

# TYTO International Owl Society



"Return to Home" by and courtesy of Terance James Bond

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## **Editorial**

Welcome to Tyto. To quote the old saying "There is good news and bad news"! The bad news is that as this issue was about to go to publication we learned that our usual printers Berforts Information Press had been placed into Administration and thus would be unable to undertake the printing of this issue.

Our main concern was that this issue should reach you on time, whilst not exceeding our anticipated printing budget. The good news is that, in the very short time available, we were able to identify an on-line printing company that could produce the magazine at a cheaper cost whilst also offering full colour reproduction. Unfortunately the on-line process only permits reproduction in a format of 40 pages rather than the customary 48 pages that we provide you with. It is intended to make up the shortfall of pages by increasing the size of each future E-Tyto issue by 4 pages per issue.

In the circumstances Society contact details as well as Financial Statements for the Year Ended 31st March 2015 have been omitted from this issue. Contact information, if needed, can be found on our website and the Financials will be available in hard-copy at our 20th Anniversary Meeting and Annual General Meeting which we anticipate will be held at the Cotswold Wildlife Park.

The demise of our old printer Berforts is symptomatic of the reduced demand for the printed "written word" and its increasing migration to online platforms. As I suggested in September's E-Tyto it is difficult to

contemplate how Tyto might be presented to you in the future given the incredible rate of acceleration of progress in online media and technology. Call me old-fashioned, but I still prefer to relax with a magazine or book in hard copy rather than peer at a tablet or monitor.

**And it's goodbye from him.....**

For the second time I step down from the Editorship of Tyto, after a total of eight years" in the chair", and hand over to Mark Birdsall. For those of you who did not know Mark and met him for the first time at his home-base of Baytree Owl Centre, at our September meeting I am sure that you will have been impressed with both his knowledge and handling skills. Change is good and I look forward to seeing our magazine develop and progress under Mark's stewardship.

## **Notice of Annual General and 20th Anniversary Meeting of the International Owl Society**

Preliminary notice is given that our 20th Anniversary Meeting and AGM will be held at the Cotswold Wildlife Park, Burford, Oxfordshire on Saturday 16th April 2016. We hope to organize a very special day to celebrate our 20th birthday and there will be some special raffle prizes to win on the day.

These will include an original Mark Chester painting as well as the last pair of framed Trevor Boyer Limited Edition Prints of a Barn Owl and European Eagle Owl commissioned by the Society.

Join us for what should be a very special day!

**Further details will be announced in due course!**

## **p-4 The I.O.S Regional Meeting at Baytree Owl Centre, Saturday 10<sup>th</sup> October 2015.**

The founder of Baytree Garden Centre, Reinhard Biehler, came to Lincolnshire from Bavaria in 1964 to work as a rose budder. He purchased Baytree House, a 7 acre smallholding, in 1970 and started trading from a market stall on the side of the road. With his wife Yvonne the business boomed eventually covering 16 acres and becoming one of the biggest garden centres in the U.K.

Reinhard had a keen interest in owls and set aside an area on the site dedicated to this group of birds as an attraction to the growing number of visitors. Since this time a succession of managers stamped their own mark on the centre. The present manager, Mark Birdsall has made significant improvements to the aviaries, has introduced a flying arena, paired up single birds and obtained new species to transform the breeding results at the centre. It now holds over 75 owls of 30 varieties as well as diurnal birds of prey which included when we visited a Verreaux's Eagle, a Tawny Eagle and a Secretary Bird.

Our meeting started in the new conference room with our guest speaker Jimmy Hill. Jimmy is an experienced falconer recently working at the International Centre for Birds of Prey at Newent (the location of our last meeting). The subject of this talk was his long standing interest in monitoring wild birds of prey. He covered most of the British species relating anecdotes and fascinating snippets of information such as the Long-eared owl nest near Abergavenny which held six chicks, the ringing of Peregrine chicks with coloured darvic rings so their distribution could be tracked and showed a photograph of Kestrel chicks sharing a nest site with Jackdaw chicks. Jimmy explained how, because of ringing, it was discovered that when a male Honey Buzzard disappeared, his brother took over the responsibility of helping the female raise the chicks. He concluded with some wonderful photos of

P-5 Harpy Eagles in Venezuela and details of a Tawny Fish Owl study in a national park in Taiwan, where their diet consisted of not only fish but also amphibians, mammals and crabs. This talk illustrated how one person with a deep interest and passion for a subject can make a valuable contribution to our knowledge.

From the conference room we made our way to the Owl Centre where Mark had taken the unprecedented step of closing the centre to the general public making it solely available for I.O.S. members. Here, Melissa Bowen gave an excellent presentation of a variety of exotic creatures ranging from a Blue-tongued Skink, a 14 foot yellow mutation Asiatic Python, a Kinkajou, a Silver Fox and finally an inquisitive Raccoon. All were handled and presented with care and sensitivity while Melissa recounted interesting facts and histories of each animal.

We then moved on to the flying area where Mark Birdsall demonstrated and discussed the methods and problems of flying owls. He flew a range of species from the African Spotted Eagle Owl, a Turkmenian x Siberian Eagle Owl, a Ural Owl, a Great Grey, a Northern Hawk Owl and lastly an Ashy-faced Owl. To me, the outstanding birds were the Great Grey and the Northern Hawk Owl but all performed well.

