

# Bermuda Audubon Society Newsletter

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## First Record of Le Conte's Sparrow in Bermuda

Edward S. (Ned) Brinkley

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November 13<sup>th</sup>, at a little before 0930, while walking as a group along the Dutton Avenue side of Pembroke Marsh on the elevated dike, our group flushed a sparrow over our feet, which landed in a brushpile about 100 feet from us. I immediately identified it verbally as a Le Conte's Sparrow, a familiar bird from home. After making sure that all the group saw the bird, I fixed it in my binoculars and called out the following characters as we studied the bird: "Look first at the lovely pure blue-gray auriculars, framed all the way around by bright saffron. The back has that straw color that's different from sharp-taileds, and the nape has chestnut streaks, rather than being pale gray. The anchor-shaped eyeline is a mark Sibley mentions in an article in *Birding*. It's hard to see but try to see the pale, rather than gray, median crown stripe, which gets some of that saffron color toward the bill."

We backed away from the bird and called as many birders as possible from the TCD. We then decided to leave the bird alone and went to Jubilee Road for a bit, returning to TCD at around 1000. As there were no birders on the scene yet, we decided to look for the bird again, refound it in the same spot, and took several photographs, backing away again. We learned later that David Wingate and Eric Amos had the bird 15-20 minutes later, by which time we were dropping off one of our members at the airport. (Photo by Ned Brinkley)

Footnote: Ned Brinkley, editor of the journal *North American Birds*, was leading a small group of visiting American and Canadian birders. He credits the entire group with the discovery of the bird: Margaret J.C. Bain (editor-in-chief of *Birders Journal* in Canada), Hollis and Beverly McCall, and Charles Naeseth. Ned has undertaken extensive research on this species between Canada (Manitoba) breeding grounds and wintering areas in Texas and the Carolinas, with a long publication on the status of the species in Virginia, where he has also done research on the species at Back Bay, Virginia Beach, since 1988. It was therefore most appropriate that Ned should be the finder of Bermuda's first ever Le Conte's Sparrow. The bird was not seen again until it was relocated on the opposite side of the marsh during the Christmas Bird Count. (AD.)

## First Record of Scissor-tailed Flycatcher in Bermuda

David Wallace

October is an excellent birdwatching month in Bermuda, so with that in mind I set out with my binoculars on a fine late afternoon – October 23<sup>rd</sup> 2003 – for an hour or two of birding in the hope of seeing something good. Stopping first at Port Royal Golf Course, where a Northern Flicker had been seen, I met up with Peter Hopkin who was hoping to see the same bird. We logged a few species of warbler (nothing unusual), three Peregrine Falcons (very nice), and then stopped to view a Wilson's Snipe at close quarters on the path in front of us. Thank heavens we stopped, for flying in ahead of us to land in the gnarled branches of a West Indian Almond tree was, as we both exclaimed together, a (expletive deleted) Scissor-tailed Flycatcher. We had about ten seconds of great viewing, before it flew; tail streaming behind and out of sight. It was never seen again despite extensive searching.

The Scissor-tailed Flycatcher *Tyrannus forficatus* is a distinctive bird, slightly larger than a Great Kiskadee, but not as chunky. It is pale grey and black, with a pale pinkish wash on the sides and flanks. The outer tail feathers are extremely long and patterned black and white. Although neither of us had seen the species before, its identification was clear. The breeding range of the Scissor-tailed is mainly between Southern Nebraska, New Mexico, Texas and Louisiana. It winters in Florida, Mexico and Central America. It is a notorious wanderer, with records from all over North America including Alaska and Nova Scotia. This species had been expected to appear in Bermuda and the only reason one has never been recorded before is probably due to the considerable sea crossing it had to make.

## Christmas Bird Count

Andrew Dobson

Bermuda's 29<sup>th</sup> CBC was held on Sunday 14<sup>th</sup> December 2003. Seventeen local birders were out in the field, most of them from dawn to dusk, counting every bird they could find. Our efforts were part of a huge count being carried out by about 2,000 other groups throughout North America, Central America and even a few in South America. Each group tallies all birds found during a 24-hour period between December 14<sup>th</sup> and January 5<sup>th</sup> in a designated 15-mile diameter circle. The focus of this year's census is to gauge the health of bird populations of the North American boreal forests that extend from Alaska to Eastern Canada. A number of forest species including the Belted Kingfisher, Northern Flicker and White-throated Sparrow are present in Bermuda this winter. However, local birders were particularly keen to see how Hurricane Fabian had affected resident bird populations.

