
Emergency
measures to save
Baer's Pochard:
location of breeding
sites in Russia

By

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FRONT PHOTO CAPTION: Baer's Pochard Survey of Khanka Lake.

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INTRODUCTION

Baer's Pochard *Aythya baeri* is a Critically Endangered migratory duck (BirdLife International 2013) that formerly bred across the Amur and Ussuri basins in Russia, although historical nest records only exist from Lake Khanka.

No species specific surveys have ever taken place within the range in Russia and the decline in abundance can only be tracked from the decreasing number of occasional records (Figure 1).

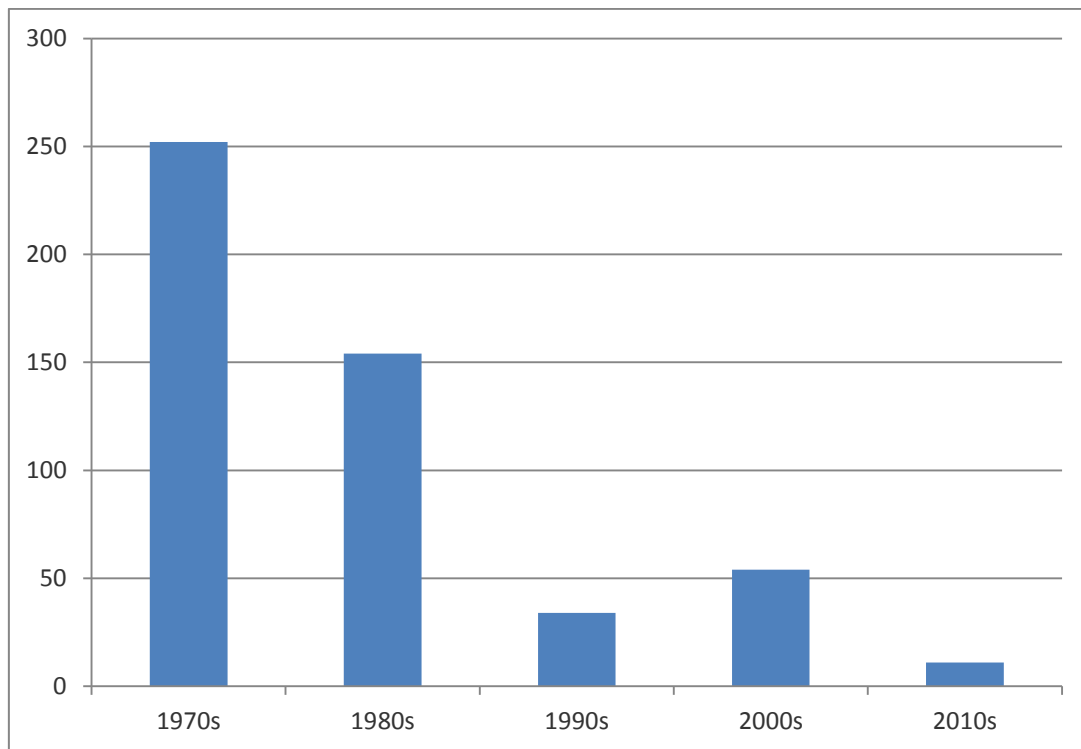


Figure 1. The number of Baer's Pochard observed in Russia by decade.

This decline in the number of observations in Russia generally matches the declining trend in the species as described in China (Wang *et al.* 2012), except for a slight increase in the 2000's. This increase is likely to be the result of an increasing intensity of bird surveys in the region (international conservation projects and the development of birdwatching activity). The subsequent decrease in observations in the 2010's seems to reflect the actual decrease in the global population size and is less likely to be an artifact of research and birdwatching activities.

The goals of this project were to 1) survey selected areas within the known (former) range in Russia and 2) to widely disseminate information on the urgent conservation needs of Baer's Pochard.

AREAS SURVEYED AND SURVEY TIMING

Between mid March and early August 2013, nine major zones within the breeding range of Baer's Pochard were surveyed (Figure 2).