Finally, we called the raffle which raised £80 and auctioned a superb limited edition print of a Eurasian Eagle Owl by the wildlife artist Terrance James Bond, donated by John Gray, this raised £120 for our Blakiston's Fish Owl Project. The I.O.S. is very grateful to Mark Birdsall and his wife, Roger Cooling and the rest of the staff at Baytree for making the meeting such a success.





**Mark Birdsall's most enjoyable flying display at our September Meeting**





## **IN MEMORIAM**

**IT IS WITH GREAT REGRET THAT WE ANNOUNCE THAT MEMBER BILL TURNER PASSED AWAY SHORTLY AFTER OUR SEPTEMBER MEETING. OUR THOUGHTS AND CONDOLENCES ARE WITH PAT AND FAMILY AT THIS SAD TIME.**

# p-8 Notes on Keeping and Breeding the Oriental Bay Owl *Phodilus badius* at Tierpark Berlin, Germany

by Martin Kaiser,

Curator of Birds, Tierpark Berlin-Friedrichsfelde, Germany

## Introduction

In 1955 Tierpark Berlin was opened as one of the largest landscape zoos with about 160 ha and since this time there were kept nearly 60 owl species and subspecies. We have bred many of them successfully and several species long term (Kaiser 2002). Among others the world first breeding success of Brazil Owl *Strix hylophila* succeeded in 1972 (Grummt 1974).

The Bay Owl *Phodilus badius* is one of the most impressive owl species kept at Tierpark Berlin although it is relatively small with about half the mass of Barn owl, but chunky. Amazing and fascinating is the grotesque elongated facial disk with large dark eyes, short ear-like tufts and enlarged erectable ventral ruff-feathers which looks quite mammal-like.

## Systematics

The taxonomic position of the Genus *Phodilus* within the Family Tytonidae is often discussed. Data on morphology, skeleton, syrinx, ectoparasites (Mallophaga), behaviour and especially vocalisation shows departures from both Strigidae and Tytonidae without being clearly intermediate. Some authors therefore proposed recognition of a



p-9 separate family, Phodilidae (Bruce 1999, König et al. 1999).

Usually six subspecies are recognised, but nowadays the populations of Sri Lanka (*assimils*) and SW India, Kerala (*ripley*) are considered as an own species Ceylon Bay owl *Phodilus assimils*, distinctive in morphology and especially voice from Oriental Bay Owl *P. badius* (Rasmussen & Anderton 2005, Mikkola 2013). The rare Congo-Bay Owl *prigoginei* is occasionally treated as a race of *P. badius*, but this seems hardly probable as this species is considered by some author's racer in Genus *Tyto* than in *Phodilus* (Bruce 1999).

## **Distribution**

The Oriental Bay owl is distributed from Nepal, Sikkim and Assam to Vietnam and Tonkin – subspecies *saturatus*, from Burma south to Malay Peninsula, South Thailand and Sunda Islands – subspecies *badius*, Belitung Island, off Southeast Sumatra – subspecies *parvus* and Naturnas Island, off Northwest Borneo – subspecies *arixuthus*, known only from the holotype (König et al. 1999). The preferred habitat is dense evergreen and semi-evergreen lowland forest, submontane and montane forest up to 1800m, but also occurs in secondary-growth, dense coppice of farmland and cultivated areas, sometimes far from true forest (König et al. 1999, Wells 1999).

## **Habits**

Like in several other tropical owls there is little known about the general habits especially as this bird is strictly nocturnal and seldom seen. For the most part the presence of Bay owls can determine by their striking voice: loud rising series of highly musical, melancholy, fluty whistles which sounds a little eerie. These whistles are given from a

p-10 stationary position and very noisy during breeding season (König et al. 1999, Wells 1999, Rasmussen & Anderton 2005). A low, soft, frogmouth-like call is given year around (Wells 1999). The short and rounded wings and the short tail make it well adapted for hunting in dense forest under-stratum. It hunts from a perch, often near water, for all kinds of small vertebrates and large insects. The Bay owl is breeding in tree-hollows or cavities, rarer nest boxes and also in leaf layers on palms (Java) on 3-5 eggs (Bruce 1999, König et al. 1999). The incubation period and other points concerning breeding biology are unknown from the field.

These strictly nocturnal owls are spending the daytime not only in hollows but perched on branches not high above the forest floor also, and generally so fast sleep that they could be grabbed by their feet (König et al. 1999). This curious behaviour has been recorded also in captivity where the Bay owl is indeed really rare.

## **Keeping**

In Germany it is kept beside Tierpark Berlin at Bird Park Walsrode, Bird- and Owl Park Niendorf / Timmendorfer Strand, Eulenhof Deining and two private keepers. In Europe it's additional kept at Prague Zoo, World Owl Trust and two further institutions in U.K. as well as a few private persons e.g. Enrico Albertini, Italy. There was nothing published about breeding and keeping of Bay owl as far as the author knows.