The weather forecast for the 14<sup>th</sup> sounded good, but at dawn, things looked less than promising with overcast conditions and one or two heavy showers. However, the skies cleared giving bright sunshine and good viewing conditions for most of the day. So what did we find?

- 9,630 individual birds (very similar to last year's 9,769)
- 104 species of birds (99 in 2002)
- Four new species for count day (the same as last year)
- European Starling was the most common species (23% of the count)
- 240 species have now been recorded on the CBC in Bermuda since 1975

There had been speculation as to the effects of Hurricane Fabian on local bird populations, but I am pleased to report that there was no great change in the number of our local birds compared to previous counts. In fact two of our invasive species recorded their largest ever totals - Great Kiskadee and Rock Dove (Feral Pigeon). It is always rewarding to add new species to the count day. Each year it becomes more difficult, but this year we were able to add four more species. Cahows are not always present in mid to late December, but they have been more active this year, perhaps due to the disruption caused to their breeding grounds by Fabian. David Wingate and Gene Harvey managed to see two birds flying over the ocean from Cooper's Point, while Jeremy Madeiros had four birds over the Cahow islands after sunset. Paul Watson, counting from his boat in the Paradise Lakes area was able to add the elusive Red-tailed Hawk (now into its third year in Bermuda). Steve Rodwell flew in from New York at lunchtime and immediately started his CBC count in St. Georges. His reward was the first count day Chestnut-sided Warbler. The fourth new record, and perhaps the biggest surprise, was the re-discovery of a Le Conte's Sparrow at Pembroke Marsh by Bruce Lorhan and James 'Charlie Brown' Tatham (see separate story). There were many other good birds too. Members might be surprised to know that 10 Snow Geese were recorded as well as one Canada Goose and 14 species of duck. An impressive 22 species of warblers were noted, including two Yellow-breasted Chats. Other surprises included two Blue Grosbeaks, ten Common Redpolls and three Pine Siskins. Perhaps the most tantalizing sighting was a possible Bicknell's Thrush at Hog Bay Park. It is once again of considerable concern to report the great number of feral cats, chickens and terrapins seen throughout the island. One cat was actually watched swimming across the narrow part of the pond at Spittal Pond nature reserve.

The results of our count, part of the 104<sup>th</sup> Annual National Audubon Society count of birds in the Western Hemisphere and other parts of the World, will shortly be available on their web site at [www.audubon.org/bird/CBC](http://www.audubon.org/bird/CBC)

## President's Perch

Jennifer Gray

It is hard to believe another year has come to an end and a new one has begun. My best wishes to our membership for a healthy and happy year ahead.

- Your committee has worked very hard this past year and has set out challenging and exciting plans for the coming months. Our newest reserves have needed the most work and we have made a good start at clearing the Brazilian Pepper on Cockroach Island. In doing so, we uncovered an impressive stand of White Stopper, some specimens which were five feet tall, many stopper seedlings, snowberry and passion flower. Rain and wind drove this battered committee back to shore and a return

trip is needed to clear felled Casuarinas and to uproot emergent invasives. By early spring we hope to have longtail igloos installed on the main island. The Alfred Blackburn Smith Reserve generally fared well in Hurricane Fabian, but a number of large Casuarinas toppled over across the walking path. With the assistance of our own talented chain saw-wielding tree surgeon, Fiona Doe, we have cleared the access trail. A new access gate for the reserve has been installed on the South Road and we remind our membership not to use the Coral Beach property for right of entry to this magnificent reserve.

- An Audubon focus for years now has been to address the issue of feral animals in Bermuda. We have held a strong and open opinion against the huge numbers of feral cats that have invaded our islands and in particular our nature reserves. We were very pleased to receive word from the Ministry of the Environment outlining their intent to introduce legislation that will lead to the control of feral cats in our community. This proposal has been submitted to the Cabinet Office and will become law once a few formalities have been completed. Our words of praise for this effort have been sent to the ministry.



