



BRCC

Biodiversity Research & Conservation

The present status of the Steppe Eagle in Kazakhstan



Pulikova G.I., BRCC, RK

Kaptyonkina A.G., BRCC; Institute of Zoology RK

Smelansky I.E., ACBK, RK; Sibecocenter, RF

Zinevich L.S., VNII Ecology, RF

Nikolenko E.G., Karyakin I.V., RRRCN; Sibecocenter, RF

1. Conservation status.

2010 V category - **rehabilitated**, requires continuous monitoring



2015



ДАЛА ҚЫРАНЫ СТЕПНОЙ ОРЕЛ

Aquila nipalensis
(Hodgson, 1838)

Сұңқартәрізділер отряды –
Отряд Соколообразные – Falconiformes

Қаршығатектестер тұқымдасы –
Семейство Ястребиные – Accipitridae



Статусы. V санат. Салыстырмалы түрде саны көп, бірақ шамалы жылдар бұрын ол күрт төмендеген.

Статус. V категория. Численность относительно велика, но еще недавно она быстро сокращалась.

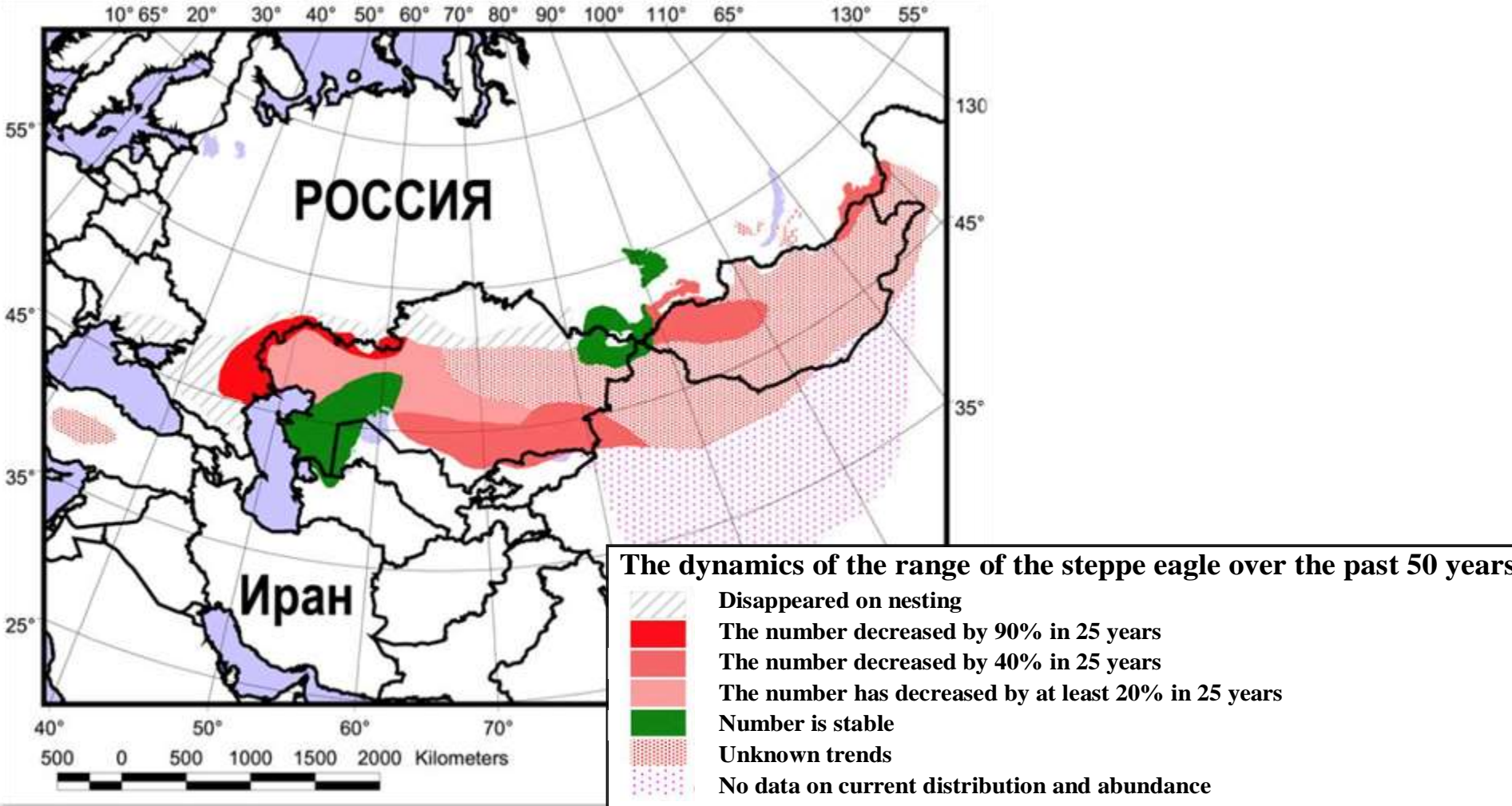
Very rapid population declines
across much of the range



Pfeffer R.G. Steppe Eagle *Aquila nipalensis* (Hodgson, 1838). The Red Data Book of the Republic of Kazakhstan. (2010) https://zool.kz/wp-content/uploads/2021/02/red-data-book-rk_v1_1_2010.pdf#page=130

BirdLife International. 2021. *Aquila nipalensis*. The IUCN Red List of Threatened Species 2021: e.T22696038A205452572. <https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T22696038A205452572.en>