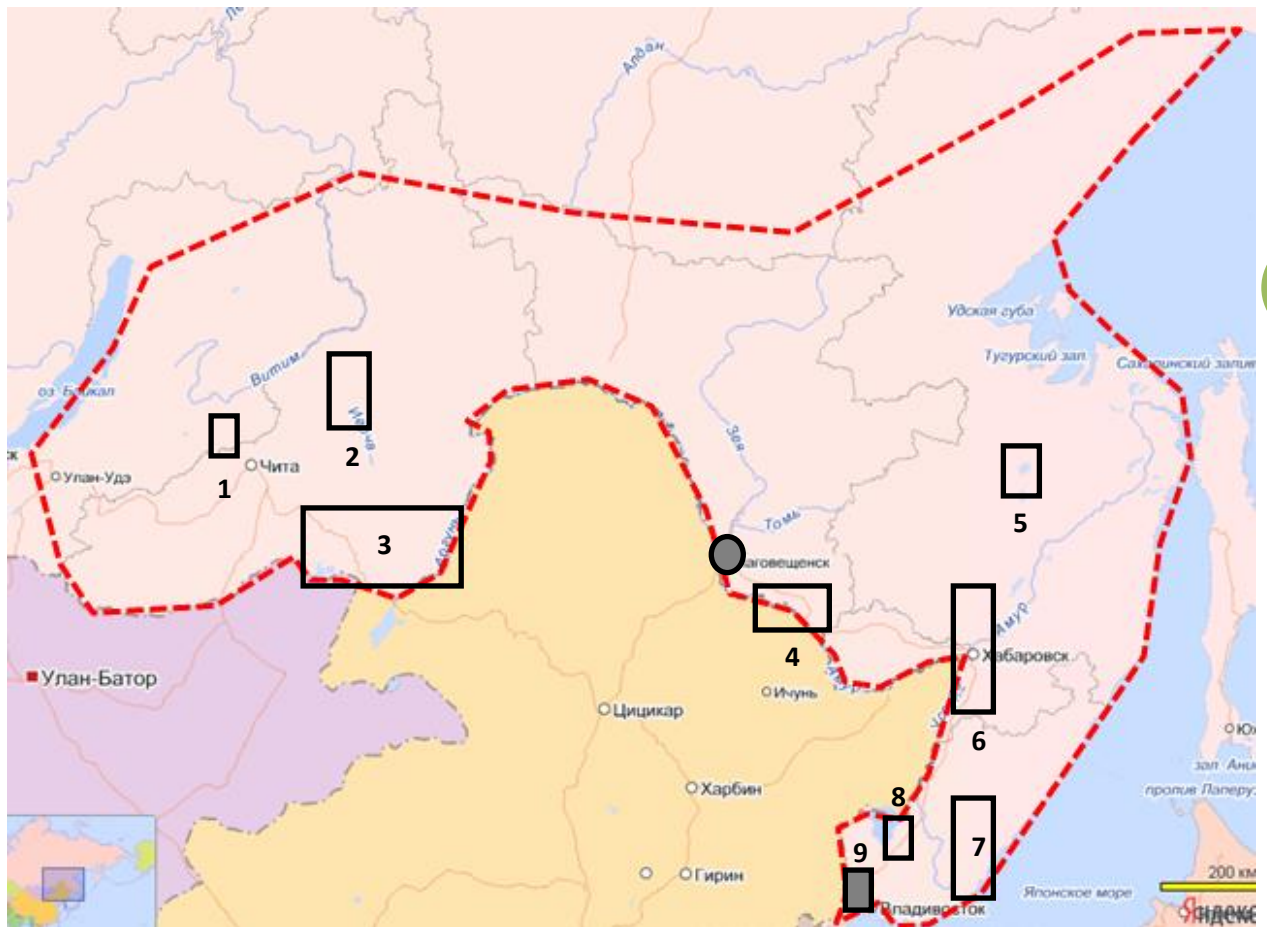


Figure 2. Baer's Pochard breeding range in Russia with zones surveyed by this project in 2013 (black rectangles). Filled rectangle is zone where Baer's Pochard was recorded and filled circle is an isolated record in 2013.

Table 1. Survey locations, dates and participants undertaken in 2013.

#	Location name	# zone	Area, km ²	Survey dates	Participants
1	Ivano-Arakhleiysskie lakes	1	188	11-13 Jun	Oleg Goroshko
2	Shilka R	2	125	1-10 Jun	Oleg Goroshko
3	Upper Amgun' R	3	156	7-12 May	Oleg Goroshko
4	Onon R basin: lakes and swamps on flood-plain	3	162	24 Apr- 15 Jul	Oleg Goroshko
5	Burea River and its channels banks	4	10	4 Apr	Aleksey Antonov
6	Lakes of Amur River floodplain	4	10	15-22 Apr	Aleksey Antonov
7	Floodplain of Uril River, flooded	4	48	26-30 Apr	Aleksey Antonov
8	Lebedinoye Lake and smaller lakes in the same chain	4	30	1-8 May	Aleksey Antonov
9	Mutnaya River floodplain	4		1-8 May	Aleksey Antonov
10	Kleshenskoy Lake and swampy Borzya River	4	8.4	1-16 May	Aleksey Antonov
11	Antonovskoye man-made Reservoir	4	8.4	18, 23 May	Aleksey Antonov