Audubon hit the advocacy trail once again recently on the issue of feral pigeons, with a plea to the ministry to move quickly to solve the problem. The White-tailed Tropicbird or Longtail has slowly been declining due to the destruction of the limestone cliffs around much of the island. These birds nest in natural erosion cavities found in our cliff faces. As the availability of these cavities become fewer, they begin to fight over the remaining ones or choose less suitable sites leaving themselves vulnerable to predation and or flooding. Hurricane Fabian caused immense damage to cliff faces on the southern coast of Bermuda where the greatest number of Longtails nest each year. Preliminary investigations by local researcher Patrick Talbot, estimate that as much as 50% or more of the Longtail's nesting

habitat on the south shore has been destroyed in this recent storm. There is no question that the Longtail population is in decline. In addition to loss of habitat they have suffered from competition from feral pigeons and predation or invasion by feral cats and dogs. The Bermuda population of Longtails is believed to be the largest in the Atlantic, making it vitally important for the continued survival of the species. As Bermuda's special harbingers of spring, the longtails have often been regarded as a symbol of Bermuda, and we delight in their calls and tireless aerial acrobats as they soar along the coastlines and in harbours and bays. Our jewellery stores and local products are adorned with their images and our visitors now regard the longtail as our emblem of beauty and happiness. With their aesthetic, spiritual and economic value we believe we must do our utmost to protect this fabulous avian species. The Bermuda Audubon Society has pledged to purchase and erect artificial nest sites where natural nesting habitat has been lost due to storm damage and has offered our services to help with the

eradication of the feral pigeon whose numbers persist and proliferate island wide at a rate that is already difficult to control. An alarming number of the remaining longtail nest sites have been occupied by feral pigeons and we are deeply concerned for the future of the longtails if they are unable to secure nest sites for reproduction. We were pleased to receive \$10,000 from the Ministry of the Environment supporting our application to the Environmental Grant Scheme to increase the scale of our "Igloo" nest manufacture and deployment. A recent evening get together by the committee saw more than twenty igloos completed and ready for installation (see photo);' This is a mere fragment of what will be required. We will have our work cut out getting enough igloos fabricated and installed before the return of the longtails and any one willing to lend a hand should contact a committee member soon.

- Another committee effort saw the fabrication of more than fifty bluebird boxes. Our sincere appreciation goes out to Dr. Bob Steele for his tremendous contribution of time and effort on this project as he carefully cut and prepared all the lumber for this workshop. The boxes and some kits were offered for sale at the Farmers Market leading into Christmas and proved to be a "hot" item. I have a few remaining for sale but another work session will be required before spring and again we would love to hear from volunteers interested in this project.

- "Keep on running" were Alan Edness's last words to friend and neighbour Gerard Fitzpatrick before Alan was tragically lost at sea last January. So Gerard took to the streets of Manhattan and ran the New York Marathon in memory of his comrade. To make it a meaningful effort Gerard used the event to raise money for one of Alan's favourite organisations, The Bermuda Audubon Society. In addition to his love of the sea Alan was a keen environmentalist generally and had a particular enthusiasm for birdlife. Thanks to the ecological passion seeded deeply within Alan's soul and the tremendous efforts of Gerard, a good friend, we were pleased to accept a donation of over two thousand five hundred dollars. Well done Gerard!

- It has indeed been a busy and productive year and we have no intention of slowing down in 2004. We will launch celebration plans for our anniversary year and complete a strategic planning session to produce a comprehensive reserve management plan. Our work has just begun to restore available space for longtail nests and we will continue to encourage bluebird trails and boxes in the community. Our wishes for the coming year include community participation in efforts to protect the environment, many more volunteers to help us with our projects and continued support from the government and people of Bermuda to preserve and enhance our island environment.

## **Bird Report October to December 2003**

**Andrew Dobson**

The post-Fabian period has been an exciting one in Bermuda. Two new species were added to the Bermuda list - Scissor-tailed Flycatcher and Le Conte's Sparrow. A possible Brewer's Blackbird would also be a new record for Bermuda and warrants further review. The variety of bird species continues to impress and the early winter period has continued the trend with an influx of Robins and Redpolls. At least 230

species of birds have been reported in 2003, which represents about 62% of bird species ever recorded in Bermuda. While space doesn't allow all the records to be published, some of the more interesting records are made available in the seasonal reports.