2. Trends of different populations of the Steppe Eagle (2013).

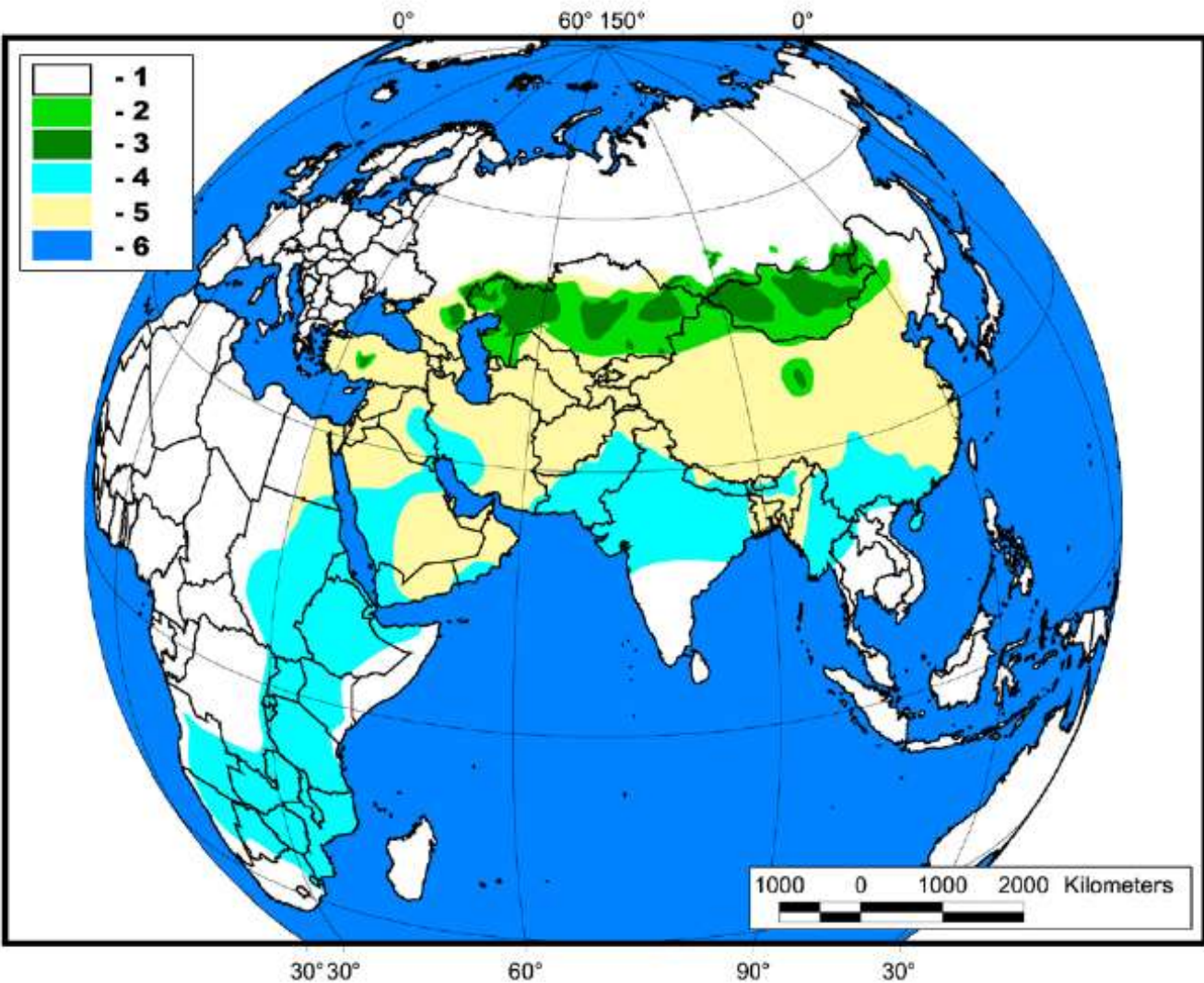


Karyakin I.V. Review of the Modern Population Status of the Steppe Eagle in the World and in Russia. (2013) <http://rrrcn.ru/ru/archives/19580>

3. The latest population estimate (2018).

Country	Estimation of population number, pairs	Share of world population, %	Trend of the population number for the last 5-6 years
Kazakhstan	20950-31570	68,5-82,2	Decrease
Russia	2640-3945	8,6-10,4	The reduction in the European part is stable or local increase in the Asia part
Mongolia	1500-9900	5,9-21,5	No data
China	400-600	1,3-1,6	No data
Other countries	10-50	0,1	No data
WORLD	25500-46065		

4. Breeding in Kazakhstan.



Range of the Steppe Eagle:
 1 – country borders;
 2 – populations;
 3 – breeding range;
 4 – nomadic areas;
 5 – wintering grounds;
 6 – seas and oceans.

Karyakin I.V. Status of the Steppe Eagle in the World: "White Spots" in Distribution, Population Numbers, Ecology and Threats. <http://rrrcn.ru/ru/archives/32535>



4. Breeding in Kazakhstan.

4.1. Western group.

Western group is the population core of the species.

2006

an average 20 658 pairs
(12 273–29 566 pairs)



-16,7%

2023

an average 17 200 pairs
(10–25 000 pairs)



Not enough data for the last 10 years for several breeding groups in:

- the Volga-Ural interfluve;
- the Sub-Urals Tableland;
- the Southern Mugodzhary.

Female Steppe Eagle in the nest. Photo by Pulikova G.

