Worm Lab at Dalhousie University as Sargassum Midget.

Only two skuas were seen during the trip, both South Polar Skuas (probably, see figure caption below) and both in the Northeast Channel between Georges Bank and Browns Bank. In the upper Gulf of Maine, herring fisherman and birder Ellis d'Entremont has also noted that jaegers and skuas are most

commonly observed in the relatively deeper shipping lanes of the Grand Manan Basin; perhaps they are flying between the more fruitful banks and therefore are easier to see.

Although birds following the ship as we chummed would be counted on multiple checklists, it should still be worthwhile to compare relative abundances of the tubenoses.

Average counts of species per 1-hour checklist seem to be associated with ocean bottom topography, as they should, given that the productivity and therefore habitat varies between these areas. Average numbers of Wilson's and Leach's Storm-petrel were 5 and 4 times higher respectively, on the slope than on the shelf. Cory's averages were similar on the shelf and on the slope. The cool-water-loving Great Shearwater averages were higher on the shelf and especially on Georges Bank compared to the slope. The two Sooty Shearwater sightings were on Georges Bank and Northern Fulmar was in the Northeast Channel. Sootys tend to be most abundant in summer and had likely moved to the n.e. Atlantic by early August. The only *Larus* species was a Herring Gull on Georges Bank. The only other jaeger was Pomarine in the Fundian Channel.



**The Wilson's Storm-Petrel in the foreground is an adult. They breed in the southern hemisphere summer (our winter) around the Antarctic and Cape Horn regions and then begin primary moult in mid-Apr to early June and finish mid-Aug to late Sep. The bird in my photograph has replaced most primaries. Young birds completing their preformative moult begin replacing their primaries later. Photo by Alix d'Entremont**





The sea surface temperature above Georges Bank was about 14-17 degrees Celsius, much cooler than the 25+ degree Celsius waters on the slope and deeper waters.

## FUTURE TRIPS

This pioneering trip was a tremendous success. One of the birders, a visitor from British Columbia, who had spent thousands of hours birding at sea both for work and recreationally, commented that this pelagic trip was “his favourite paying pelagic trip ever.” In an email sent to the group once back on land, Keith Lowe shared how his sleeping chair tipped over backwards a few times during the night, but said that it was all worth it.

The Audubon’s Shearwater was the only warm-water specialty that was found during the 2017 trip, but many others are possible. Michael Force, wildlife surveyor for NOAA, explains that in warm water cores south of the slope, it is “easy to find Audubon’s Shearwaters and Band-rumped Storm-Petrels,” but that White-faced Storm-Petrels, Barolo Shearwater and Black-capped Petrels are not common. Species such as Bridled Tern, White-tailed Tropicbird and Red-billed Tropicbird have been seen near the continental slope off Massachusetts, so should be looked for on and around the Scotian Slope.

**LEFT: These two skuas are at the same stage of primary moult, both having dropped the two innermost primaries, suggesting first-cycle birds by their primary moult scores as per Newell and Howell (2013). The bird depicted in both photos above shows extremely worn and pointed primaries, providing more evidence of a young bird. It is comparatively much more bleached, perhaps because it spent much time at sunnier latitudes. The mottling on the neck is likely due to the darker post-juvenile feathers compared to the highly bleached retained juvenile feathers.**

The individual in both photos below shows a pale hind collar and a short gony which are features commensurate with South Polar Skua, but the large bill and plumage colour are suggestive of Brown Skua. In fact, a Brown Skua photographed off the east coast of Australia (Macaulay Library Number ML64312061) was quite similar in plumage. Two individuals with mitochondrial DNA of the Brown Skua group were recorded in the northeast Atlantic in 2001 and 2002 (Votier et al., 2004). Biometrics and the relatively low population of hybrids with South Polar Skua suggest that they were pure Brown Skuas. The few unconfirmed reports from the eastern US and one from Sable Island, Nova Scotia (McLaren & Lucas, 2004), along with the DNA evidence, means that we must consider Brown Skua here, identification criteria are still lacking, however.

