

## NEW DATA ON AMPHIBIANS AND REPTILES DISTRIBUTION IN THE RUSSIAN FAR EAST

E. V. Adnagulov,<sup>1</sup> I. G. Tarasov,<sup>2</sup> and V. V. Gorobeiko<sup>3</sup>

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The data on new findings of amphibians and reptiles in the Khabarovsk Territory, Amurskaya Region, and Evreiskaya Autonomous Region, obtained from 1990 to 1998 are reported. The information about records of *Bufo gargarizans* (Anura, Bufonidae) and *Hyla japonica* (Anura, Hylidae) on the limit of their distribution is included. The findings of *Amphiesma vibakari* and *Elaphe rufodorsata* (both Serpentes, Colubridae) are the first records of those reptiles in the Evreiskaya Autonomous Region and new for Middle Amur area. As for *E. rufodorsata* it is an extreme north-west location of the species in the Russian Far East. All the data of 248 locations are mapped.

**Key words:** Amphibians, Reptiles, distribution, Khabarovsk Territory, Amurskaya Region, Evreiskaya Autonomous Region.

Herpetological investigations in the Russian Far East are still incomplete. The areas of the North Sikhote-Alin' Range and territories northwards from Amur River are poorly studied. Literature data on the amphibian and reptiles ranges are insufficient and disordered. The herpetofauna of some Nature Reserves, founded recently such as Bureinskii, Dzhugzhurskii, Botchinskii, Bolonskii (Khabarovsk Territory), Norskii (Amurskaya Region), and Bastak (Evreiskaya Autonomous Region), is almost unknown. The information about amphibians and reptiles of those reserves is preliminary (Voronov 1997, 1998; Shlotgauer and Voronov 1997). However, information about distribution and biology of amphibians and reptiles has not only scientific value, but also is important for nature use and protection, for making ecological impact assessments and conducting prognostic research into population changes of different species.

From 1990 to 1998 we studied some areas in the Khabarovsk Territory, Amurskaya Region, and Ev-

reiskaya Autonomous Region. New data on distribution, relative abundance and biology of the amphibians and reptiles were obtained and are listed in this paper. All cases of findings are mapped in chronological order. Some data were published (Adnagulov 1996a, 1996b, 1997, 1998; Tarasov 1995). Personal notices, mostly oral of S. M. Smirensky (Moscow State University), A. L. Antonov, K. G. Bakanov, I. D. Debelaya, S. M. Kremlev, S. V. Kramnaya, V. A. Kuptsova, V. V. Pronkevich, A. G. Roslyakov, V. M. Sapaev, and V. V. Shamov (IWEP, FEB RAS, Khabarovsk, Russia), A. I. Antonov, A. F. Bylkov, V. N. Zolotykh, S. Yu. Ignatenko, E. V. Ignatenko, M. P. Parilov, V. A. Chubykin, N. S. Shingarev (Khinganskii State Nature Reserve), A. K. Bondarenko, K. N. Tkachenko (Bolshekhkhtsirskii State Nature Reserve), A. N. Stepanov (Fish Survey of Nanaiskii District, Khabarovsk Territory), V. M. Bozhenko (State Committee for Nature Conservation and Natural Resources of Nanaiskii District, Khabarovsk Territory) are used in present article. We are very grateful to Dr. Boris A. Voronov (IWEP, FEB RAS) for the data on Botchi River watershed and Lake Bolon' environs.

The following abbreviations and terms are used in this paper: *juv*) juvenile animals (first or second summer animals), *sad*) subadult, *ad*) adult, *in litt.*) written notice; BirSPI) Birobidzhan State Pedagogical Institute, KhSNR) Khinganskii State Nature Reserve, BKhSNR) Bolshekhkhtsirskii State Nature

<sup>1</sup> Institute of Water and Ecological Problems (IWEP), Far-East Branch of the Russian Academy of Sciences (FEB RAS), 65, Kim Yu Chen St., Khabarovsk 680000, Russia. E-mail: dv-herp@ivep.khv.ru

<sup>2</sup> State Committee for Nature Conservation and Natural Sources of Tomsk Region 14, Kirov Ave., Tomsk 634034, Russia. E-mail: tig@green.tsu.ru

<sup>3</sup> State Committee for Nature Conservation and Natural Sources of Evreiskaya Autonomous Region, 41a, Pionerskaya St., Birobidzhan 682200, Russia. E-mail: ecology@on-line.jar.ru

Reserve, BSNR) Bureinskii State Nature Reserve, DSNR) Dzhugdzhurskii State Nature Reserve; KSNR) Komsomol'skii State Nature Reserve. Administrative territories are abbreviated as follows: KhT) Khabarovsk Territory [Districts: AD) Amurskii, AMD) Ayano-Maiskii, BkD) Bikinskii, VaD) Vaninskii, VbD) Verkhnebureinskii, VD) Vyazemskii, KD) Komsomol'skii, LaD) Lazovskii, NaD) Nanaiskii, ND) Nikolaevskii, POD) P. Osipenko, SGD) Sovgavan'skii, TChD) Tuguro-Chumikanskii, KhD) Khabarovskii]; AR) Amurskaya Region [Districts: ArD) Arkharskii, BD) Bureiskii, RD) Romninskii]; EAR) Evreiskaya Autonomous Region [Districts: BrD) Birobidzhanskii, LD) Leninskii, ObD) Obluchskii, OkD) Oktyabr'skii].

Systematic names are given after the last published lists of amphibians and reptiles of the USSR (Borkin and Darevsky, 1987; Ananjeva et al., 1998) with nomenclature corrections after Orlov and Barabanov (1999). Amphibian larvae development stages are based on methods of Dabagyan and Slepsova (1975) and Sytina et al. (1987). The locations were studied by authors as follows: points 10, 13–16, 18, 19, 22–25, 27–32, 35, 36, 42–44, 46, 48, 50, 60, 61–66, 69–72, 75, 76, 78, 83, 84, 87–94, 96–99, 101, 121, 122, 131–135, 138, 142–149, 153–162, 164–166, 168, 169, 172, 174, 177, 180, 183, 187, 188, 196–200, 203, 207, 212–214, 224–226, 229, 230, 234, 235, 241–243, 245, 247, 248 — by E. V. Adnagulov; points 1–9, 11, 12, 20, 21, 34, 37–40, 49, 51–59, 68, 73, 74, 77, 79–82, 85, 86, 95, 100, 102–120, 123–129, 136, 137, 140, 141, 144, 167, 170, 171, 173, 182, 184–186, 189–195, 201, 204, 208–211, 215, 220–223, 227, 231–233, 238, 244, 246 — by I. G. Tarasov; and points 17, 26, 33, 41, 45, 47, 67, 130, 139, 150–152, 163, 175, 176, 178, 179, 181, 202, 205, 206, 216–219, 228, 236, 239, 240 — by V. V. Gorobeiko.