## **p-11 Husbandry and longevity**

Tierpark Berlin received his first male Bay owl already on 08.03.1965 by Victor Franck. This bird was living 23 years, 1 month and 16 days until 24.04.1988 (Grummt 1994). A young pair hatched 1987 at San Diego Zoo arrived in Berlin on 14.09.1988. Unfortunately there was no egg laid or any breeding activity with this pair (Kaiser 2002). For that reason we changed the females two times, first in 2000 with a private German keeper a presumably old female in bad condition which was originated from Jurong Bird Park Singapore and second in 2005 with Walsrode a young one hatched there the same year. Nevertheless there was no breeding activity until the male from San Diego died in 2014 with an age of 27 years and 17 days, not by old age but by a plasmodia infection. The longevity of this species is at least more than 28 years as a male hatched 1984 in San Diego Zoo died in Walsrode with an age of more than 28 years (David Rimlinger pers. comm.) and a further male hatched in San Diego on 12.07.1987 was living still by the end of July 2015 with an age of 28 years at Audubon Zoo, New Orleans (Carolyn Atherton pers. comm.).

Finally we paired our female with a male we got on loan from Klaus Langfeldt, Bird- and Owl Park Niendorf and indeed the first egg laying took place. We keep the Bay owls at Tierpark Berlin in two separate enclosures. One is located in the visitors' area with an aviary of about 20 m<sup>2</sup> and heated indoor facility of about 10 m<sup>2</sup>. The second is situated behind the scene with an aviary of 10 m<sup>2</sup> and 4 m<sup>2</sup> indoor rooms.

## **Breeding and chick development**

Assumable the key for the breeding success was the transfer of the pair from one enclosure to the other and additional the separation of female and male for some time. The male was placed to the enclosure of the

**p-12** female after a period of about 3 months separated on 02.02.2015. The keepers registered two eggs in the nest box on 06.03.2015. The first Bay owl hatched on 1<sup>st</sup> April and a second was seen during a control on 4<sup>th</sup> April. The nest box was not observed within the next two weeks to avoid disturbances of the parent rearing. With an age of two weeks of the chicks we decided to risk a control for marking the youngsters with closed bands on 17<sup>th</sup> April. Much to our pleasure we found a third young owl together with the female in the nest box. All three youngsters were in best condition and corresponding to the hatching interval of about two days they exhibited noticeable disparity in size and development. Even the smallest last hatched chick was too large for marking with closed band.

As there hatched three chicks but two eggs found on 06.03.2015 only and the eggs laid at about two day intervals (König et al. 1999) it was possible to calculate the incubation period with 30 to 31 days.

By the age of 12 to 16 days all three chicks are covered with yellowish grey down, thinning especially on head where the naked skin is visible. The eyes begin to open with narrow slits by the two younger birds and are almost open in the oldest one. By the latter first brown feathers of the facial disk are beginning to appear and the wing feathers develop with still closed quills.

We marked the 18 to 23 days old owls with open bands on 24<sup>th</sup> April. The border of the facial disk is almost completely visible in the oldest chick. The eyes are not yet fully open in the 18 days old youngest one.

The female is still sitting in the nest box together with their nearly one month old chicks on 30<sup>th</sup> April. As the first hatched young owl shows the typical defensive threatening behaviour with wing beats and spit the almost fully feathered wings are visible. Dunes are at neck and belly only with contour feathers are apparent through the down. It differs

p-13 distinct from the younger siblings by the nearly completed conspicuous facial disk.

The young owls are found alone in the nest box first on 6<sup>th</sup> May as they are almost fully feathered, especially the 35 day oldest one which lost most of the dunes. This chick emerged from the nest box with 42 days and the younger siblings fledged with 43 days. They use the nest box several times within the next some days. The fledged young owls look completely like the adults. They show also the small blackish-brown spots on the pinkish buff under parts contrary than described by Krahe (2003). Therefore it is no special juvenile plumage in this species and the only possibility to distinguish young birds from adults is by the bands.

By tow and a half month of age the three young Bay owls were separated from the parents and moved to enclosure in the visitors' area.

Bay owls have been exhibited at Tierpark Berlin for 50 years and we are pleased about the first breeding success after this long period.

### **Breeding history**

The species is not very often bred in the pasture. The world first breeding success was in 1976 by Klaus Langfeldt, Bad Schwartau, Germany (Krahe 2011, 2014). It should mention that his pair was kept together with a Long-eared Owl *Asio otus* (K. Langfeldt pers. comm.). He bred the Bay owl successful several times also at Bird Park Niendorf/Timmendorfer Strand until 1996 and after 17 years non breeding one more in 2014 (pers. comm.).

At San Diego Zoo, California, hatched 17 chicks between 1984 and 1992, of which 14 were reared, both parent and hand reared



p-14 (David Rimlinger pers. comm.). The first chick hatched in San Diego in May 1984 was sent to Walsrode in 1992 where they breed successful until today.

Enrico Albertini, Monticello Brianza, Italy has successful bred 19 Bay owls from 2001 till 2015 with a break unfortunately from 2010 until 2013 due to the death of their founder breeding female (pers. comm.).

In 2005 first breeding of U.K. succeeded at World Owl Trust (Matthews 2011).

The German private keeper Mr. Schrader is breeding the species since 2009 till 2015.