*Photos by Alix d’Entremont*



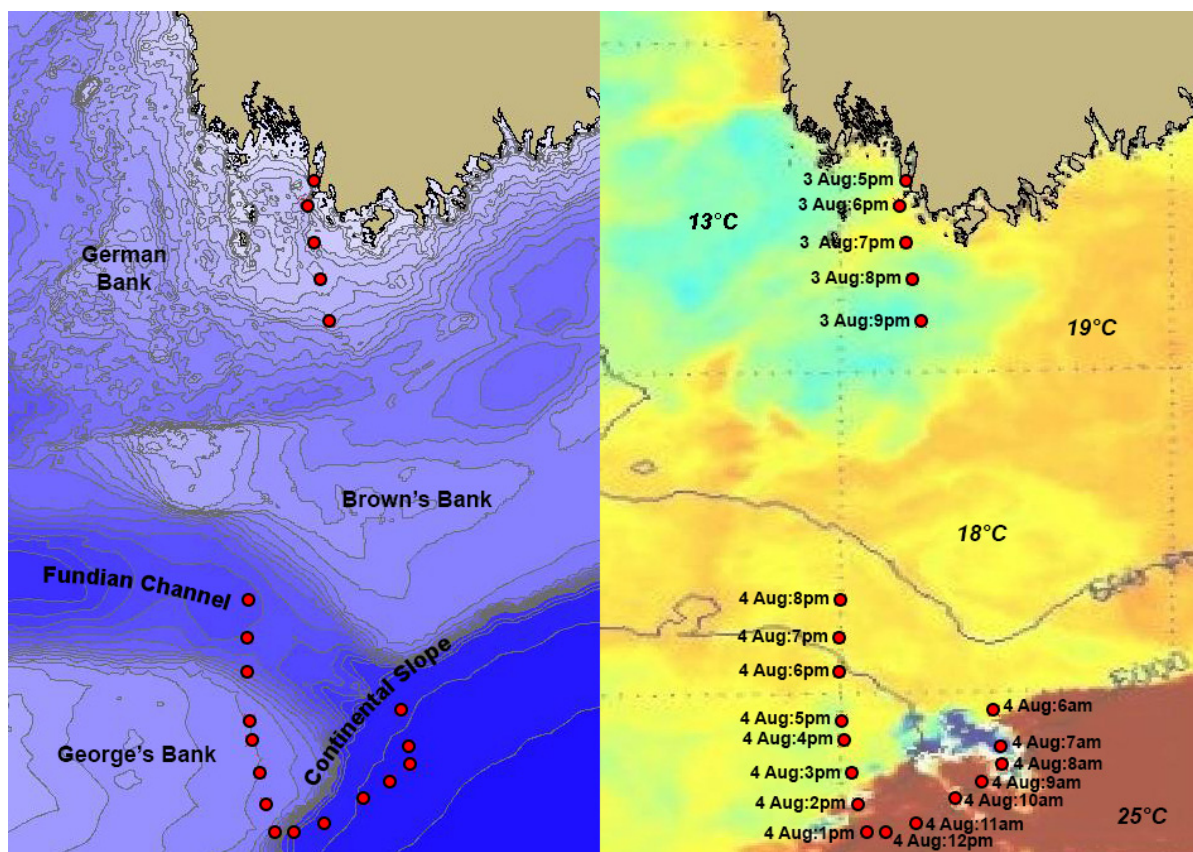
Total Sightings, Aug 3-4 Species	Total
Cory's Shearwater	68
Great Shearwater	727
Sooty Shearwater	2
Manx Shearwater	1
Audubon's Shearwater	1
Northern Fulmar	1
Leach's Storm-Petrel	270
Wilson's Storm-Petrel	767