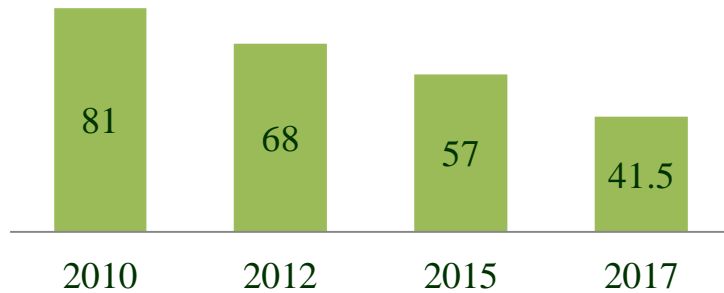
Karyakin I.V. Novikova L.M. The Steppe Eagle and power lines in Western Kazakhstan. Is coexistence have any chance? (2006) <http://rrrcn.ru/ru/archives/31679>



4. Breeding in Kazakhstan.

4.1. Western group.

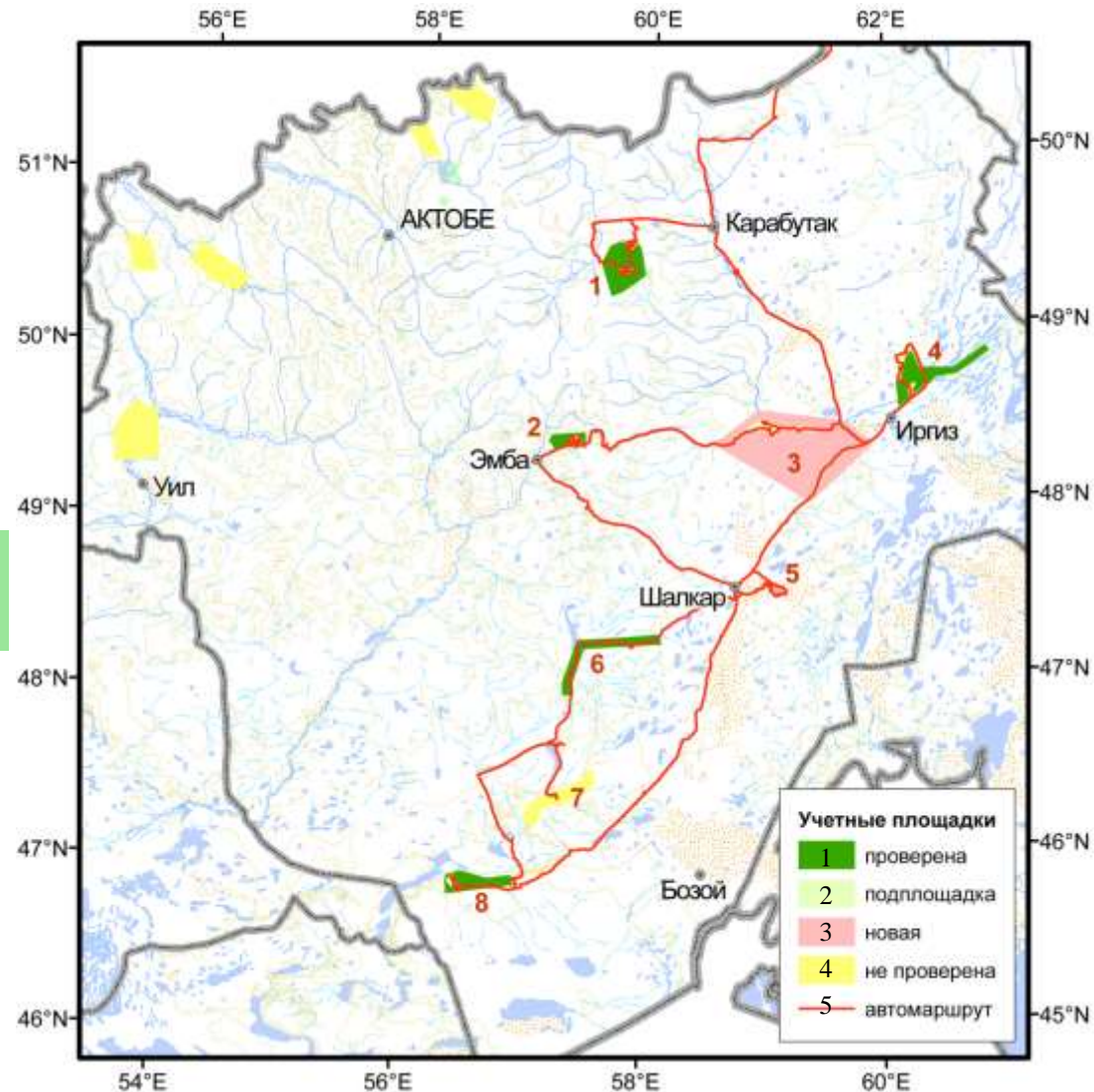
% of occupied nests



Brood size in 2017 = $1,58 \pm 0,61$ nestlings per successful nest

Monitoring in Aktobe Region (2017):

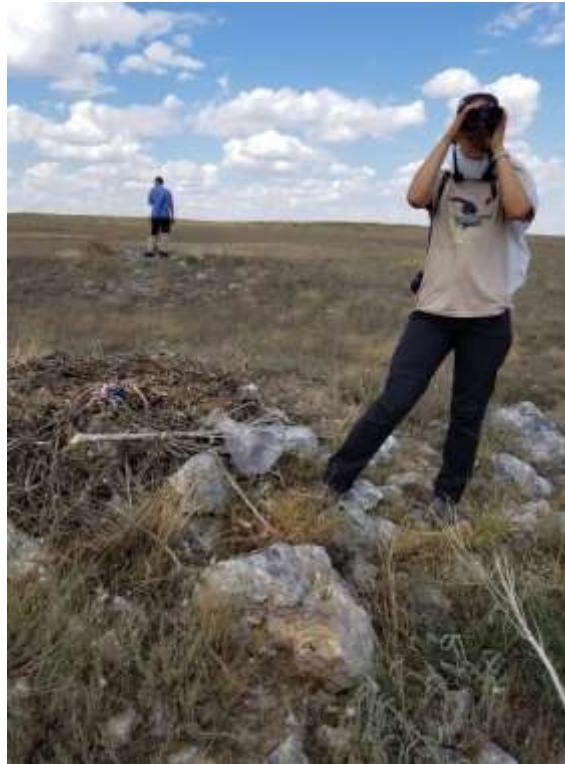
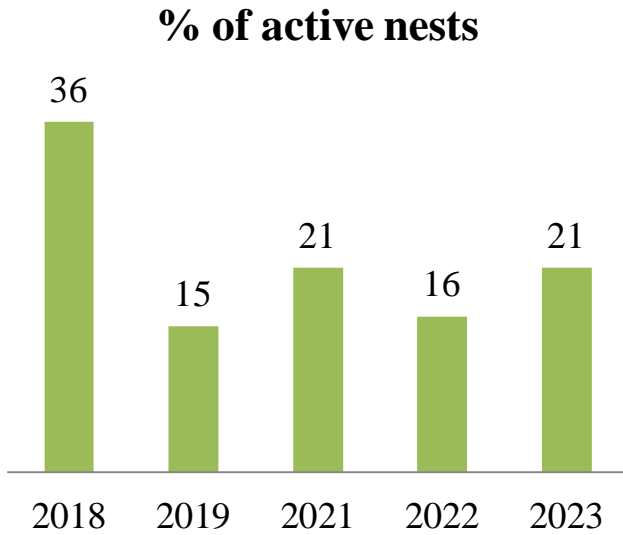
- 1 – plot checked;
- 2 – checked partly;
- 3 – new plot;
- 4 – unchecked plot;
- 5 – vehicle route.