Prague Zoo has first time bred 2 chicks in 2015 with offspring pair from E. Albertini (Antonin Vaidl, pers. comm.).

Finally Tierpark Berlin is pleased to report that three chicks were parent reared in 2015 as well.

## **Acknowledgements**

I would like to thank my colleagues at San Diego, Audubon Zoo, Prague, Niendorf and Walsrode for their information and help as well as the bird keepers of Tierpark Berlin for their involvement and their good job without which this success would not have been possible.

## p-15 References

- Bruce, M.D. (1999) Family Tytonidae (Barn Owls). In: del Hoyo, J., Elliott, A., & Sargatal, J., eds.: Handbook of the Birds of the World Vol. 5, Barn-owls to Hummingbirds. Barcelona.
- Grummt, W. (1974) First and second captive-bred generation of the Brazilian owl *Strix hylophila* at Tierpark Berlin. Int. Zoo Yearb. 14: 97-98.
- Grummt, W. (1994) Zum Lebensalter von Vögeln im Tierpark Berlin-Friedrichsfelde. Zool. Garten N.F. 64, 320-328.
- Kaiser, M. (2002) Die Haltung von Eulen (*Strigiformes*) im Tierpark Berlin-Friedrichsfelde in den Jahren 1955 bis 2002. Milu 10: 552-582.
- König, C., Weick, F., & Becking, J.-H. (1999) Owls. A Guide to the Owls of the World. Sussex.
- Krahe, R.-G. (2003) Strigiformes. In: Robiller, F.: Das Große Lexikon der Vogelpflege. Stuttgart.
- Krahe, R.-G. (2011) Welterstzuchten von Eulen in den Jahren 1834 bis 2010. Gef. Welt 135 (6): 24-27.
- Krahe, R.-G. (2014) World First Breeding Successes of the Order of Owls. Society for the Conservation and Research of Owls (S.C.R.O.)
- Matthews, S. (2011) UK First Breeding Records. Avic. Society.
- Mikkola, H. (2013) Handbuch Eulen der Welt. Stuttgart.
- Rasmussen, P.C., & Anderton, J.C. (2005) Birds of South Asia, The Ripley Guide Vol. 2: Attributes and Status. Washington & Barcelona.
- Wells, D.R. (1999) The Birds of the Thai-Malay Peninsula. Vol. 1, Non-Passerines. London

**p-16 Plate 1**-The amazing face of a Bay Owl looks almost cat-like (12.06.2015)



**Plate 2**-The breeding pair of Bay Owls at Tierpark, Berlin (04.09.2015)

**p-17 Plate 3**-Female with chicks (12-16 days old) in the nest box (17.04.2015)



**Plate 4**-20 day old chick with long closed quills of wing feathers (24.04.2015)



Plate 5



Plate 6





**Plate 7**

**Key**

**Plate 5**-Female with youngsters 26-30 days old; note the disparity in size and development (30.04.2015)

**Plate 6**-Fledged Bay Owls showing the typical wing pattern (12.06.15)

**Plate 7**-Young fledged Bay Owls (left and right) look completely similar to the adult female at centre (12.06.15)

**Plate 8**- Page 20-The three young owls, separated from their parents, are often found sitting together (04.09.2015)



**Plate 8**

# **Imprint Owls for Display**

**By Mark Birdsall**

With producing and rearing a large quantity of owl youngsters each year, I inevitably get people from all walks of life and who purchase birds for a wide variety of different reasons. A controversial subject matter always comes to light time after time in regard to how owls should be displayed and used in a commercial manner.

Personally I have owned and flown birds for nearly 25 years now for both pleasure and demonstration work. I have seen many methods and set ups of how people run these displays and how also seen how the public perceive what is acceptable and what isn't.

As a centre owner and Zoo License holder, we are restricted to "officially" not being able to tether owls here. This is fine by me, as I don't do any off site work or have any need to perch them out for any reason. I am fully aware though, that for most owl keepers who run display teams, that off site work is the major part of their income and therefore this is a priority that this is something that their owls are comfortable with.

The majority of the owls leaving me are imprints that are ready at about 4 weeks old with the exception of a few species. They have already been raised in a centre environment and hand raised from hatching, so they are generally very comfortable around people and have experienced travelling, other birds and animals, large groups and being fed and handled by different people to avoid a one person imprint. This ultimately makes life much easier for the people taking them on and taking them into a similar environment at their own premises.

**p-22** In a lot of situations I think people who run this type of display team should sometimes think more carefully about where they source their youngsters from and at what age they are able to take them to carry on this type of essential initial training.

Make the effort to introduce the bird to all manner of situations as a youngster, so it doesn't feel threatened by any of these once grown. I think sometimes we forget about the random things that can spook our birds later on in life, especially at shows and events and a lot of this can be avoided at an early age if they become accustomed to it as babies. Things we sometimes don't expect to be an issue often are for example large tents, flags, p.a. systems, loud noises and bangs, aeroplanes, things with wheels, other birds and I'm sure many more you have come across.

So try and take your baby with you everywhere possible to build on this and for those who run experience days and the like, don't forget that it is important that your bird must become accustomed to being handled and fed by other people. Birds that become "one man" imprints can become difficult to use with guests and in some cases dangerous to the public and others when in breeding condition.