## AMPHIBIANS

### Siberian Newt

#### *Salamandrella keyserlingii* Dybowski, 1870 (Fig. 1)

1. KhT, VbD, Bureya R. watershed, Tuyun R. mouth, spawn, 1 *ad*; 24.05.92.
2. KhT, VbD, Tyrma R. watershed, Yaurin R. left bank, spawn; 27.05.93.
3. AR, ArD, Krasnaya Gorka, common; 1993–1997.
4. AR, BD, Dikan R. watershed, a stream bank close to Tatarskaya Mt., road pool, spawn; 31.05.94.
5. AR, ArD, Dikan R. watershed, Talaya R. left bank, 1 *ad*, spawn; 1.06.94.
6. AR, ArD, Dikan R. watershed, Sukhoi Klyuch creek right bank, spawn; 2.06.94.
7. AR, ArD, Dikan R. watershed, Pogorelka R. left bank, spawn; 3.06.94.
8. AR, ArD, Dikan R. watershed, foot of Sinyaya Mt., spawn; 4.06.94.
9. AR, BD, interstream area of Bureya and Dikan R., Kulu-staichik R. right bank, spawn; 5.06.94.
10. KhT, AD, egg sacks and adult animals ("water newts") from late April to early May are rarely met in different shallow pools in vicinity of Dzhuen; 20.07.95 (interrogated data).
11. AR, ArD, Pervy Kluch, 1 *ad*; 17.04.96 (A. F. Bylkov, 1996, personal communication).
12. AR, ArD, vicinity of Arkhara, road pool, *ad*; 1996 (A. I. Antonov, 1996, personal communication).
13. KhT, NaD, Anui R. watershed, Vtoroi Zaur R. valley [elevation about 700 m above sea level (a.s.l.)], 22 clutches of different development stages — approximately from 15-th to 25-th. The number of eggs per sack was counted in 14 clutches. It was 24 (–) up to 68 (21) eggs, 52.1 in average (the number of undeveloped eggs is braced, perhaps unfertilized), *ad* were not met; 5.06.96.
14. KhT, VbD, after interrogated data, it is met in the BSNR in the valleys of Bureya, Levaya Bureya and Pravaya Bureya R.; August 1996 (A. I. Antonov, 1996, personal communication).
15. KhT, LaD, Khor R. watershed, Dolmi R. lower part, road pool, 8 clutches; 30.04.97.
16. KhT, AMD, Kurun-Uriakh, after interrogated data, it is common in the village and its vicinity; 18.06.97 (A. L. Antonov, 1997, personal communication).
17. EAR, BrD, Birobidzhan – Birofeld highway, 9-th km, the forest pool on the arboreal park boundary, 1 *ad*; July 1997.

#### Asiatic Grey Toad *Bufo gargarizans* Cantor, 1842 (Fig. 2)

18. KhT, ND, vicinity of Chnyrrakh, larch, alder and birch mixed forest, southern dry stony slope, 1 *ad*; July 1989 (A. L. Antonov, 1997, personal communication).
19. KhT, TChD, Tugur-Nimelen plain, Tugur R. right bank, toads of different ages were met; July, 1989 (V. M. Sapaev, 1998, personal communication).
20. EAR, ObD, vicinity of Pashkovo, quarry and small-leaved forest, 3 *sad* and 1 *ad* female; 24.05.90.
21. AR, BD, vicinity of Kulustai, Bureya R., river arm left bank, 1 *sad* and 1 *ad* female; 5–6.06.94.
22. KhT, BkD, vicinity of Pokrovka, middle Uglevaya R., broad-leaved forest, apiary, 5 animals; 6.07.94.
23. KhT, BkD, vicinity of Vasil'evka, Ussuri R. right bank, boundary of wet flood-plain meadow and broad-leaved forest, *juv*, 2 *ad*; 8.07.94.
24. KhT, LaD, Matai R. watershed, Zheltyi creek (Kabanii R. tributary), mixed coniferous and broad-leaved forest, 1 *ad* female; 15.07.94.
25. KhT, LaD, Matai R. watershed, Kabanii R. (3rd Khima R. tributary), edge of the timber carrying road, 1 *ad* female; 16.07.94. Kept in IWEP, FEB RAS.
26. EAR, BrD, Ikura R. flood-plain, 10 km from Birobidzhan, oak and aspen forest, 1 *ad*; 29.05.95.
27. KhT, AD, Lake Bolon', Dzhuen, 2 *ad* females; 23.07.95.
28. KhT, LaD, Mukhen R. watershed, Shirokii R. bank (about 4 km eastwards from Zolotoi), 1 *ad* female; 5.08.95.
29. KhT, LaD, Khor R. left bank, vicinity of Sukpai village, 1 *ad* female and 2 *ad* males; 5.08.95.

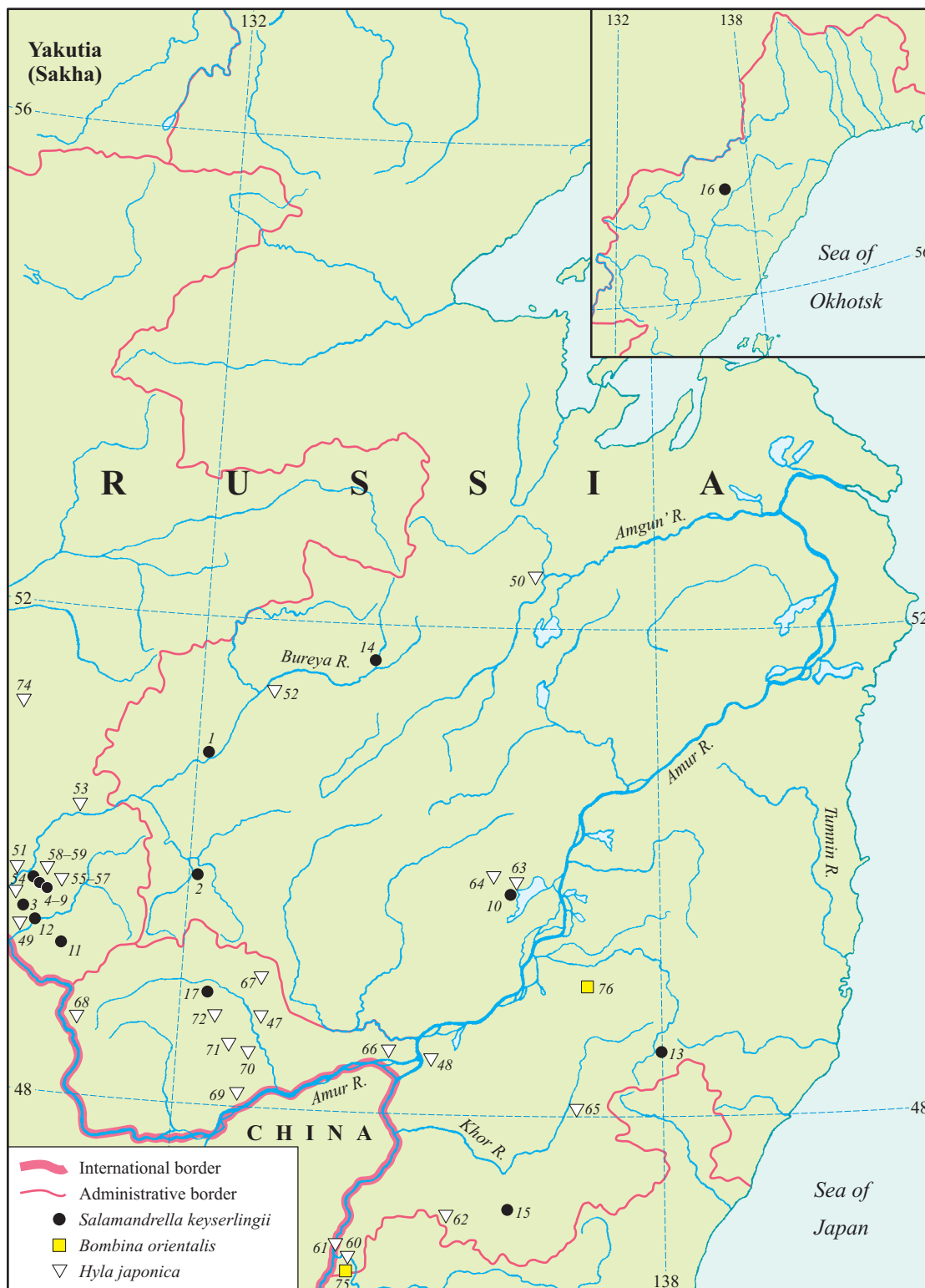


Fig. 1. Locations of *Salamandrella keyserlingii*, *Bombina orientalis*, and *Hyla japonica*.