### Herons to Ducks



Migrant heron and egret numbers are lower than recent years. An immature **Black-crowned Night-Heron** appears to be roosting with the Yellow-crowned at Pembroke Marsh. An **American Bittern** was at Pembroke Marsh 4 Nov (SR), while the first of the season's **Least Bittern** was at the same location on 8 Nov (AD). A **Glossy Ibis** was at the Airport 15 Dec (DH). An immature **Tundra Swan** 16 Nov at Cloverdale Pond (AD) was only the 4<sup>th</sup> recorded in Bermuda. It was also seen at Spittal Pond during its two-week stay.

Ten **Snow Geese** are wintering at Outerlea Farm (7) and Mid-Ocean GC (3). A **Canada Goose** arrived at Jubilee Road 11 Dec (AD) where it still remains. Fourteen species of duck are wintering including **Gadwall**, **American Wigeon** (5), **Northern Shoveler** (3), **Northern Pintail** (4) and **Bufflehead** (2). **Green-winged Teal** has been the most common duck species. A flock of 34 was at Spittal Pond 5 Dec (EA). A flock of 25 **American Wigeon** flew over Spittal Pond 11 Nov (DBW) and is probably a record count for Bermuda.

### Birds of Prey to Terns

A **Northern Harrier** at Heydon Trust 16 Oct (R&KL) was a prelude to the best ever winter for this species. At least four birds account for sightings at Morgan's Point, the Hamilton Harbour Islands, Pembroke and Devonshire Marshes and the Airport. The long-staying **Red-tailed Hawk** remains in the Paradise Lakes area. A second *buteo* hawk at Morgan's Point may well be another Red-tailed (an immature lacking a red tail). Three **Peregrine Falcons** were seen together over Port Royal GC 24 Oct (DW, PJH et al). A **Virginia Rail** was at Parsons Road Pond in Nov (PW) while an immature **Purple Gallinule** was at the same location on 4 Nov (SR). At least six **Lesser Yellowlegs** have been present in December – an unusually high number for winter. A **Solitary Sandpiper**, **White-rumped Sandpiper** and **Pectoral Sandpiper** stayed at Jubilee road before departing in December. A **Pomarine Jaeger** flew past Dockyard 28 Dec (PJH). Of the smaller gulls to arrive, a flock of nine **Bonaparte's Gulls** was in Harrington Sound 31 Dec (RP), and a single **Black-legged Kittiwake** was at Watford Bridge 9 Dec (PJH). A Royal Tern was seen in St. George's in Dec (PW), while a **Forster's Tern** was in the Great Sound 5 Nov (PJH).

### Passerines

A **Black-bellied Cuckoo** at Hog Bay Park 18 Oct (AD, SR et al) was the only one of the Fall. A **Short-eared Owl** on Cooper's Island 16 Nov (AD) was the first of at least three fall and winter records. A **hummingbird** species was reported in St. David's 5 Oct. At

least two **Northern Flickers** have wintered. The first was seen at the A.B. Smith Reserve 5 Oct (EA) while one has regularly be seen at Port Royal GC with other sightings at Riddell's Bay(SR), Morgan's Point (AD,DW) and Smith's Hills (JM). The latest ever *Empidonax* **Flycatcher** (Alder/Willow type) was at Heydon Trust 23<sup>rd</sup> Nov (DBW). An **Eastern Phoebe** has wintered at Spittal Pond for the second year running. A **Grey Kingbird** was on St. George's GC 4 Oct (AD). The first **Scissor-tailed Flycatcher** for Bermuda was discovered at Port Royal GC 24 Oct (PJH, DW) – see separate article. Thrush species were very sparse this fall. An influx of **American Robins** occurred in mid-Nov with a flock of about ten birds remaining on Morgan's Point during the winter. An **American Pipit** was at Spittal Pond in early Dec (DW). Thirty-six species of wood warbler were recorded this fall. The only two not to be seen this year were Townsend's Warbler and Louisiana Waterthrush. Among the unusual warblers, there were **Golden-winged Warblers** in Salt Kettle 1 Oct (WF) and Wreck Road 2 Oct (WF), a **Brewster's Warbler** at Hog Bay Park 5 Oct (EA), and a **Cerulean Warbler** 5 Oct on Tudor Hill (EA). A **Chestnut-sided Warbler** at Ferry Point Park 14 Dec (SR) provided only the third wintering record. Other unusual winter records were a **Blackpoll Warbler** (DW) at Lagoon Park 28 Dec and a **Kentucky Warbler** at Morgan's Point 31 Dec (AD, PW). At least eleven species of migrant sparrows have been recorded this fall and early winter. Pride of place goes to the discovery of Bermuda's first **Le Conte's Sparrow** at Pembroke Marsh 17 Nov (NB et al) – see separate article. **Clay-coloured Sparrows** are uncommon, but there were reports from Lagoon Park (PJH), St. Georges (PW) and two together at Wreck Road 1 Nov (WF). A **Lark Sparrow** was a surprise on Horn Rock 1 Dec (JM). Four December Swamp **Sparrows** certainly creates a winter maxima with reports from Lagoon Park (DW), Morgan's Point (AD), Paget Marsh (DW) and Spittal Pond (AD). The first **Snow Bunting** was reported from Boaz Island 9 Nov (PJH). Two **Blue Grosbeaks** at Spittal Pond Farm 14 Dec (AD, JG) provided a rare winter record. A **Red-winged Blackbird** was at Jubilee Road 15 Dec (MB et al). A possible **Brewer's Blackbird** was reported from Botanical Gardens 13 Nov (PJH). A **Purple Finch** was seen on St. George's GC 17 Oct (PW. NB et al). An influx of **Common Redpolls** in mid-Dec provided sightings from Dockyard to St. Georges with the largest flock (9) at Gibb's Hill Lighthouse 14 Dec (EA). Three **Pine Siskins** (the first since 1986) were seen on Morgan's Point 14 Dec (EA).