Try to use and encourage your young owl to use the block or bow perch even at a young age. Avoid feeding on or from it though as this will have a detrimental effect later on once the bird is tethered. If you start sitting it on a perch and then jump the bird to your glove or over to another perch, it will grow up assuming this is common practice and will then be constantly bating from the perch when tethered, thinking it is free to do what it did as a youngster.

Once at an age to have equipment fitted, which, for most owls is as soon as their legs are feathered up, get some anklets on but no straps at this point and just let it get used to this adjustment of having something

**p-23** around its legs initially. After a week or so, some permanent flying straps can be added to give you something to get hold of and start some basic restrictive work on the glove. The bird should be just about fully fledged before tethering to a perch, in order to make sure the legs are grown to full strength to avoid injury.

For those of you that attended the meeting at my centre, we talked a little about ‘glove discipline’, something that seems to get a little lost in modern practice it seems. I often see pictures of people out on a stand at a show with a bird sat with its back to the handler or even worse on someone’s shoulder. The owl given free rein to wander where it pleases, just attached by a dodgy looking knot or dog clip type affair to a glove or perch. It is important to implement good glove behaviour from an early age and as shown during my training display here at the centre, the birds won’t even sit anywhere else or in any other position due to the way they are brought up. They right themselves if moved by wind or for any other reason. Too often I see this at displays and where you can maybe a little flexible at home with these things under your own supervision, it is important that we all try to implement a high standard when out on display as you never know who is watching and what ideas are perceived by those looking on.

As a society I feel we should be doing our best to try to guide and educate those who choose this as a profession, so we can move forward as one and all be exhibiting the same high standards to provide of professionalism and care for our animals to those people looking on.



## Snowy Owl Migration:

### More complicated than most people realize!

By Laura Erickson

Whenever Snowy Owls appear in the Lower 48 States, people get excited. Snowy Owls are magnificent—so superlative in every way, and so tied in with popular culture thanks to Harry Potter’s Hedwig—that any report attracts birders, photographers, and a lot of people who otherwise aren’t even interested in birds.

When I started birding and took my first ornithology class in 1975, I learned that Snowy Owls are non-migratory arctic birds that retreat south only when the population of their dietary staple—lemmings—crashes. We were taught as fact that few if any of the ones we see in the south manage to return to the Arctic, and that most or even all of them are starving.

This was probably a fine working hypothesis, but has been thoroughly disproved. David Evans started banding and following Snowy Owls in the Duluth-Superior Harbor in 1973. He is a co-author of the newly revised Snowy Owl entry in the Birds of North America, published by the Cornell Lab of Ornithology and the American Ornithologists’ Union. David found that Snowy Owls were successful at hunting in our area, and over the years, he learned that some banded individuals returned two, three, or even four years in succession. Results of his work weren’t disseminated far and wide—he started long before social media was in the picture.

Snowy Owls also often appear on airport runways—an expanse of open land visually similar to tundra. Logan International Airport worked out with

p25 Massachusetts Audubon and bird banders a project for capturing and removing these owls to safer places. This program has also provided data about the birds' health and verified that many of them do just fine down here, and some return year after year. But again, word of this didn't get out with regard to the overall health of Snowy Owls in many years, and people continued to believe that most or all of the Snowy Owls that appear down here are weakened and emaciated.



### Plate 1

During the significant Snowy Owl “invasion” during the winter of 2013-14, some researchers banded together to affix GPS transmitters on some Snowy Owls to follow their individual movements in a project they cleverly named **Project SNOWstorm**. Some of these researchers are well known in both the birding community and the larger world. Any huge research project about such a popular and charismatic species, with such charismatic and media-savvy researchers trying to

p26garner essential funding is going to catch the public eye, and is going to be covered by the news. This has been a Good Thing.

The trick is that when they got the word out that, during the first two years they were working on this, the birds they were handling were mostly in great shape, the media and many birders jumped to the conclusion that all or most of the Snowy Owls that appear down here from year to year are healthy. Ironically, some self-serving photographers using unethical methods such as baiting Snowy Owls to draw them closer, birders getting too close when chasing down lifers, and bird guides bringing hordes of other people to see them, had long been justifying their actions by claiming that the birds were doomed anyway, so if a bird died as a result of their activities—well, it was going to be dead soon anyway. Now they took a 180-degree turn, saying the birds are perfectly healthy, so there's no reason to worry about disturbing them.

It's of course true that Snowy Owls need fuel to make such a long, arduous journey in the first place, so they must have had at least some successful hunting along the way, but it's also true that individual migrants of all kinds of species use up all their physical resources making a long flight, and some end up utterly depleted and dying.

Rehabbers have long known that many or even a majority of the Snowy Owls that are brought to them in some invasion years are significantly below normal weight. Some are, indeed, starving. This can be a secondary result of injury, pesticide exposure, disease, or other problem associated with a long journey and trying to hunt in unfamiliar territory. Once they arrive, some individuals can't get enough food, sometimes because there isn't enough food available, sometimes because they cannot find a safe place to hunt alone (Peregrine Falcons, ravens and crows, and acquisitive birders and photographers displacing them), and

p-27 sometimes because the long, arduous journey through unfamiliar areas simply did in a very old or very young bird. But in some years it happens like people used to think it always happened—lemming populations do crash periodically, and those years are, indeed, sometimes associated with both “owl invasions” and a large number of starving owls.