Fig. 2. Locations of *Bufo gargarizans* and *B. raddei*.

30. KhT, KhD, Tarabarov Island, Zatirka, sand beach of Amur R., 2 *ad* females; 15.07.96.
31. KhT, KhD, Tarabarov Island, Zatirka, sand beach of Amur R., 1 *ad* female; 17.07.96.
32. KhT, KhD, Bol'shoi Ussuriskii Island, Shershiha Bay, single-sand beach of Amurskaya arm, 2 *ad*; 22.07.96.
33. EAR, BrD, Birobidzhan, arboreal park, oak-birch-maple forest, 1 animal; 15.08.96.
34. EAR, ObD, vicinity of Radde, Lagar R. left bank, mixed forest, road along the river, waste apiary, 4 *sad* and 1 *ad* female; 23 – 24.07.97.
35. KhT, KD, vicinity of Verkhnetambovskoye, Bystrina arm of Amur R., 2 *juv*; 24.09.97 (A. G. Roslyakov, 1997, personal communication).
36. EAR, LD, vicinity of Voskresenovka, south-east slope of Gomel' Mt., boundary of oak forest, wet meadow, 1 *sad* and 1 *ad* female; 13.06.98.

### Raddei's Toad *Bufo raddei* Strauch, 1876

(Fig. 2)

37. EAR, ObD, vicinity of Pashkovo, Lake Kamyshinoe, larvae; 24.05.90. Kept in KhSNR (No. 275).
38. AR, ArD, protected zone of the Antonovskoe forestry of KhSNR close to Lake Dolgoe, common in dry meadows and oak forests; 1992 – 1998.
39. AR, ArD, KhSNR, Lake Kleshenskoe bank, 1 *ad*; 15.07.93 (V. A. Kastrikin, 1993, personal communication). It is the first authentic registration of *B. raddei* in the Reserve.
40. AR, ArD, vicinity of Sagibovo, edge of an agricultural field and a road, 1 *sad*, 1 *ad* male and 1 *ad* female; 23 – 24.06.94.
41. EAR, BrD, Birobidzhan – Khabarovsk highway, 10-th km, dachas, vegetable-garden, 3 animals; 16.09.95. 1 specimen is kept in BirSPI.
42. KhT, KhD, Amur R. flood-plain, Tarabarov Island, Zatirka, meadow, 2 *ad* females; 16.07.96.
43. KhT, KhD, Amur R. flood-plain, Bol'shoi Ussuriskii Island, Bezumka arm, meadow, 2 *ad*; 18.07.96.
44. KhT, KhD, Amur R. flood-plain, Bol'shoi Ussuriskii Island, sand-shingle beach of Amurskaya arm, 14 *ad* males and 34 *ad* females; 22.07.96.
45. EAR, BrD, 11 km to the south-east from Valdgeim, agricultural field, 2 animals; 2.09.96.
46. EAR, LD, vicinity of Voskresenovka, south-east slope of Gomel' Mt., edge of oak forest, wet meadow, 1 *sad*; 13.06.98.

### Japanese Tree Frog *Hyla japonica* Günther, 1859

(Fig. 1)

47. EAR, BrD, vicinity of Krasnyi Vostok. During 1988 – 1998 single animals were met regularly in summer time. 1 specimen is kept in BirSPI.
48. KhT, Khabarovsk, Russia, vicinity of Krasnaya R. mouth, bushy meadows in waste lands, male voices activity is during summer months, every year; 1988 – 1998.
49. AR, ArD, Arkhara, common; 1990 – 1998.
50. KhT, POD, P. Osipenko village, 1 *ad* male was met in center of the village; 24.05.90 (V. V. Pronkevich, 1991, personal communication).
51. AR, ArD, vicinity of Krasnaya Gorka, larvae, 2 *juv*; 4.08.91.
52. KhT, VbD, Bureya R. watershed, Tuyun R. mouth, voice activity; 24.05.92.
53. AR, BD, Bureya R. left bank, 2 km upstream of Talakan R. mouth, voice activity; 2.06.92.
54. AR, ArD, vicinity of Ukrainka, road, larvae, 4 *ad*; 30.06.93.
55. AR, BD, road in interstream of Bureya and Dikan Rs., 1 *sad*; 30.05.94.

56. AR, ArD, Dikan R. watershed, Talaya R. left bank, voice activity; 31.05 – 1.06.94.
57. AR, ArD, Dikan R. watershed, Pogorelka R. left bank, voice activity; 3.06.94.
58. AR, BD, Bureya R. left bank, vicinity of Kulustai, bank of Lake Tazanka, 1 *sad*, voice activity; 5.06.94.
59. AR, BD, interstream area of Bureya and Dikan Rs., Kulustaichik R. right bank, 1 *sad*, voice activity; 5.06.94.
60. KhT, BkD, vicinity of Pokrovka, middle Uglevaya R., broad-leaved forest, apiary, pool, larvae; 6.07.94.
61. KhT, BkD, vicinity of Vasil'evka, voice activity; 8.07.94.
62. KhT, LaD, Matai R. watershed, Zheltyi creek (Kabanii R. tributary), mixed coniferous and broad-leaved forest, voice activity, larvae; 15.07.94.
63. KhT, AD, Lake Bolon', Dzhuen, 21 *ad* males; 19.07.95.
64. KhT, AD, Lake Bolon', Dzhuen and Bolon' villages, voice activity; 19 – 26.07.95.
65. KhT, LaD, Khor R. left bank, Sukpai village, larvae, voice activity; 7.08.95.
66. KhT, KhD, Amur R. flood-plain, Tarabarov Island, Zatirka, meadow, single voices of male; 16.07.96.
67. EAR, BrD, Birobidzhan – Kukan highway, 7th km, larch and birch marshy forest, shallow pool; 600 – 800 *juv* finishing metamorphose; 24.08.96.
68. EAR, ObD, vicinity of Radde, Lagar R. left bank, a road in mixed forest along river, voice activity; 24.07.97.
69. EAR, LD, Amur R. left bank, Vertoprashikhka bay (about 5 km downstream of Leninskoe), edge of aspen and oak forest, meadow; 3 *ad*; 25 – 26.07.97 (V. V. Shamov, 1997, personal communication).
70. EAR, BrD, Alekseevka, voice activity; 13.06.98.
71. EAR, BrD, Birofeld, voice activity; 13.06.98.
72. EAR, BrD, foot of Shuki-Poktoi Range east slope, reservoirs along Birobidzhan – Birofeld highway, voice activity; 13.06.98.
73. AR, RD, Tom' R. watershed, Aleun R. mouth, voices; June 1998 (M. P. Parilov, 1998, personal communication).
74. AR, RD, Tom' R. watershed, middle Aleun R. close to Malaya Dzelindka R. mouth, voices; June 1998 (M. P. Parilov, 1998, personal communication).

### Oriented Fire-Bellied Toad

#### *Bombina orientalis* (Boulenger, 1890)

(Fig. 1)

75. KhT, BkD, foot of Strel'nikovskii Range, vicinity of Pokrovka, middle Uglevaya R., edge of the mixed coniferous and broad-leaved forest, road pools, 18 *ad*, larvae (Adnagulov, 1996a); 6.07.94. 3 *ad* kept in IWEP, FEB RAS.
76. KhT, NaD, Kartanga R. valley, bushy small-leaved forest, 10 – 11 *ad*; 6 – 7.07.98 (S. V. Kramnaya, 1998, personal communication).