4. Breeding in Kazakhstan.

4.1. Western group.



*Alexandr Bragin and Yael Leonard at steppe eagle nests.
Evgeny Bragin with a Steppe Eagle.
Photo by Katzner T.E..*

Brood size (nestlings per successful nest)

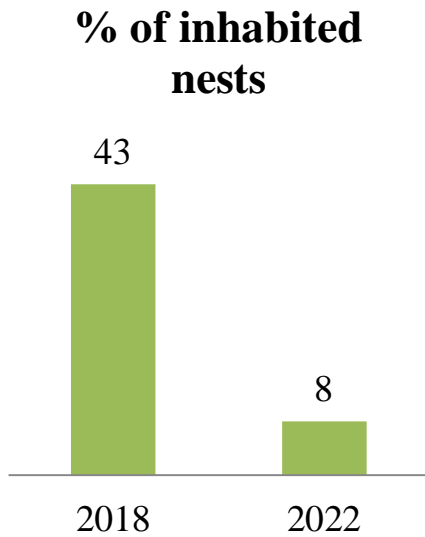
2018	2019	2021	2022	2023
1,95±0,13	2,1±0,23	1,95±0,15	1,79±0,24	1,7±0,16

Bragin A.E., Katzner T., Bragin E.A. Monitoring of the Steppe Eagle Breeding Group in the Aktobe Region (Kazakhstan) in 2018–2023. (2023) DOI: 10.19074/1814-8654-2023-2-259-263



4. Breeding in Kazakhstan.

4.1. Western group.



Donyztau Chink. Photo by Smelansky I.E.

Smelansky I.E., Tomilenko A.A., Barashkova A.N., Yakovlev A.A., Krivopalova A.Yu., Pestov M.V., Terentiev V.A. New Data on Distribution and Population Number of Large Raptors in Northern Usturt Within Atyrau Province, Kazakhstan. (2020) [10.19074/1814-8654-2020-40-82-102](https://doi.org/10.19074/1814-8654-2020-40-82-102)

Smelansky I.E., Tomilenko A.A., Barashkova A.N., Aleksandrovich R.N. Eagle Nesting Groups in the Important Bird Area “Donyz-Tau cliff faces” in 2022. (2023)

DOI: [10.19074/1814-8654-2023-2-142-152](https://doi.org/10.19074/1814-8654-2023-2-142-152)



4. Breeding in Kazakhstan.

4.1. Western group.

Numbers of steppe eagles nesting in roadside windbreaks and power lines have decreased.



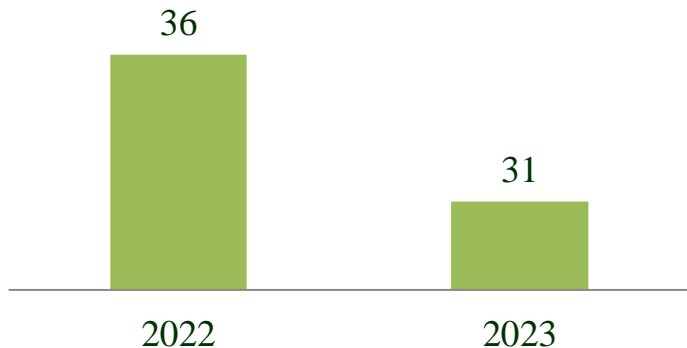
*Old nests of Steppe Eagle on the trees.
Photo by Pulikova G.*