**Plate 2**

This year Snowy Owls are already being reported in big numbers in Michigan, Wisconsin, and Minnesota. David Evans, the researcher who has been banding them in the Duluth-Superior area for over 40 years, brought one emaciated bird to Peg Farr, director of Duluth’s Wildwoods Wildlife Rehabilitation Center, and told her that in his experience, in years when owls first start appearing in November and December, most of them are healthy, but when they first start appearing in October, he’s long noticed that many of them are stressed, injured, or even starving.

p-28 This is the tenth autumn in which Peg has been taking in birds, but just the first October in which she's had to deal with Snowy Owls—and she's had three already. As far as she could judge by plumage and size, all were young males. And each weighed less than 900 grams—that's less than 2 pounds, when healthy males should weigh 3 ½ pounds. Marge Gibson of the [Raptor Education Group, Inc.](#), in Antigo, Wisconsin, has received four so far, one dead on arrival. One young male weighed an astonishing 815 grams—only 1.8 pounds. And a young female weighed 1000 grams, or 2.2 pounds, when healthy females should weigh more than double that. Marge had news of seven others that were found dead in fields.

Marge and Peg post information about the animals they're treating on their blogs, and Marge also posts on the Wisconsin Birding Facebook page. Instantly, people who have been keeping abreast of developments for Project SNOWstorm were sending these experienced and knowledgeable wildlife rehabilitators cranky and sometimes outright rude messages that it's a “myth” that owls are starving, even as Marge and Peg could feel in their own hands the atrophied breast muscles and exposed keel bone beneath the feathers of obviously emaciated birds.

These people were parroting a warped interpretation of the great new information Project SNOWstorm has been gathering. Scientists tracking healthy Snowy Owls in the past two years have proven that many of the ones that retreated down here were healthy. Of course, those two years happened to coincide with an abundance of food on the tundra. Project SNOWstorm necropsies on tracked owls that died showed that they'd been killed due to clear factors other than starvation.

The old conventional wisdom that all the Snowy Owls that appear down here are starving has long frustrated me, and I'm glad Project SNOWstorm has had the public forum to clear that up. But the new



**Plate 3**



p-30 conventional wisdom—that they’re *never* starving—is equally incorrect.

There’s an old fable about blindfolded people examining an elephant, each learning a vast amount of information about one tiny part, and each coming to an entirely different conclusion about the entire animal. Rehabbers and field biologists each have specific areas of expertise with little overlap. It will take open sharing of information between them to clear this up.

In my experience, most rehabbers know a lot about wild birds, and are *extremely* happy to get more information from field people—it helps inform their treatment so they can provide as much of a natural diet and environment as possible. Meanwhile, more and more field biologists are pooh-poohing the work of rehabbers, and ignoring the wealth of information they could be providing. Some field biologists believe that helping individual animals is worthless from a conservation standpoint and takes valuable energy and resources from work that helps whole populations. Others discount the value of individual animals altogether.

My own background as a rehabber certainly gives me a bias, but objectively, rehabbers have furnished invaluable information and services essential in reintroduction programs for endangered species. Their observations about animal behavior and adaptability have helped inform our increasing understanding of avian intelligence. Techniques they refine inform the care given to animals by laboratory biologists. Rehabbers are required to keep statistics about the weight and condition of animals on admission, and what circumstances led to their being admitted. Because they receive so many birds from diverse segments of the general population, their data can furnish a lot of valuable information about “birds in trouble,” providing an important early warning system regarding pesticides and other dangers.

p31 Rehabbers and field biologists have both been essential partners in discovering virtually everything we know about lead poisoning—a huge conservation issue for waterfowl, including Trumpeter Swans, and raptors, including Bald Eagles. Rehabbers were in the first line of defense in figuring out which species were most vulnerable to West Nile virus.

And in the peculiarly complicated case of Snowy Owl movements, statistics regarding the differences in the timing and birds' condition on arriving at rehab centers from year to year can help fill in some of the many holes in our understanding of the birds' situation in different kinds of invasion years.

And there are, indeed, different kinds of invasion years. In normal years, a Snowy Owl's clutch size averages 3–5. When food is plentiful, it's 7–11. We get “invasions” when food and production of young owls are abundant, such as in 2013. In those years, many or most of the birds seen by birders are in fine fettle. Young males in particular were probably driven south not by food needs but by territorial adults driving them out of their normal range. But we also get invasions in years after the lemming population crashes, while the Snowy Owl population is still near peak even with low reproduction, when some may indeed be driven south by hunger. That may be happening this year.

And of course, in any kind of year, as field biologists such as David Evans, working the same winter areas year after year, decade after decade, have long known, some individual Snowy Owls migrate to the same wintering areas regularly.

Understanding Snowy Owl movements is also complicated by simple geography. Birds found along the eastern seaboard may have moved a thousand miles or more along fairly open, tundra-like habitat, while

p32 those arriving in the Midwest may have crossed a thousand miles of dense boreal forest—an inhospitable habitat for a species adapted to hunting in open country.