### Siberian Wood Frog

#### *Rana amurensis* Boulenger, 1886

(Fig. 3)

77. AR, ArD, Ganukan Reserve, Lake Bolotnoe, hibernating cave, 30 *sad*, 83 *ad* males and 81 *ad* females; 25.03.90. Kept in KhSNR (Nos. 94 – 255, 494 – 526).
78. KhT, TChD, vicinity of Tugur village, Kutyn R. flood-plain, marsh; past-fire larch forest, *juv*, *sad*, and *ad*; August – September 1990.
79. AR, ArD, Arkhara, common; 1990 – 1998.
80. KhT, VbD, Bureya R. watershed, Tuyun R. mouth, marshy light larch forest, 2 *sad* and 1 *ad* female; 24.05.92. 1 *sad* and 1 *ad* female kept in KhSNR (Nos. 528 – 529).

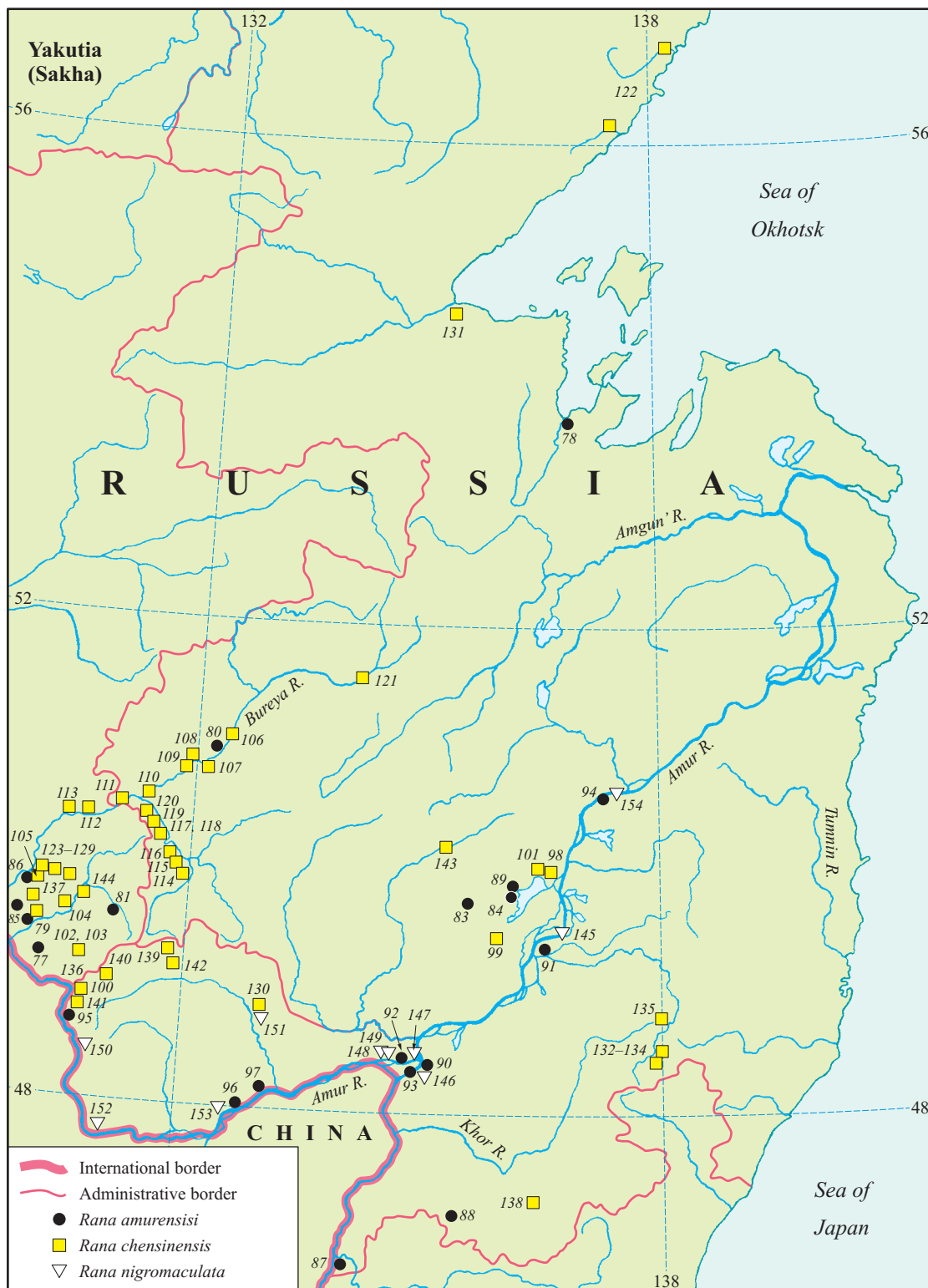


Fig. 3. Locations of *Rana amurensis*, *R. chensinensis*, and *R. nigromaculata*.