Nova Scotia birders have yet to see a photographically confirmed Cory's (Scopoli's) Shearwater (*Calonectris diomedea diomedea*), but observers on pelagic trips out of Hatteras during August and September 2017 noted that the majority of Cory's appeared to be of the nominate population (<http://www.patteson.com/>), so it is just a matter of time before we get our first photographic record. However, we must keep in mind the

difficulties of at-sea identification and the ill-defined limits of variation in the two extremely similar taxa before we can claim our first (see Nova Scotia Birds Vol. 57 issue 4 pp. 38-43). The near-threatened Cape Verde Shearwater (*Calonectris edwardsii*) has been reported as singles from North Carolina and Maryland (Howell, 2012). Incredibly, the critically endangered Bermuda Petrel has even been recorded in the vicinity of Georges Canyon, on 21 Apr 2014 (Nova Scotia Birds Vol. 56 issue 4), associating with pilot whales. At least three Bermuda Petrels with tracking devices were recorded in Nova Scotian waters in 2009 (McLaren, 2012). On 7 July 1997, a Fea's Petrel was photographed at The Gully, an area on the continental slope northeast of Sable Island (Birders Journal 1997, Vol. 6:245-248; Nova Scotia Birds Vol. 40 No. 1). Bulwer's Petrel has been reported but not confirmed twice in our waters, and there are three well documented records from the eastern U.S. (Howell, 2012). Trinidad Petrels are now annual off North Carolina (Howell, 2012). It is clear that there are multiple reasons for future trips to the warm waters on and past the shelf slope.

Michael Force recommends honing in on warm water over canyons (like George's and Corsair) and the shelf break, but that he has had "great success" off the southeastern edge of George's Bank and off the Northeast Peak. Chumming at the productive fronts where cold and warm waters meet might prove more beneficial than steaming farther into the warm waters. There remains a lot to learn about bird distribution in our offshore waters. Let's see what surprises are revealed next.

The red dots on both of these maps represent the location of the same eBird checklists for the trip. Only the sea surface temperature map shows the date and time of the checklists. The general water depth during the trip was about 100 m on Georges Bank, 200-300 m in the Fundian Channel and 3000 m at the deepest point off the banks. [Bathymetry from MassGIS; Sea Surface Temperature by Rutgers University]  
Photos by Alix d'Entremont





## REFERENCES

**Davis, D. and S. Browne.** 1998. *The Natural History of Nova Scotia, Volume 1: Topics and Habitats*. Nimbus Publishing and the Nova Scotia Museum, Halifax, Nova Scotia.

**Howell, S.N.G.** *Petrels, albatrosses and storm-petrels of North America*. Princeton University Press, New Jersey.

**Howell, S.N.G.** 2014. *The Amazing World of Flyingfish*. Princeton University Press, New Jersey.

**Thurston, H.** *The Atlantic Coast: a natural history*. Greystone Books, Vancouver, BC, Canada.

**Pershing, A., M. Alexander, C. Hernandez, L. Kerr, A. Le Bris, K. Mills, J. Nye, N. Record, H. Scannell, J. Scott, G. Sherwood, A. Thomas.** 2015. *Slow adaptation in the face of rapid warming leads to collapse of the Gulf of Maine cod fishery*. *Science* Vol. 350, Issue 6262, pp. 809-812. DOI: 10.1126/science.aac9819

**Newell, D., S.N.G. Howell and D. López-Velasco.** 2013. *South Polar and Great Skuas: the timing of primary moult as an aid to identification*. *British Birds* 106, pp. 325-346.

**Votier, S.C., Bearhop, S., Newell, R.G., Orr, K., Furness, R.W. and Kennedy, M.** (2004) *The first record of Brown Skua *Catharacta antarctica* in Europe*. *IBIS*, 146(1), pp. 95-102. (doi:10.1111/j.1474-919X.2004.00234.x)

**McLaren, I.** 2012. *All The Birds of Nova Scotia*. Gaspereau Press, with the Nova Scotia Bird Society, Kentville, Nova Scotia.

**McLaren, I., & Z. Lucas.** 2004. *A possible Brown Skua (*Stercorarius antarcticus*) on Sable Island, Nova Scotia*. *NAB* 58:622–626.



**Walker's Livestock**  
Feed & Supplies



**Wild Bird Seed  
Blue Jay Mix  
Wild Finch Mix  
Raw Peanuts  
Corn  
Sunflower  
Safflower  
Millet**

**1397 Cole Harbour Road  
Dartmouth Nova Scotia  
B2V 1N5**

**Email – [Info@walkersfeed.ca](mailto:Info@walkersfeed.ca)  
Phone – (902) 435-5561**

**[www.walkersfeed.ca](http://www.walkersfeed.ca)**