4. Breeding in Kazakhstan.

4.1. Western group.

% of active nests

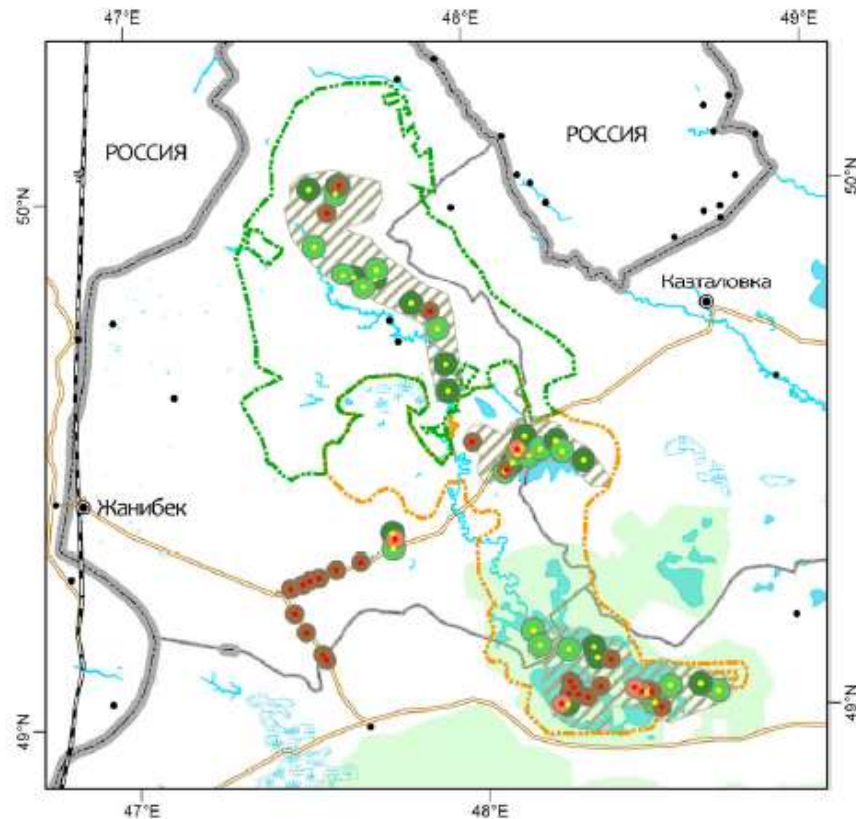


Brood size (nestlings per successful nest)

Year	Brood size (nestlings per successful nest)
2022	1,69±0,79
2023	1,90±1,51

Breeding territory of Steppe Eagle (2022):

-  *inhabited*
-  *occupied*



Smelyansky I.E., Tomilenko A.A., Aleksandrovich R.N., Barashkova A.N., Kitibaev B., Koshkina A. *Steppe eagles in Bokey-Orda nature reserve and Ashiozek sanctuary Western Kazakhstan oblast) in 2022-2023. (2023)*

4. Breeding in Kazakhstan.

4.2. Central group.



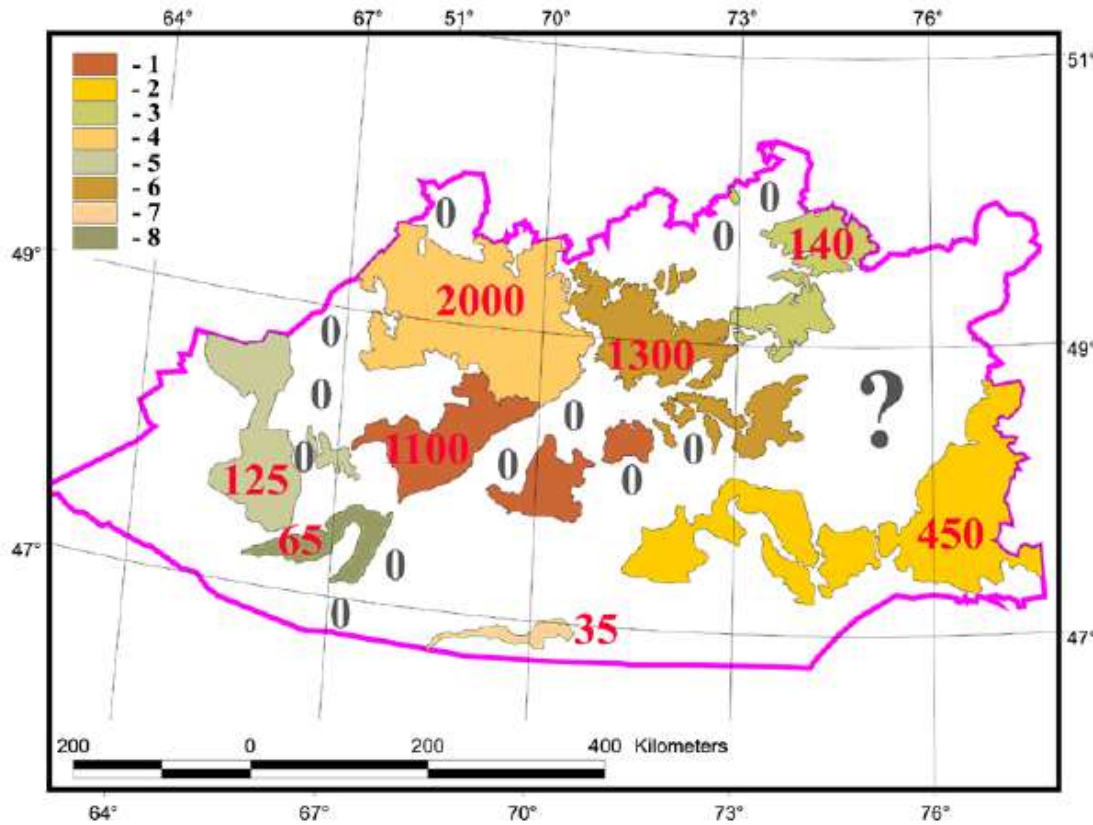
2007



-27,08%

2017

an average 5 275 pairs
(4 794–5 814 pairs)



Habitats of the Steppe Eagle in the Karaganda region (numbers on the map show the Steppe Eagle population numbers):

- 1 – Upland in the central part of the Sarysu river basin;
- 2 – Balkhash Lake region;
- 3 – North- East of Karaganda region;
- 4 – North-West of Karaganda region;
- 5 – Steppe hills adjacent to Ulytau Mountains;
- 6 – Central part of the northern half of Karaganda region;
- 7 – Cliff-faces of the Betpak-Dala;
- 8 – Cliff-faces in the right bank of Sarysu river;

0 – the breeding territories of the Steppe Eagle is not found



4. Breeding in Kazakhstan.

4.2. Central group.

2017

an average 5 275 pairs
(4 794–5 814 pairs)