12	lakes of middle and upper Amur River floodplain	4	43	18-23 May	Aleksey Antonov
13	Chukchagirskoe L, Kokol'ninskiy lakes, Kokol'ni R, Ol'djikan R	5	420	15-29 Jul	Vladimir Pronkevich
14	South part of Evoron L	5	20	30 Jul	Vladimir Pronkevich
15	Wetlands of "Aistiniy" Refuge	6	180	24-30 Apr; 5-10 Jul	Vladimir Pronkevich
16	Ussuri R (river and 14 wetland on flood-plain, including proposed "Scheremetievskiy" Nature Park)	6	97	20 May – 3 Aug	Vladimir Pronkevich
17	Tunguska R, Kur R	6	47/245* km	6-12 Jun	Vladimir Pronkevich
18	Zhuravlevka R	7	22* km	19 May	Diana Solovyeva, Sergey Vartanyan
19	Kievka R, Partizanskaya R	7	109/23* km	15-23 Apr	Diana Solovyeva, Oleg Voronoy
20	Wetlands in lower Avvakumovka R	7	5	27 Apr	Diana Solovyeva
21	Ilistaya R mouth	8	1 km**	7-14 Apr	Dmitriy Korobov
22	Sosnovskie lakes	8	8 km**	9-11 May	Avdeuk, Sergey Surmach
23	Rice fields on Lupovoe lakes	8	15 km**	7-11 and 21-22 May	Vyalkov, Yuri Gluschenko
24	Pospelovoe lakes	8	37 km**	23 May	Yuri Gluschenko, Dmitriy Korobov, Sergey Avdeuk, Irina Kal'nitskaya
25	Khasan Lake wetlands	9	259 km**	14-24 Jun, 16-21 Jul	S Avdeuk, Katkov, A Vyalkov, Mamet'ev, Sergey Surmach
26	River Second mouth	9		16-25 Mar	Tatiana Atrokhova, Sergey Sumach

*surveys along the rivers were measured in km; **total survey length for the survey area.

SURVEY METHODS

Survey methods included ground based, track based and boat based searches for all ducks (Table 2). Ducks were identified to the species level by usage of 60x scope and 12x, and 10x binoculars. Stationery observations were made whenever possible, with observations from moving boats only used along rivers and during motor-boat excursions.

Aerial surveys for cranes in the Lake Khanka floodplain on 22-26 May did not provide any sightings of Baer's Pochard, and there was generally low abundance of ducks and diving ducks in particular. However, aerial survey is not suitable for detecting Baer's Pochard and other diving ducks in wetland habitats (Sergey Surmach's team).

Table 2. Survey methods used during Baer's Pochard surveys in Russia in 2013.

Method	Picture	Location number*
Jet motor boat		13, 17
Special bog boat and engine		21-25
Aircushion vessel		16

Rowing
boat



5, 9, 12

Rubber boat



7, 11,
15, 18-
19

Track or
ground
observations



8, 27

On foot



1-4, 6,
7, 10,
11, 15,
20

*location according to Table 1.

RESULTS

Baer's Pochard observations

A total of five adult Baer's Pochard were located in Russia in 2013. Four were recorded in Khasan District of Primorye during surveys on 14-23 June (zone 9 on Figure 2). They were identified with 90% confidence. They were: 1) a male in a mixed flock with other pochards (Tufted Duck *A. fuligula*, Common Pochard *A. ferina* and Greater Scaup *A. marila*); 2) two solitary females behaving in a way that suggested nesting (initial search). A second survey of the wetlands where these Baer's Pochard were recorded, on 16-21 July, produced no further observations of either broods or females. A male Baer's Pochard (male 2) was recorded during the second survey; however it is unclear if this was the same male as male 1 observed during the first survey. Further, a male with the features of a hybrid *A. baeri* x *A. ferina* was observed in June; it had a dark head (like Baer's Pochard) and ash-grey back (like Common Pochard; Khasan District, location isn't shown on Figure 3).

10



Figure 3. Localities where Baer's Pochards were recorded (zone 9 on Figure 2) in 2013.

One female Baer's Pochard was observed in the period 8-14 July by a German bird watching team lead by Wieland Heim in the site close to River Zeya mouth (filled circle on Figure 2). They report that "Next to one mixed colony of White-winged and Common Terns we found the probable best bird of the year: a female Baer's Pochard!"

(<http://www.amurbirding.blogspot.ru/2013/07/week-20.html>). This bird was not detected at the spot during the following two weeks.