81. AR, ArD, Arkhara R. watershed, Vodopadnaya R. bank (Salokachi R. left tributary), marshy light larch forest, 1 *sad*; 29.06.92 (S. Yu. Ignatenko and E. V. Ignatenko, 1992, personal communication).
  82. AR, ArD, vicinity of Ukrainka, larvae, 1 *juv*, 1 *sad*, 1 *ad*; 29 – 30.06.93. Larvae is kept in KhSNR (No. 585).
  83. KhT, AD, Kharpi R. left bank downstream of Al'kan R. mouth, meadow, 4 *ad*; 15.08.93.
  84. KhT, AD, Lake Bolon', vicinity of Dzhuen, foot of Chaura Mt., 4 *ad*; 18.08.93.
  85. AR, ArD, Krasnaya Gorka, common; 1993 – 1997.
  86. AR, BD, Bureya R. left bank, vicinity of Kulustai, 1 *ad* male; 7.06.94.
  87. KhT, BkD, Bikin R. left bank, flood-plain meadow (pasture), 9 *juv*; 6.07.94.
  88. KhT, LaD, Matai R. watershed, Zheltyi creek (Kabanii R. tributary), mixed coniferous and broad-leaved forest, 5 animals; 15.07.94.
  89. KhT, AD, Lake Bolon', vicinity of Dzhuen, 1 *ad* female; 21.07.95.
  90. KhT, Khabarovsk, 21 *ad*, 18 of them crushed by vehicle wheels (Adnagulov, 1998); 26.04.96.
  91. KhT, NaD, Anui R. right bank, close to Manoma R. mouth, edge of broad-leaved forest, meadow, 6 individuals with body length 25 – 45 mm; 19.06.96.
  92. KhT, KhD, Amur R. flood-plain, Bol'shoi Ussuriskii Island, Bezumka arm, meadow, 1 *sad*, 2 *ad* males; 18.07.96.
  93. KhT, KhD, Amur R. flood-plain, Bol'shoi Ussuriskii Island, Shershikha bay, shingle-sandy beach of Amurskaya arm, 1 *ad*; 22.07.96.
  94. KhT, KD, vicinity of Verkhnetambovskoe, Chernaya arm, 2 *juv*; 26.06.97 (A. G. Roslyakov, 1997, personal communication).
  95. EAR, ObD, flood-plain lakes to the north-west of Radde, 1 animal; 13.07.97.
  96. EAR, LD, Amur R. left bank, Vertoprashikha bay (about 5 km from Leninskoe), edge of aspen and oak forest, meadow; 18 *sad*; 25 – 26.07.97 (V. V. Shamov, 1997, personal communication).
  97. EAR, LD, vicinity of Voskresenovka, south-east slope of Gomel' Mt., edge of oak forest, wet meadow, common; 13.06.98.
- Rana chensinensis* David, 1875**  
(Fig. 3)
98. KhT, AD, Lake Bolon', Cape Nergul', stony bank, 1 animal; 24.05.81 (B. A. Voronov, 1999 — *in litt.*).
  99. KhT, NaD, Simmi R. left bank (Lake Bolon' tributary), close to Kirpu R. mouth, aspen and birch forest, 1 animal; 8.07.81 (B. A. Voronov, 1999 — *in litt.*)<sup>4</sup>.
  100. EAR, ObD, vicinity of Pashkovo, quarry, 1 *ad* female; 24.05.90.
  101. KhT, AD, Lake Bolon', vicinity of Achan, north-west foot of Ketel-Gogdaktani Mt., 1 animal; 23.06.90 (B. A. Voronov, 1999 — *in litt.*).
  102. AR, ArD, Arkhara, 1 *sad*; 19.09.90.
  103. AR, ArD, Arkhara, 1 *sad* and 1 *ad* male; 7 – 8.10.93.
  104. AR, ArD, vicinity of Gribovka, Ilga R. right bank, 2 *sad* and 1 *ad* female; 12.09.91.1 *ad* female was kept in KhSNR (No. 489), now is kept in Amurskii Regional Museum of Local Lore, Blagoveshchensk.
  105. AR, ArD, Bureya R. left bank, vicinity of Domikan, voice activity; 2.05.92.
  106. KhT, VbD, Chekunda, voice activity; 23.05.92.
  107. KhT, VbD, Bureya R. watershed, Tuyun R. mouth, 1 *sad* and 4 *ad* females; 24.05.92. 1 *sad* and 2 *ad* females kept in KhSNR (Nos. 530 – 532).
  108. KhT, VbD, Bureya R. watershed, Talaya R. mouth, 1 *sad*, 6 *ad* males, 3 *ad* females; 25 – 27.05.92. 1 *sad*, 5 *ad* males, 1 *ad* female kept in KhSNR (Nos. 533 – 536, 538 – 540).
  109. KhT, VbD, Bureya R. watershed, Bol'shoi Chalbakh R. mouth, 1 *ad* male; 27.05.92. Kept in KhSNR (No. 541).
  110. KhT, VbD, Bureya R. right bank opposite Tyrma R. mouth, 1 *sad*; 28.05.92. Kept in KhSNR (No. 542).
  111. KhT, VbD, Bureya R. watershed, Maidakan R. mouth, larch forest, larvae; 29.05.92. Kept in KhSNR (No. 567).
  112. AR, BD, Bureya R. watershed, Loginsky creek mouth, 4 *sad* and 1 *ad* male; 1.06.92. Kept in KhSNR (Nos. 543 – 547).
  113. AR, BD, Bureya R. right bank, 2 km upstream of Talakan R. mouth, 10 *sad*, 4 *ad* females and 2 *ad* males; 2 – 3.06.92. 4 *sad*, 2 *ad* males and larvae kept in KhSNR (Nos. 548 – 553, 569).
  114. KhT, VbD, Tyrma R. watershed, vicinity of Alanap, Yaurin R. left bank, 2 *ad* females; 27.05.93. 1 *ad* female kept in KhSNR (No. 571).
  115. KhT, VbD, Tyrma R. right bank close to Yaurin R. mouth, larvae; 27.05.93. Kept in KhSNR (No. 573).
  116. KhT, VbD, Tyrma R. left bank, close to Yaurin R. mouth, sulfur-hydrogen source, larvae, 1 *sad*; 27 – 28.05.93. Larvae kept in KhSNR (No. 574).
  117. KhT, VbD, Tyrma R. left bank, close to Tygan creek, 1 *sad*; 29.05.93.
  118. KhT, VbD, Tyrma R. watershed, Tygan creek left bank, 4 *sad* and 1 *ad* female; 30.05.93. 1 *ad* female kept in KhSNR (No. 572).
  119. KhT, VbD, Tyrma R. watershed, Bol'shoi Darun R. right bank, larvae; 30.05.93. Kept in KhSNR (No. 575).
  120. KhT, VbD, Tyrma R. watershed, Lakamun R. mouth, 1 *sad*; 31.05.93.
  121. KhT, VbD, Bureya R. right bank, about 5 km upstream of Usman' R. mouth, opposite the water monitoring station, 20.06.93 (A. L. Antonov, 1998, personal communication).
  122. KhT, AMD, DSNR, individuals of different ages were noted in Aldoma and Lantar' R. valleys; August 1993 (A. L. Antonov, 1993, personal communication).
  123. AR, BD, road interstream of Bureya and Dikan Rs., 3 frogs crushed on road; 30.05.94.
  124. AR, BD, Dikan R. watershed, the creek bank by Tatarskaya Mt., road pool, larvae; 31.05.94.
  125. AR, ArD, Dikan R. watershed, Talaya R. left bank, 2 *ad* females; 1.06.94.
  126. AR, ArD, Dikan R. watershed, Sukhoi Kluch R. right bank, 2 *sad*, 1 *ad* male and 1 *ad* female; 2.06.94.
  127. AR, ArD, Dikan R. watershed, Pogorelka R. left bank, 2 *sad*, 4 *ad*; 3 – 4.06.94.
  128. AR, BD, interstream of Bureya and Dikan R., Kulustaichik creek right bank, 5 *sad*, 1 *ad* female and 1 *ad* male; 5.06.94.
  129. AR, BD, Bureya R. left bank, vicinity of Kulustai, 40 *sad*, 6 *ad* females and 3 *ad* males; 5 – 7.06.94.
  130. EAR, BrD, Bira R. left bank, downstream of Birobidzhan, 1 *ad* male; 22.04.95.
  131. KhT, TChD, vicinity of Chumikan, *sad* and *ad* were noted; September 1995 (V. A. Kuptsova, 1995, personal communication). 4 *ad* kept in IWEP, FEB RAS.
  132. KhT, NaD, Anui R. watershed, Vtoroi Zaur R. valley (about 700 m a.s.l.), larvae in 35 – 38-th development stages; 5.06.96.

<sup>4</sup> Probably *R. amurensis*, because the biotope is not adequate for *R. chensinensis*.

133. KhT, NaD, Anui R. watershed, Vtoroi Zaur R. valley (about 700 m a.s.l.), 1 *ad* female, perhaps, had not spawned: some eggs with swollen membranes felt from cloaca; whereas the tadpoles in the same place were aged about 8 – 10 to 17 – 20 days according to stages of development; 6.06.96.
134. KhT, NaD, Anui R., close to Vtoroi Zaur R. mouth (about 680 m a.s.l.), shingle bank, individuals of different ages, mainly *sad*, with body length 25 – 40 mm; 6.06.96.
135. KhT, NaD, Anui R., close to Bezmyanny and Prianuiskii creeks mouths, grassy areas of Anui R. bank, 11 *sad*; 9.06.96.
136. AR, ArD, vicinity of railway station Tonnelnyi, Ammonal'nyi creek dam, 5 tadpoles were noted; 17.09.96 (V. A. Kastrikin, 1996, personal communication). 1 larva (49-th stage) kept in KhSNR (No. 607).
137. AR, ArD, vicinity of railway station Zhuravli, small-leaved forest, voice activity; 17.04.97.
138. KhT, LaD, Khor R. watershed, lower part of Sagdy-Selanka R. (Kafe R. tributary), pools beside of timber carrying road with total water surface about 400 m<sup>2</sup>, 150 clutches were noted; 3.05.97.
139. EAR, ObD, Kul'dur, the shallow pool, 3 – 4 *ad* and numerous tadpoles; 18.06.97. 2 *ad* and a few *juv* kept in Local Lore Museum of Kul'dur.
140. EAR, ObD, vicinity of Yadrino, Malaya Sololi R. left bank, 1 *sad* and 1 *ad*; 22.07.97.
141. EAR, ObD, vicinity of Radde, Lagar R. left bank, deciduous forest, 3 *juv*, 3 *sad*, 2 *ad*; 23 – 24.07.97.
142. EAR, ObD, Bira R. watershed, lower valley of Karagai creek (Kul'dur R. tributary), a secondary birch forest, tadpoles in forest road pools; 12.06.98.
143. KhT, KhD, Kur R. watershed, close to Yuzhnaya Bargarga R., 1 *ad*; 15.07.98 (V. M. Sapaev, 1998, personal communication).
144. AR, ArD, Arkhara R. watershed, Bol'shoi Dydy R. mouth, river bank, 1 *ad*; July 1998 (A. F. Bylkov, 1998, personal communication).