2018

an average 5 032 pairs

-4.6%

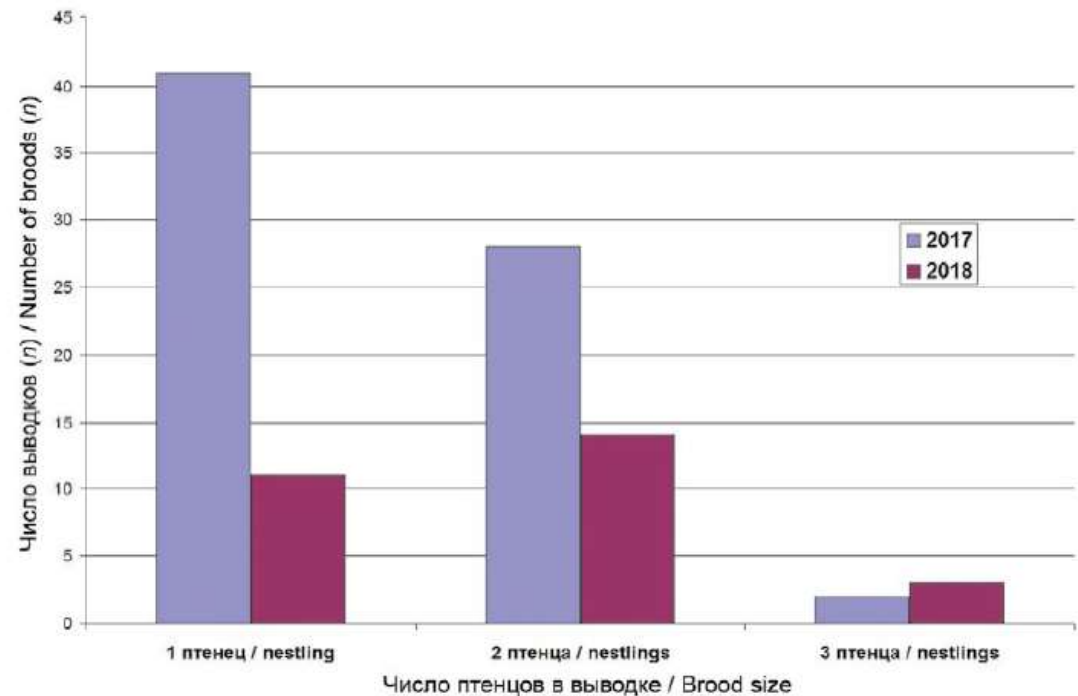
Brood size
(nestlings per successful nest)

2017

1,45±0,56

2018

1,70±0,67



Karyakin I.V., Pulikova G.I., Zinevich L.S. The Results of Monitoring the Breeding Groups of the Steppe Eagle in the Karaganda Region, Kazakhstan. (2019) [10.19074/1814-8654-2019-38-214-229](https://doi.org/10.19074/1814-8654-2019-38-214-229)



4. Breeding in Kazakhstan.

4.3. East group.

	<i>Kalba Ridge (2006)</i>	<i>Northern Balkhash area (2009)</i>	<i>East Kazakhstan region (2012-2013)</i>	<i>East Kazakhstan region (2020)</i>
breeding pairs	1200	460	-	1617
brood size	2±0.53	1.9±0.5	2±0.9	1±0.00



Steppe Eagles. Photo by Pulikova G.

Smelansky I.E., Barashkova A.N., Tomilenko A.A., Berezovikov N.N. Raptors of the foothills of Kalbinsky Altai, Kazakhstan. (2006) <http://rrrcn.ru/ru/archives/31707>

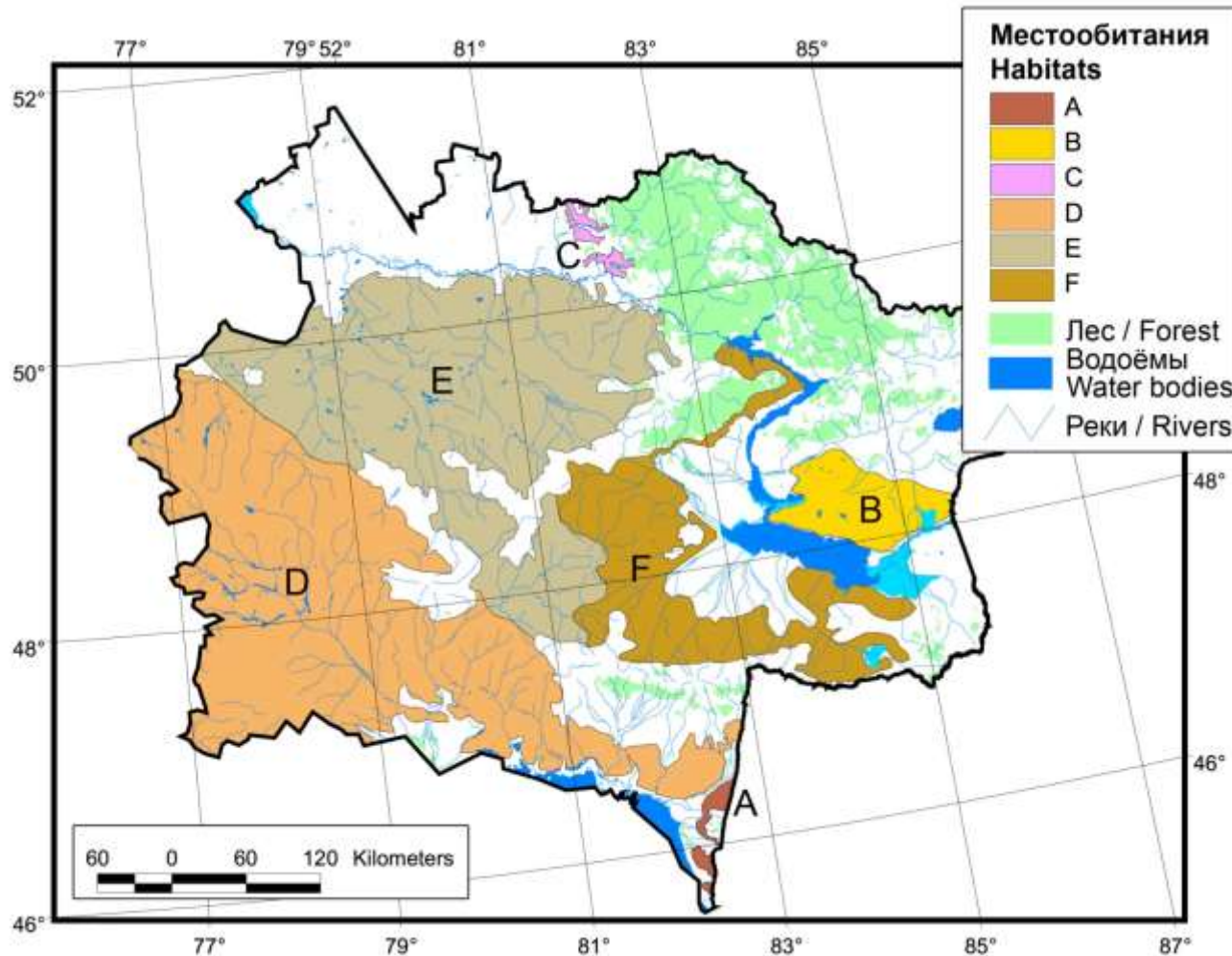
Barashkova A.N., Smelansky I.E., Tomilenko A.A. Some Records of Raptors in the East Kazakhstan. (2009)