### Escapees

**Greater Flamingo** 'Flo' escaped from BAMZ again in mid-Sept. and has taken up residence at North Pond. Flo is the same bird that was at Spittal Pond for many years before becoming entangled in a kite string at Warwick Pond and taken into care. A splendid male **Orange Bishop** was at Devonshire Marsh 11 Nov (AD).

Observers: Eric Amos, Margaret Bain, Ned Brinkley, Andrew Dobson, Wendy Frith, Jennifer Gray, Dale Hines, Peter Holmes, Peter Hopkin (PJH), Ray and Kay Latter (R&KL), Jeremy Madeiros, Ron Porter, Steve Rodwell, Keith Rossiter, Penny Soares, David Wallace (DW), Paul Watson, David Wingate (DBW).

## Society News



### **Planting after Fabian**

Following the advice given by Lisa Greene in the last Newsletter (Vol 14. No.3), members are encouraged to read the series of articles on the value of endemic and native trees written by David Wingate and published by the Mid-Ocean News during December 2003. If you missed the articles, they should be available by searching the archives at [www.theroyalgazette.com](http://www.theroyalgazette.com)

### **Birds of the World**

The *Handbook of the Birds of the World*, Vol. 7 (Mousebirds to Hornbills) has just arrived in the BAMZ library – part of an on-going commitment by the Society to the BAMZ library and members are most welcome to go in and take look at the series of books.

### **Accommodation required**

During May and June of this year, four staff from the Royal Society for the Protection of Birds (RSPB) will be visiting Bermuda. They have earned sabbatical leave during which time they will be volunteering their time to transfer David Wingate's bird diaries to a computer data base at BAMZ. Accommodation has been organized for the first two visitors. If you can help with accommodation for the second two visitors (May 19<sup>th</sup> to June 6<sup>th</sup>), please could you email [info@audubon.bm](mailto:info@audubon.bm) or tel. 238-3239. Thank you.

### **Bluebird Workshop - Saturday 13 March**

Bluebird Workshop – Government House – enter from Langton Hill - 9.00 to 12.00 hrs.  
Come and make your own nest box !

Pre-registration is required: Email [info@audubon.bm](mailto:info@audubon.bm) or tel. 238-3239

## **Bird Briefs**

### **Ship-assisted Birds**

George L. Armistead, a tour leader for Field Guides, Inc. emailed an account of birds seen on or around his cruise ship en route to Bermuda. On 13<sup>th</sup> October 2003, he noted the birds as the ship traveled from about 200 miles east of Cape Hatteras, N.C. to about 300 miles east of Cape Hatteras. There was a substantial landbird fallout that included the following: Mourning Doves (7), Northern Flickers (8), Brown Creeper, House Wrens (2), Winter Wrens (6), Golden-crowned Kinglet, Ruby-crowned Kinglet, Hermit Thrush, Gray Catbirds (2), Brown Thrasher, American Pipit, Magnolia Warbler, Cape May Warbler, Myrtle Warblers (12), Palm Warblers (3), Chipping Sparrow, Song Sparrows (5), Swamp Sparrows (2), White-throated Sparrows (14), Dark-eyed Juncos (20), Red-winged Blackbirds (3), Eastern Meadowlarks (4), Brown-headed Cowbird