### ***Rana nigromaculata* Hallowell, 1861** (Fig. 3)

145. KhT, NaD, Slavyanka, marshy meadow, common, every year 1982 – 1997.
146. KhT, Khabarovsk, Krasnaya R. mouth vicinity, bushy meadows, in summer months mating males' voice activity is noted; 1988 – 1998.
147. KhT, KhD, Amur R. flood-plain, Bol'shoi Ussuriskii Island, vicinity of dachas "Sedmye Stvory", meadows in the former river arm, 4 *ad* females, 3 *ad* males, 11 *sad*; 9.07.95.
148. KhT, KhD, Amur R. flood-plain, Tarabarov Island, Zatirka, sand beach of Amur R., 4 *ad* females, 2 *ad* males; 16.07.96.
149. KhT, KhD, Amur R. flood-plain, Bol'shoi Ussuriskii Island, Bezumka arm, meadow, 4 *ad*; 18.07.96.
150. EAR, OkD, Levaya Starikova R., flood-plain meadow, 1 animal; 22.07.96.
151. EAR, BrD, Bira R. flood-plain, vicinity of Krasnyi Vostok, quarry, 6 *ad* females and 3 *ad* males, 150 m from quarry is a shallow pool with numerous tadpoles; 5.06.97.
152. EAR, OkD, vicinity of Ekaterino-Nikol'skoe, foot of Medvezhii Utes Mt., willow bushes, 1 *ad* male; 6.07.97.
153. EAR, LD, Amur R. left bank, Vertoprashikha bay (about 5 km downstream of Leninskoe), edge of aspen and oak forest, meadow, 2 *ad*; 25 – 26.07.97 (V. V. Shamov, 1997, personal communication).

154. KhT, KD, vicinity of Verkhnetambovskoe, Bystrina arm, 1 *ad* male; 23.09.97 (A. G. Roslyakov, 1997, personal communication).

## **REPTILES**

### ***Pelodiscus sinensis* (Wiegmann, 1834)** (Fig. 4)

Interrogated data are mainly given on this species.

155. KhT, AD, vicinity of Achan, Serebryanaya arm, 1 animal; 25.05.81 (B. A. Voronov, 1999 — *in litt.*).
156. KhT, BkD, vicinity of Vasil'evka, many small (total length of 10 – 12 cm, probably with head and tail) young turtles were noted in bays and arms of Bikin R. in 1993. Individuals of different ages are caught sometimes with fishing hooks and nets; July 1994.
157. KhT, VD, in vicinities of Sheremet'ovo on Ussuri arms banks and bays the cases of turtles' eggs collecting were noted in late 1980s to early of 1990s; July 1994.
158. KhT, AD, single animals are met very rarely in Lake Bolon' close Achan village in Sii arm (V. V. Shamov, 1995, personal communication).
159. KhT, KD, KSNR, Lake Bich-Khouni (lower part of Gorin R.) (Annals of KSNR, 1986).
160. KhT, NaD, very rarely met in Kafa and Girika arms (vicinities of Troitskoe and Slavyanka) (A. N. Stepanov, 1996, personal communication). A big animal (carapace length circa 22 – 25 cm) was caught with net in vicinity of Slavyanka in September 1995.
161. KhT, NaD, vicinity of Lake Gassi. Some individuals were noted crushed by vehicle wheels crossing the Khabarovsk – Komsomol'sk highway in 4 – 7 km from the bridge across Lake Gassi. Animals went towards Amur R. main-stream (K. G. Bakanov, 1996, personal communication). Turtles are met very often in Lake Gassi, on Osinovyi cape and on sand-and-silt shallows and beaches close to Pikhtsa and Khar R. mouths.
162. KhT, NaD. Besides Lake Gassi turtles are met in some close Amur R. arms. This reptile was common on Ori arm banks in 1980s. Adult animals were repeatedly met in Pirskeya arm in June – July, 1990. 4 – 5 turtles were met for each 10 km. On the sandy right bank of Pirskeya arm egg shells were found. Perhaps, it was the clutch destroyed by predators (crows?). More than 20 animals were noted in Ori arm in late October, 1990 (V. M. Bozhenko, 1996, personal communication). Turtles were met in Lake Pir, and in Amur R. flood-plain lakes and arms close Lake Gassi mouth.
163. EAR, LD, Bidzhan R. downstream of Preobrazhenovka, Cherepashii bay, traces on shallows of 1 *ad*; July 1993. Occasionally take the baits and is caught with nets along the river. Employees of Bidzhanskoe forestry met egg clutches repeatedly upstream of Bidzhan village. 1 animal was kept in iron barrel in the village.
164. KhT, KhD, Amur R. flood-plain, Bol'shoi Ussuriskii Island, adult animals and egg clutches are met occasionally in Shershikha bay (Amurskaya arm); 23.07.96 (A. K. Bondarenko, 1996, personal communication).

***Lacerta vivipara* Jacquin, 1787**

(Fig. 5)

165. KhT, SGD, Botchi R. watershed, was repeatedly met in burnt-out forests, and along Grosseovich — Mul'pu R. road; 20–25.07.66 (B. A. Voronov, 1998 — *in litt.*).
166. KhT, AD, Lake Bolon', Cape Nergul', stony bank, 1 animal; 24.05.81 (B. A. Voronov, 1999 — *in litt.*).
167. AR, ArD, Arkhara, common; 1990–1997.
168. KhT, AMD, Maya R. watershed, Bol'shoi Aihm R. valley, adult animals were met; July 1990 (I. D. Debelaya, 1990, personal communication).
169. KhT, TChD, 15 km to the north-west from Uda R. mouth, Barbashi creek left bank close to its mouth; 4.07.91 (B. A. Voronov, 1997 — *in litt.*).
170. KhT, VbD, Bureya R. watershed, Tuyun R. mouth, birch forest, 1 *ad* male; 23.05.92. Kept in KhNSR (No. 527).
171. AR, ArD, vicinity of Krasnaya Gorka, road, 1 animal; 28.06.92.
172. KhT, AMD, Lantar R. left bank, 4 km from its mouth, regenerated burnt-out forest on the south slope of a hill, edge of a road, 1 animal; 30.07.93. Local people say this species is very rare in vicinity of former Mal'tsevo (Lantar') village (B. A. Voronov, 1998 — *in litt.*).
173. AR, ArD, Dikan R. watershed, Pogorelka R. left bank, 1 *sad*; 3.06.94.
174. KhT, AD, Lake Bolon', vicinity of Dzhen, occasionally met on forest glades and close to small reservoirs; 19–26.07.95 (interrogated data).
175. EAR, BrD, Bastak Range, marshy light larch forest with birch and aspen, 2 individuals; 05.08.93. Kept in BirSPI.
176. EAR, OkD, Bidzhan R. watershed, Ashinga R. valley, wet meadow, 3 individuals; 24.07.96.
177. KhT, VbD, Bureya R. watershed, 5 km upstream of Usman' R. mouth, *juv*; 26–27.07.96 (A. L. Antonov, 1998, personal communication).
178. EAR, OkD, Bidzhan R. watershed, Ashikan R. valley, mossy marsh with larch, 1 animal; 27.07.96.
179. EAR, OkD, vicinity of Kul'dur, marble quarry eastwards of the settlement, 1 animal; 21.06.97.
180. KhT, AMD, Uchur R. watershed, Levy Duguyan R., Kvar-tsevala Mt. slope, adult animals; July 1998 (S. M. Kremlev, 1998, personal communication).