Pulikova G.I., Kaptyonkina A.G., Tugarev S.Y. Steppe Eagle in the East Kazakhstan Region. (2021) [10.19074/1814-8654-2021-42-34-54](https://doi.org/10.19074/1814-8654-2021-42-34-54)



4. Breeding in Kazakhstan.

4.3. East group.



Steppe Eagle breeding habitats in the East Kazakhstan region:

*A – Eastern range of Alakol basin (low-altitude Arasantau Ridge and sandy plumes);
B – Northern part of Zaysan Hollow and foothills of Southern Altai;
C – Foothills of south-eastern part of Altai (Uba basin);
D – Kazakh Uplands and undulating plains of Northern Balkhash area and Central Kazakhstan Uplands;
E – Uplands and piedmont plains of the Eastern Kazakhstan Uplands and northern part of Alakol Basin;
F – Saur Ridge, eastern slope of the Tarbagatai and Kalba Ridges.*

4. Breeding in Kazakhstan.

4.3. East group.



*Nests of Steppe Eagle in the northern foothills of the Dzungarian Alatau.
Photo by Karyakin I., Pulikova G.*



*Field work.
Photo by Nikolenko E., Pulikova G.*

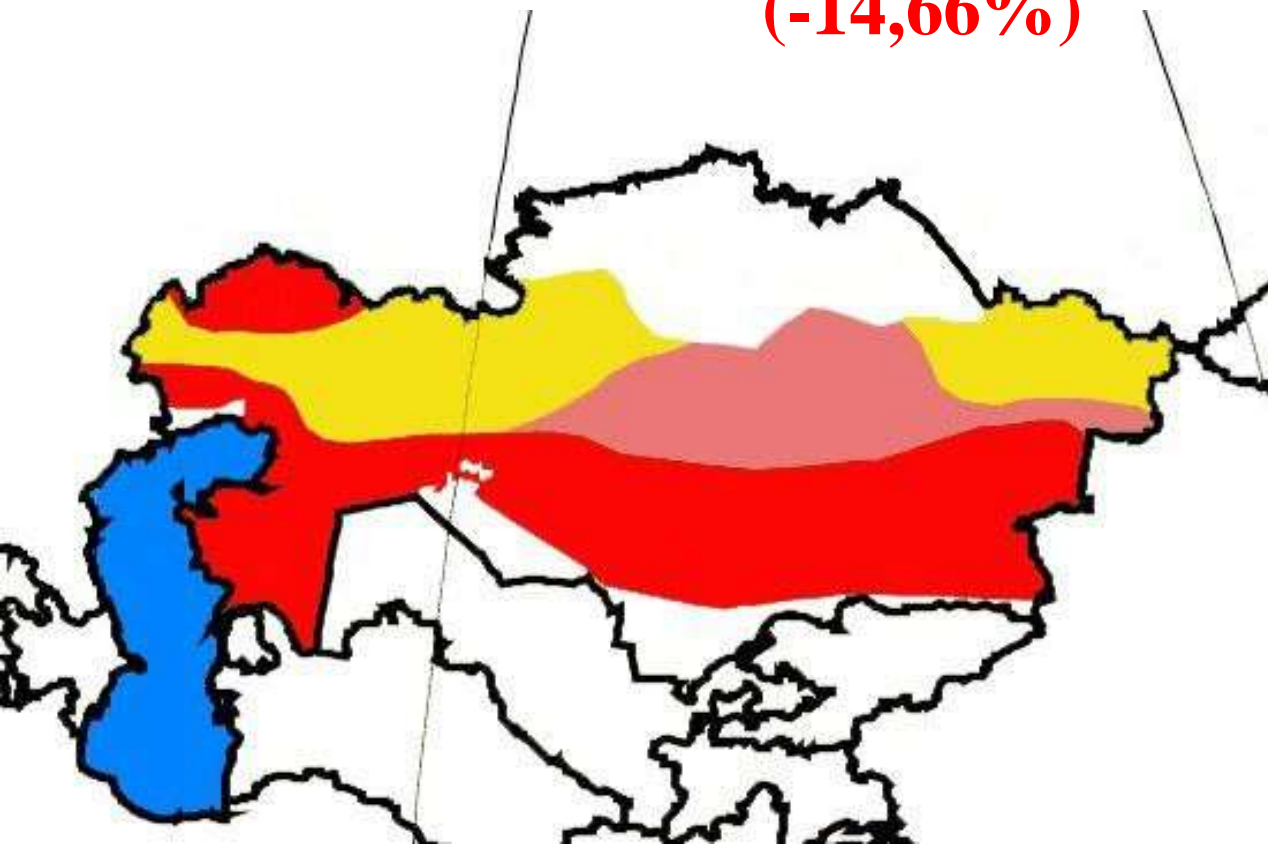
5. The population estimate (2023).