Several more ducks were identified as Baer's Pochard with less confidence: a pair, a female and two single males in Khasan District of Primorye (Figure 3) and three ducks in a flock on River Tunguska (- 48.727076 N 134.343930 E; area 6 on Figure 1).

All observers indicated extremely shy behavior of all *Aythya* species and a difficulty to approach the birds for reliable identification of the species.

Leaflet distribution

Two thousand leaflets were printed and mailed to project participants in May 2013. Twenty identification guides (Waterfowl of Russia) were also purchased and mailed by 1 May. These guides were distributed among hunting authorities responsible for control of waterfowl hunting during the open season (*i.e.* the checking of hunting bags). Approximately 1400 leaflets were widely distributed among hunters, local villagers, and nature lovers within the areas of survey and in the cities north of the survey zones (all within the proposed Baer's Pochard range). The rest of the leaflets will be distributed during further fieldwork in spring 2014.

The leaflet contained the e-mail address of the Baer's Pochard Working Group (Russian) and telephone numbers in Khabarovsk, Amur, and Dauria regions (Appendix B). No responses from any correspondents have yet to be received.

DISCUSSION

Based on the surveys carried out in 2013, Baer's Pochard may be still breeding on the wetlands of Khasan District, South Primorye (zone 9). They may also be breeding in the River Amur floodplain, but the single female seen there could also have just been present briefly. Future survey efforts should be concentrated in Khasan district, with surveys conducted in early spring and through the breeding season.

The occurrence of Baer's Pochard in the River Amur catchment (zones 1-4) seems to be affected by climatic fluctuations and wet-dry cycles in particular. The number of records increased in wet years (1982-98) and decreased in dry years (2000-07). Increased flooding of the area began in 2009 and has continued until now, with high flooding in summer 2013, indicating that a new period of wet years may have begun. Baer's Pochard might therefore return to the wetlands of the middle River Amur catchment, particularly Torey lakes but also other wetlands and lakes in the region. Consequently, the middle River Amur catchment is considered to be the second most important area in Russia for Baer's Pochard, and if funding and human resources are available these wetlands should be surveyed in greater detail.

Lake Khanka should be considered as the third most important area and surveyed whenever possible.

We also suggest the usage of newly-developed technical devices such as radio-controlled planes with video recorders (drones) is considered for surveys of mixed species duck flocks in poorly accessible wetlands, firstly in the Khasan District of Primorye.

Potential threats

Three of the five survey teams reported spring grass burning as a key cause of wetland habitat loss (zones 1-4 and 7). As the causes of the decline in Baer's Pochard are totally unclear we can now suggest that the loss of breeding habitats through spring grass burning in Russia could be one of the threats. Grass from the previous year would provide cover for ground-nesting ducks if left in place. Burning of this grass makes pond and lake banks open and unsuitable for nesting ducks. Grass fires occurred in April in the south of the study area and in May in the north and west. In Dauria (zones 1-3), about 50% of grasslands were burnt annually, and in the River Angun catchment this reached 65% (Oleg Goroshko pers. comm.).

Diana Solovyeva's team surveyed seven ponds or small lakes in the lower River Avvakumovka floodplain and reported only one pair of Spotbill Duck *Anas poecilorhyncha* on a pond where one side had not been burnt. All the other ponds/lakes with burnt banks did not have any ducks on them (Picture 1).

Picture 1. Wet meadow surrounding a small lake in lower River Avvakumovka floodplain totally burned before survey in late April 2013.



Three reasons for spring burning were identified in the study area, with four target groups responsible for them.

- ❖ Ungulate poaching: grass burnt by poachers to develop areas with newly growing grass earlier in the spring.
- ❖ Farmers: to improve the quality of hay meadows and other agricultural land.
- ❖ Occasional or accidental burning by local villagers, mainly children and teenagers.
- ❖ Fire prevention by the Forest Fire Service to protect valuable forests from fire caused by the above sources.

Consultations with conservation authorities, research groups and conservation NGOs are needed to understand the scale of the problem, how it affects waterbirds (in particular Baer's Pochard) and how to reduce the impact of fire within the Baer's Pochard breeding range in Russia.

Acknowledgements

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Wang, X., Barter, M., Cao, L., Lei, J. & Fox, A. D. (2012) Serious contractions in wintering distribution and decline in abundance of Baer's Pochard *Aythya baeri*. *Bird Conservation International* 22: 121–127.