***Amphiesma vibakari* (Boie, 1826)**

(Fig. 4)

181. EAR, ObD, vicinity of Radde: "was common in 1974 through 1978"; (S. M. Smirensky, 1998, personal communication).
182. AR, ArD, KhSNR, Erakta R. valley, 1–3 snakes were met every year (total 17 individuals were noted); 1990–1997 (Tarasov, 1995).
183. KhT, KhD, BKHSNR, Chirki R. mouth, 2 *ad* males; this species has been noted in the Reserve for the first time (Dolgikh, 1993; Adnagulov, 1997); 24–25.07.91.
184. AR, ArD, vicinity of Domikan, Zmeinaya hill, 1 *ad* was captured by visiting terrariumists; 3.08.92 (S. Yu. Ignatenko, 1992, personal communication).
185. EAR, ObD, vicinity of Radde, Lagar R. left bank, waste apiary, 1 animal; 24.07.97. Kept in KhSNR (No. 611). This is the first authentic record of the species in EAR. Some morphological data of this specimen are the following:  $L = 300$  mm,  $L.cd = 87$  mm,  $Sq = 19$ ,  $Ventr = 150$ ,  $Scd = 57$  pairs.

186. AR, ArD, vicinity of Yadrino, 2 individuals were met under a stone on a hill; 1998 (V. A. Chubykin, 1998, personal communication).

***Elaphe dione* (Pallas, 1773)**

(Fig. 6)

187. KhT, SGD, Botchi R. watershed, lower part of Ikha R., mixed valley forest, about 7 m from the water; 24.06.66 (B. A. Voronov, 1998 — *in litt.*).
188. KhT, AD, Lake Bolon', Cape Nergul', stony bank, 1 animal; 24.05.81 (B. A. Voronov, 1999 — *in litt.*).
189. AR, ArD, Arkhara, common species in vicinity of the settlement; 1990–1997.
190. EAR, ObD, vicinity of Pashkovo, 3 km towards Radde, crushed on road, 1 *sad* male; 24.05.90. Kept in KhSNR (No. 276).
191. AR, ArD, Bureya R. left bank, vicinity of Domikan, Zmeinaya hill, 1 *sad*; 2.05.92.
192. AR, ArD, Arkhara–Obluch'e highway, vicinity of Rachi railway station, found dead; 18.08.93. Kept in KhSNR (No. 586).
193. AR, ArD, Dikan R. watershed, Sukhoi Klyuch creek right bank, quarry, 2 *sad*, 4 *ad* males; 1–2.06.94.
194. AR, ArD, Dikan R. watershed, Pogorelka R. left bank, apiary, 1 *sad* and 1 *ad* male; 3.06.94.
195. AR, ArD, Arkhara, 1 *sad* was killed by a local man in the vegetable-garden; 15.06.94. Kept in KhSNR (No. 588).
196. KhT, BkD, vicinity of Pokrovka, middle Uglevaya R., broad-leaved forest, apiary, 1 *sad* female; 6.07.94.
197. KhT, BkD, vicinity of Vasil'evka, Ussuri R. right bank, oak and lespedeza forest, rocks, 2 *ad* females and 1 *ad* male; 7.07.94.
198. KhT, AD, Lake Bolon', vicinity of Dzhen, *juv*, *sad* and *ad* were noted; 19–25.07.95.
199. KhT, LaD, Matai R. watershed, Shirokii R. (about 4 km eastwards from Zolotoi), 1 *ad* male; 7.08.95.
200. KhT, NaD, lower Anui R., foot of Obryvistaya Mt., cedar pine and broad-leaved forest, 1 *juv*; 17.06.96.
201. EAR, ObD, vicinity of Radde, Lagar R. left bank, waste apiary, 1 *ad* male; 23.07.97.
202. EAR, OkD, Tulovchikha R. valley, broad-leaved forest, 3 individuals; 9.07.97. In the Kraevedenie (Local Lore) Studio, Birobidzhan 1 *ad* female laid 6 eggs in August, 1997, 3 young snakes were hatched.
203. EAR, LD, vicinity of Voskresenovka, Gorn' Mt., edge of broad-leaved forest, wet meadow on the south-east gentle slope, 2 *ad*; 13.06.98.
204. AR, ArD, Zarechnoe, met in vicinity of the village (V. A. Chubykin, 1998, personal communication).

***Elaphe rufodorsata* (Cantor, 1842)**

(Fig. 4)

205. EAR, LD, vicinity of Voskresenovka, edge of light oak and birch forest, wet hillock meadow. 1 animal; 26.06.96. Kept in BirSPI. A few snakes were captured by V. Kh. Kryukov, Director of local school, for the Animalists school circle (V. Kh. Kryukov, 1996, personal communication).
206. EAR, LD, vicinity of Voskresenovka, 1 *sad*; August 1996.
207. EAR, LD, vicinity of Voskresenovka, Gorn' Mt., edge of light oak and birch forest, wet meadow on a gentle south-eastern slope, 2 females: 1 *sad* (circa 420 mm total length) and 1 *ad* (circa 680 mm total length); 13.06.98.



Fig. 4. Locations of *Pelodiscus sinensis*, *Amphiesma vibakari*, and *Elaphe rufodorsata*.