2018
an average 26 260 pairs
(20 950–31 570 pairs)






-3,850 pairs
(-14,66%)

2023
an average 22 410 pairs
(16 750–28 070 pairs)



Status of the Steppe Eagle nesting groups in Kazakhstan:

-  *stable;*
-  *moderately decreasing;*
-  *strongly decreasing up to complete extinction in some areas.*

6. Main threats.

- habitat loss and habitat degradation;
- electrocution on power lines;
- reduction in feeding resources;
- targeted and unintentional poisoning;
- intentional shooting and hunting;
- wind and (to a lesser extent) solar power generating facilities.



6. Main threats.

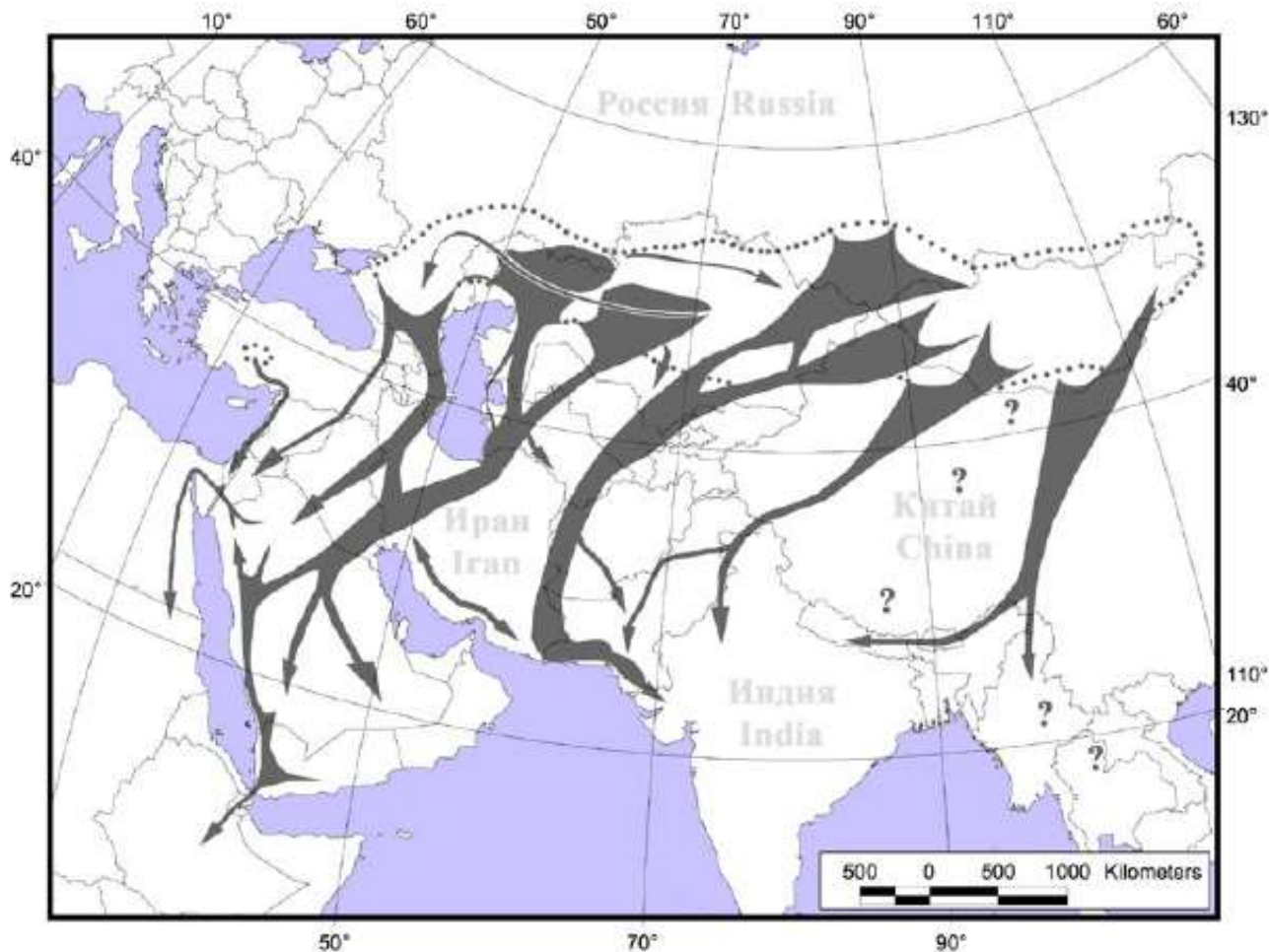
6.1. Reduction in feeding resources.



Spermophilus fulvus, *Spermophilopsis leptodactylus*, *Rhombomys opimus*, *Spermophilus undulatus*. Photo by Pulikova G.

7. Immature individuals and migrants in Kazakhstan.

Main flyways of the Steppe Eagles according to telemetry and visual observations



Karyakin I.V., Nikolenko E.G., Shnayder E.P., Zinevich L.S., Pulikova G.I., Bartoszek K., Horvath M., Juhász T., Aghababyan K., Andreenkova N.G. Results of the GPS/GSM-Tracking of Juvenile Steppe Eagles from Russia and Kazakhstan. (2019) [10.19074/1814-8654-2019-39-71-227](https://doi.org/10.19074/1814-8654-2019-39-71-227)

8. Conservation in Kazakhstan.

Kazakhstan is a key country in the conservation of the Steppe Eagle.



Steppe Eagles. Photo by Pulikova G.

The present status of the Steppe Eagle in Kazakhstan



BRCC

Biodiversity Research & Conservation

Contact details:

Biodiversity research and conservation center community trust

Address: Astana, Esil district, Kunayev str., 12/1, 420 office, postal index Z05H9B0

Site: <https://www.brcc.kz/>

E-mail: office@brcc.kz

Pulikova G. ornithologist-researcher

Mobile: +7 (701) 702768400

E-mail: genriyetta.pulikova@gmail.com