George says, "I was surprised at the total of 23 landbird species present this far offshore and the relatively high numbers of some birds too, but we were experiencing a 20+mph northwest wind. I understand that there was a good flight of migrant landbirds this day at Cape May as well. A number of birds went unidentified due to distant or brief views but I also thought I glimpsed a Chat, a Pewee, and a Red-eyed Vireo. In fact the day I arrived into port at Hamilton, that morning (14<sup>th</sup> Oct) I saw the following birds actually on the boat: House Wren, Winter Wrens (3), Grey Catbird, American Pipit, Yellow-rumped Warbler, Palm Warbler, Swamp Sparrow, White-throated Sparrows (4). All

these were on Deck 11 hanging around the pool area and they were apparently gone by the time we left Bermuda on the 17th. (*This fascinating report includes many birds that are rarely seen in Bermuda, such as creeper, wren and meadowlark. Others are uncommon, and it begs the question as to how many of our rare sightings are the result of stowaways! Ed.*)

### **Tern Banding**

The summer Common Tern banding routine has been disappointing again this year, reflecting a continuing decline. I estimated 18 pairs and 27-35 young fledged of which 25 were banded. One adult with a band was found dead on Dumpling East, Harrington Sound. It was banded as a chick on Ricketts Is. Hamilton Harbour exactly 10 years before. Jennifer Gray thought I had killed myself on my last check when I used a light Dory from BAMZ to access the islets in Harrington Sound. Not being used to a light skiff I stepped into thin air as the boat pushed away and I scraped my way down a cliff into the water. What a pretty sight I made till I cleaned myself up!!

### **Green Heron Breeding - update**

Most of my birding time during July was spent trying to solve the riddle of the nesting Green Herons. Many evenings were spent at the ponds and lakes in Tuckers Town trying to follow the flight paths of adult Green Herons in hope of zeroing in on nest sites. Despite advice from James Kushlan (author of *Hérons of the World*) who visited Bermuda in spring, I was still leaning to the idea that they were nesting up in the woodlands above the lakes. But every heron we tracked was simply flying between the lakes where they mostly appeared to be just feeding except for a spectacular burst of courtship dances and calls in the mangroves earlier in May. Kushlan was adamant that they would most likely be nesting low in the mangroves over water, but countless scans from every vantage point around both lakes revealed nothing! Finally, on 27 July Penny Hill and I decided to search from the perspective of the herons prey. We pretended to be *Gambusia* (fish) and swam all the way around Trotts Pond. Two days later I repeated the exercise around Mangrove Lake, this time with Wendy Frith, who qualifies as an Olympic swimmer. The result has been nothing short of amazing!!

Our two surveys revealed a total of at least 20 adult Green Herons, at least 4 active nests in Trotts Pond, and at least 3 active nests in Mangrove Lake. The active nests range from new without eggs, to eggs in incubation (27 July) which were hatched by 30 July, to half grown young to just fledged or recently fledged and dispersed. We have seen a total of 11 young on or just off nests so far. All of the nests located were 18 inches or less above water and located in live or dead mangrove branches which hang out over the water a little beyond the main edge of the mangrove forest. Yet despite this conspicuous positioning from the perspective of a swimmer, we have yet to be able to see them from the shore even now that we know where they are! The Green heron population is a lot larger than we thought and there might even be a colony in Lovers Lake.

### **Strouhal Numbers**

Recent animal locomotion research by Graham Taylor and colleagues at Oxford University involved 42 bird, bat and insect species. They all have a Strouhal number close to 0.3. What is a Strouhal number you ask? This number is the ratio between an animal's cruising speed and the rate at which it flaps its wings or swishes its tail. It

indicates how efficiently an animal moves through air or water. The fact that all the animals have the same Strouhal number is of immense interest to the military in designing unmanned reconnaissance vehicles! Nearer to home, there is obviously a much closer link to Monarch butterflies, Cow Pollies and Longtails than you had realized! (Discover Vol.25 No.1)