So Snowy Owls make for one complicated elephant!

Science is supposed to be about amassing as much information as possible to provide comprehensive and nuanced answers to our questions, not about limiting what questions we're allowed to ask or limiting how we answer them based on what one group of scientists wants to focus on. Some field biologists do stay abreast of what rehabbers are encountering, but many don't, and some are disturbingly patronizing or even insulting to rehabbers. That must end.

It would be the natural impulse of someone who has spent the past two years handling healthy owls to say the owls going to rehabbers now must have been injured or exposed to pesticides to have reached an emaciated state, and are not truly “starving.” But rehabbers do necropsies, and do not report “starvation” as a cause of death in even a severely emaciated bird if any evidence of a precipitating cause is found. This year, rehabbers are experiencing a different phenomenon than in the past two years. Figuring out the complexity—looking at lemming populations and gathering other data about what's happening on the tundra for example—rather than digging in heels about preliminary findings of what is so far a short-term, 2-season research project, should be our goal.

When Project SNOWstorm was inaugurated and so successful in tracking birds, it was news to a lot of people that many of the birds trapped were healthy and plump to begin with and stayed so over the season. In getting the word out about this, their news that "Owls aren't starving!" has been as egregiously overstated or misinterpreted as the

p-33 old myth that "Owls are starving!" With this year's early appearance of Snowy Owls, Project SNOWstorm has been hoping to get reports of birds that bear their GPS transmitters, and is also hoping to affix some devices to healthy birds to track. Meanwhile, rehabbers are handling unusually large numbers of severely emaciated birds. Just remember: Project SNOWstorm's job is to track healthy owls. REGI, Wildwoods, the Raptor Center, and other rehab facilities have the job of taking care of the owls that aren't doing well. Those of us who are concerned about the birds and interested in their basic natural history should be thrilled to be getting information from both avenues of discovery.

Using data from ALL professional researchers dealing with Snowy Owls, including field biologists and banders here and on their breeding grounds, scientists associated with Project SNOWstorm, and rehabbers, we will eventually tease out what Snowy Owl movements are all about. For those of us who love working out complicated answers to complex puzzles, this is good news. For those who love sound bytes or have an emotional response against bird research in one form or another, this isn't such good news. Writing click bait headlines on internet sites (Owls are starving! Owls aren't starving!) is a profoundly anti-science impulse—something all of us who trust science and want complete answers to our questions should firmly squelch.

## **Illustrations**

**Plate 1-Healthy Snowy Owl seen outside Ashland, Wisconsin in 2013 (Laura Erickson)**

**Plate 2-A healthy Snowy Owl being tracked by David Evans in Superior in January 2015 (Laura Erickson)**

**Plate 3- One of the emaciated Snowy Owls at Wildwoods (courtesy of Wildwoods, Duluth, Minnesota)**

## **p-34 Editor's Note**

Many thanks to Laura for permitting us to reproduce her Blog in this issue. Laura's website [www.lauraerickson.com](http://www.lauraerickson.com) is well worth a visit.

See also-:

**Tyto Newsbrief June 2005 "Great Grey Owls move South in search of food.**

**Tyto December 2010 " Owl Power Minnesota-The great owl irruption of 2005 revisited"**

## **Christmas Reading?**

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p-35 **Blakiston's Fish Owl Project-Update**  
compiled by John Gray



I was in touch with Dr Jonathan Slaght recently and he is currently awaiting a new Russian Visa but should be on-site in Russia for the start of the fish owl season. He advised that the project will be putting up nest boxes for fish owls this winter, following the Japanese example, **and that funds contributed by the IOS will directly support that work.** As previously advised Jonathan and the WCS project are working with other NGOs in the region to identify areas within logging concessions that are important to fish owls (nest sites, hunting sites) and excluding those areas from harvest by the concession holder.

A workshop for logging companies was held during the year was far better received than expected. The meeting was very well attended,



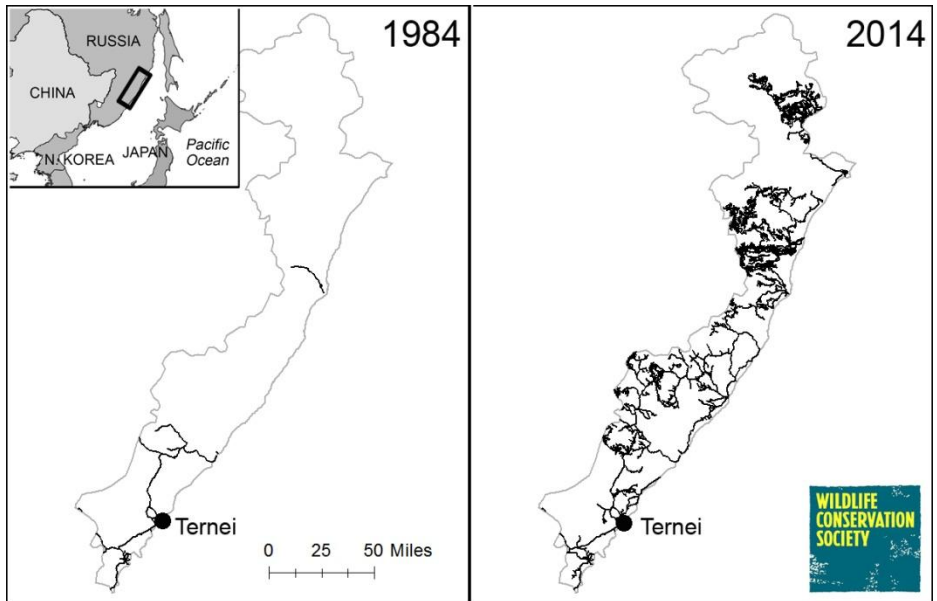
p-36 including representatives from six of the seven companies that log in Ternei County (an area 25,000 km<sup>2</sup> in size and some of the best fish owl (and tiger) habitat in Russia), the head of the county administration, and a group from the county forest service. In total, almost twenty delegates attended