Budget information

Budget item	Total cost (US\$)	Covered by EAAFP grant	Covered by other sources	
			Amur-Ussuri Center for Avian Biodiversity	Scaly- sided merganser project
<i>I&E Program</i>				
Dummy copy of leaflet	70	70		
Printing of leaflet (2000)	250	250		
Waterfowl Guides (20 pieces)	210	210		
Mailing	400	400		
<i>Field work</i>				
Dauria	1,180	1,180		
Khabarovsk	970	970		
Amurskaya	850	850		
Rivers of Primorye	500			500
Khanka and Khasan	11,093	3,300	7,793	
TOTAL	15,523	7,230	7,793	500

Appendix A. Pictures of habitats surveyed in 2013.





Appendix B. Copy of Baer's Pochard leaflet

Лицевая сторона First page

Нырок Бэра похож на гнездящуюся в тех же местах хохлатую чернетю. Самцов этих двух видов перелетать сложно, а самки различаются плохо. На рисунке видно, что самка нырка Бэра (справа) отличается от хохлатой чернети:

- Цветом глаз
- Наличием/отсутствием хохолка
- Цветом подхвостья

Baer's Pochard is similar to sympatric Tufted Duck. Males are easy to distinguish while females are alike. Picture shows difference between Baer's Pochard (right) and Tufted Duck females:

- Eye color
- Presence/absence of crest
- Under tail color



Самка хохлатой чернети Tufted Duck female
Самка нырка Бэра Baer's Pochard female

Вид занесен в Красную книгу Российской Федерации.
Totally protected by Red Data Book of Russian Federation.

Нырок Бэра стоит на грани полного исчезновения в мире.

Всякая охота, разорение гнезд и беспокойство птиц в местах размножения строго запрещены.

ПОМОГИТЕ СПАСТИ ЭТУ ПТИЦУ!

Baer's Pochard is on the edge of extinction from a wild.

Hunting, nest destruction and disturbance on breeding grounds are strongly prohibited.

HELP TO SAVE THIS BIRD!

Просим направлять любую информацию о встречах нырка Бэра в России по электронному адресу:

baersgroup@mail.ru
Телефон в Хабаровском крае: +7 909 800 09 33
Телефон в Амурской области: +7 962 294 94 41
Телефон в Забайкальском крае: +7 914 508 42 31

Фотографии и координаты встреч желательны.

Please send any information on this bird registrations to e-mail account: baersgroup@mail.ru

Call Khabarovsk: +7 909 800 09 33
Call Amur Region: +7 962 294 94 41
Call Transbaikalia: +7 914 508 42 31

Photos and coordinates are welcome.

Буклет напечатан при поддержке Партнерства по Восточноазиатско-Австралийскому Пролетному Пути
Leaflet is printed with EAAFP support



самец male

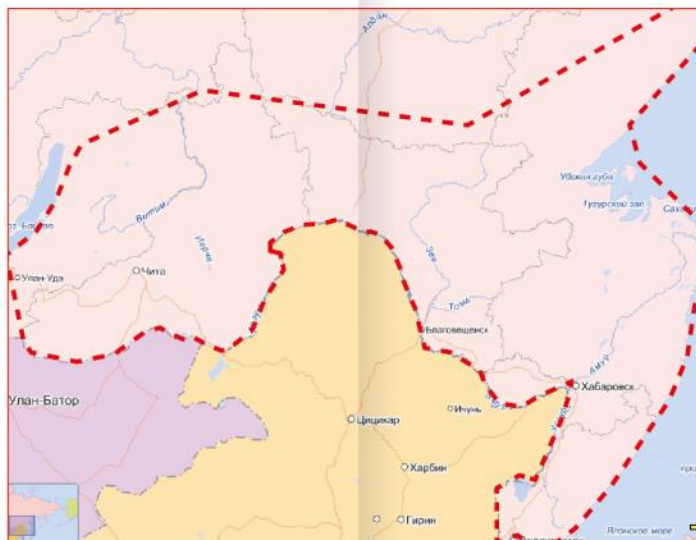
Утка, которую мы теряем уже сегодня: нырок Бэра

A duck we are losing today Baer's Pochard



самка female

Оборотная сторона Second page



Ареал нырка (чернети) Бэра в России изучен плохо, предположительно область его гнездования расположена внутри контура, ограниченного красным пунктиром.

Baer's Pochard home range in Russia is poorly known and it's suggested to lay within the area shown by red dotted line.

Учет на зимовках в Китае в январе 2013 показал, что этих уток в мире осталось меньше 200 особей. Выживание вида теперь зависит от действий людей на местах его размножения в России.

Survey on winter places in China in January 2013 alerted less than 200 birds of this species is left in the world. Species survival now depends on actions on Russian breeding grounds.