After a series of presentations by Jonathan and his colleagues about the value of riparian forest for fish owls and other animals, and the impacts that logging roads/road construction have on wildlife, the representative of the primary company (which operates/maintains probably 85-90% of the roads in the county) agreed to voluntary road closures post-harvest. This reduction in access will really help fish owls. Firstly, if there are fewer roads there will be fewer fish owls hit by cars, and fewer roads means less access for people poaching salmon (fish owls sometimes drown in poacher nets, and unsustainable salmon poaching reduces fish owl prey base). Sadly a definitive commitment to stop using large trees for bridges could not be obtained, but the WCS Project now has a foot in the door and one group did agree to stop that practice. This issue will continue to be raised. ***The agreement by a logging company to begin closing logging roads is a massive win for conservation as WCS has been trying to gain traction on this issue for nearly 20 years!*** Further meetings were planned to discuss specific locations for road closures.

The diminution of fish owl habitat can be linked directly to the collapse of the old Soviet Union and the end of logging restrictions, from that era, placed on the "harvesting" of forests.

The result was a burgeoning road network which unsurprisingly followed river courses impacting directly on fish owl habitats.

p-37 The plate below ( reproduced courtesy of WCS) graphically illustrates the growth of the roads network in Ternei over the last 30 years



A joint study has recently been concluded by Jonathan Slaght in company with Sergei Surmach, an ornithologist at the Russian Academy of Sciences. The study has been published by Bird Conservation International (BCI) and although we have received a copy we do not have a licence to reproduce it at this juncture.

The question has to be can fish owls and other seriously endangered species such as the Amur Tiger and Amur Leopard co-exist with logging companies? In undertaking the study the authors stress that they are not seeking the termination of logging activity, but rather to encourage practices under which the seemingly relentless tide of

p-38 human activity is balanced with the needs of the wildlife population and the health and well being of the forest environment.

One of the report's main recommendations is to keep roads away from water courses. The study suggests a riparian buffer of at least 100 metres between rivers and roads. And, when a water course has to be crossed, the building of bridges instead of culverts is proposed together with using tree species such as larch or aspen for their construction, rather than species such as poplar and elm which are more favoured by fish owls.

As suggested above it is very encouraging that logging companies are both listening and interested in adopting a pro-active approach. One of the largest logging companies in the area, OAO Amgu is already collaborating with biologists to identify areas of forest which are inextricably linked to the survival of fish owl populations. "This commitment to fish owl habitat protection by a logging company is significant" according to Surmach an ornithologist at the Russian Academy of Sciences and Jonathan Slaght adds that "If OAO Amgu and their parent company, TerneyLes, protect all fish owl habitat under their purview, the number of fish owl territories currently protected in the region would triple, and result in the protection of nearly half of all potential fish owl home ranges in our study area."

The construction of roads has led to increases in recreational activities. The study also suggests that logging companies close roads after use. The logging company TerneyLes has already begun this process. It is reported that they have erected barricades and destroyed key bridges to limit and hamper any illegal logging activity as well as restricting access to poachers, and to assist in the restoration of habitat for fish owls and other wildlife.

Alexander Levchenko Head of the Department of Forest Management for Terneyles stated "We at TerneyLes recognize the value of

p-39 Primorye's forests as a reservoir of biological diversity, and we take our responsibility to help manage these resources seriously. Closing roads is just one of many things we do to help protect these resources while providing sustainable employment to the citizens of Terney County.”

The project will also involve monitoring, of closed roads and WCS and the Provincial Wildlife Department will keep watch to ensure poachers do not try to force access around roadblocks.



**An abandoned logging road in the Russian Far East-Photograph by and courtesy of Jonathan Slight**



**It's not only Blakiston's Fish Owl under threat! The photograph above (by and courtesy of Jonathan Slaght) shows Amur Tiger paw prints along a logging road in Primorye, Russia.**

Sergei Surmach is further quoted saying “We are always looking for ways to balance the needs of the economy and endangered species such as fish owls and in this case, everybody wins.”

**Editor's Note-This compilation is in essence a report about a report. BCI would at this stage charge us a reproduction fee to reproduce the full Jonathan Slaght/Sergei Surmach study in Tyto.**

**Hopefully we will be able to bring this to you in full, without cost to ourselves, in the future.**