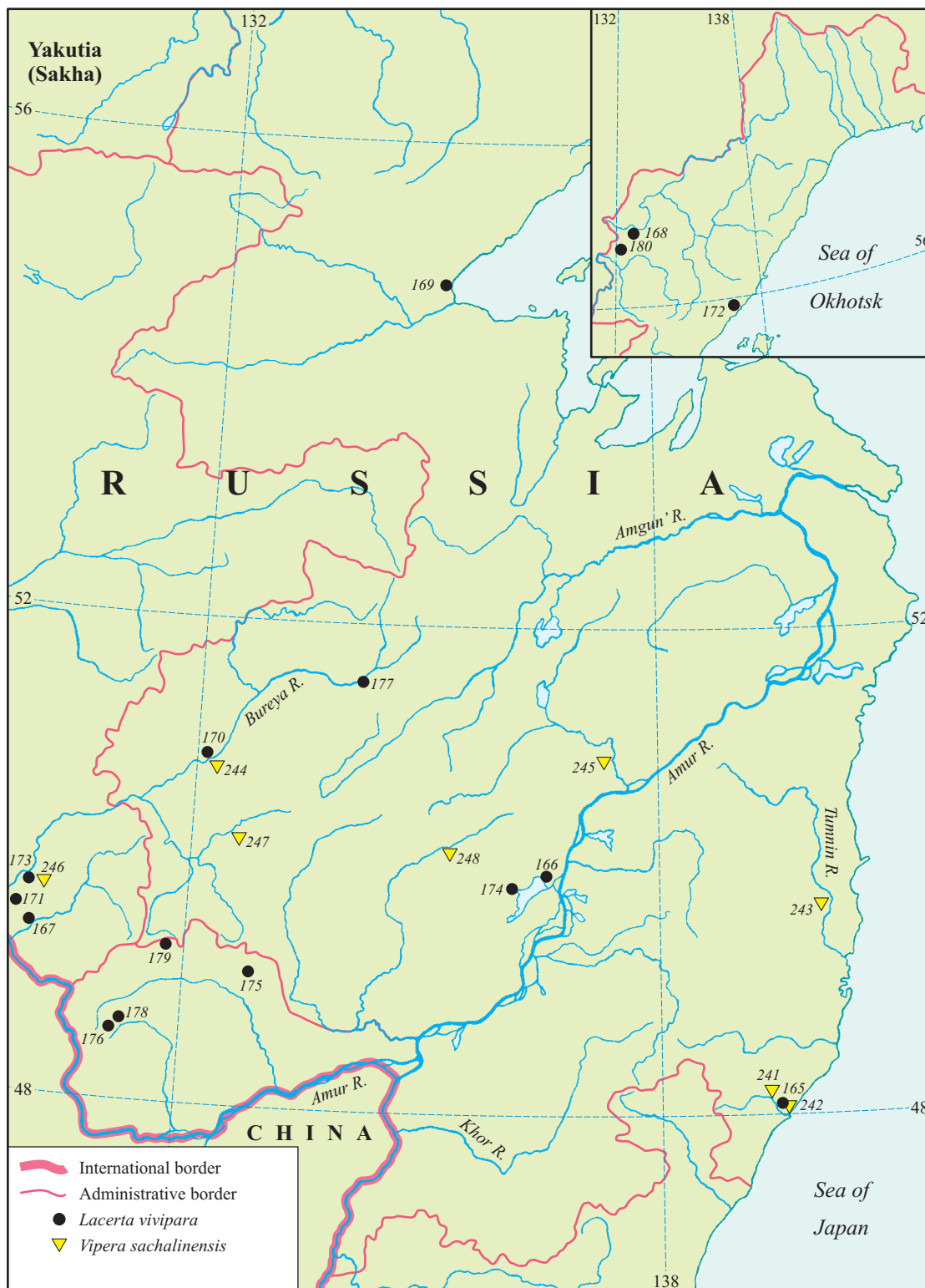


Fig. 5. Locations of *Lacerta vivipara* and *Vipera sachalinensis*.

***Elaphe schrenckii* (Strauch, 1873)**

(Fig. 6)

208. EAR, ObD, vicinity of Pashkovo, 2 *ad* were found crushed on the road; 23 – 24.05.90. 1 dead *sad* was confiscated from children; 31.05.90. Kept in KhSNR (No. 279).
209. EAR, ObD, vicinity of Pashkovo, 3 km from the village towards Radde, rubbish heap, 1 *sad* and 1 *ad*; 24.05.90.
210. AR, ArD, vicinity of Rachi railway station, common (interrogated data, 1991).
211. AR, ArD, Arkhara, 1 *ad* was captured by a local man; June 1994. 1 *ad* was killed by a local man in his vegetable-garden; 20.06.94.
212. KhT, VD, vicinity of Sheremet'ev, edge of mixed broad-leaved forest, Kamenushka R. mouth, 1 *ad* female and 1 *ad* male; 12.07.94.
213. KhT, AD, Lake Bolon', vicinity of Achan, Cape Serebryanyi Utes (Sii arm), occasionally met in secondary deciduous forests to the north and east from Lake Bolon' (interrogated data); 22.07.95 (V. V. Shamov, 1995, personal communication).
214. KhT, LaD, Matai R. watershed, Shirokii R. (about 4 km eastwards from Zolotoi), 1 *ad* female; 7.08.95.
215. EAR, ObD, vicinity of Radde, Lagar R. left bank, waste apiary, constantly met 2 *ad* and 1 *sad*; 23 – 24.07.97.
216. EAR, BrD, Bira R. flood-plain in vicinity of Birobidzhan, broad-leaved forest; 25.05.95. 1 *ad* female (156 cm total length) is kept in Kraevedenie Studio, Birobidzhan.
217. EAR, OkD, Tulovchikha R., broad-leaved forest, 2 *ad*; 9.07.97. 1 *ad* male (152 cm total length) is kept in Kraevedenie Studio, Birobidzhan.
218. EAR, OkD, Pompeevka R. mouth, broad-leaved forest, edge of the road, 1 *ad*; 10.07.97.
219. EAR, BrD, Bira R. flood-plain, Birobidzhan – Nadezhinskoe highway, edge of the road about 5 km from Zheltyi Yar, 1 *ad* male (circa 120 cm total length); 13.06.98.
220. AR, ArD, Zarechnoe, occasionally met in vicinity of the village (V. N. Zolotykh, 1991; V. A. Chubykin, 1998, personal communications).

***Gloydus ussuriensis* (Emelianov, 1929)**

(Fig. 7)

221. EAR, ObD, 3 km from Pashkovo towards Radde, near rubbish heap, 1 *ad* female; 24.05.90. Kept in Amurskii Regional Museum for Local Lore, Blagoveshchensk.
222. AR, ArD, Bureya R. left bank, vicinity of Domikan, Zmeinaya hill, 1 *ad*; 2.05.92.
223. AR, ArD, vicinity of Arkhara, quarry, 1 *ad*; 25.05.94.
224. KhT, BkD, vicinity of Pokrovka, middle Uglevaya R., broad-leaved forest, apiary, 2 *ad* were killed by local people; 6.07.94.
225. KhT, AD, Lake Bolon', vicinity of Dzhen, 3 *ad* males and 6 *ad* females; 18 – 25.07.95.
226. KhT, NaD, lower Anui R., foot of Obryvistaya hill, cedar pine and broad-leaved forest, 1 *juv*; 17.06.96.
227. EAR, ObD, vicinity of Radde, Lagar R. left bank, forest road along the river valley, 1 *juv*; 24.07.97. Kept in KhSNR (No. 610).
228. EAR, ObD, vicinity of Teplye Klyuchi, bridge across Bidzhan R., 2 *ad*; 11.06.97.
229. EAR, LD, vicinity of Voskresenovka, Gomel' Mt., edge of light oak and birch forest, wet meadow on a gentle southeastern slope, 2 *ad* females, 1 *ad* male and 3 *sad*; 13.06.98.

***Gloydus intermedius* (Strauch, 1868)**

(Fig. 7)

230. KhT, SGD, lower Bochi R. valley, 2 km northwards from Groshevichi, slope of a hill, burnt-out forest, 1 *ad*; 23.07.66 (B. A. Voronov, 1998 — *in litt.*)<sup>5</sup>.
231. KhT, VbD, Bureya R. right bank opposite Tyrma R. mouth, rocks, slough skin; 28.05.92.
232. AR, BD, Bureya R. right bank, 2 km upstream of Talakan R. mouth, small-leaved forest, 1 *sad*; 3.06.92. Kept in KhSNR (No. 554).
233. KhT, VbD, Tyrma R. watershed, Lakamun R. mouth, rocks, slough skin; 31.05.93.
234. KhT, AD, Lake Bolon', vicinity of Dzhen, Cape Saktakhonko, rocks, slough skin; 22.07.95.
235. KhT, NaD, Anui R. right bank, foot of Obryvistaya hill, 1 *ad* female; 17.06.96.
236. EAR, ObD, Kul'dur R. watershed, Karagai R. valley, broad-leaved forest, 4 individuals; 20.08.96.
237. KhT, LaD, Khor R. watershed, lower Sagdy-Selanka R. (Kafe R. tributary), coniferous and birch forest, southeastern stony slope, about 550 m a.s.l., 3 *ad*; 3.05.97. 1 *ad* male kept in IWEF, FEB RAS.
238. EAR, ObD, vicinity of Radde, Lagar R. left bank, area around wasted apiary, 2 *ad*; 23 – 24.07.97.
239. EAR, ObD, Kul'dur R. watershed, Karagai R. valley, stony slope of a hill, 1 animal; 26.06.97.
240. EAR, OkD, Drobovichnaya R., cedar pine and broad-leaved forest, rocky hill on the river bank, 1 animal circa 450 mm total length; 11.07.97.

***Vipera sachalinensis* Tzarewsky, 1916**

(Fig. 5)

241. KhT, SGD, Botchi R. watershed, lower Mul'pa R., meadow with light birch and alder forest, 3 *ad*; 31.05.66 (B. A. Voronov, 1998 — *in litt.*).
242. KhT, SGD, lower Botchi R. bank, near the water, 1 animal; 22.07.66. (B. A. Voronov, 1998 — *in litt.*).
243. KhT, VaD, Tumnin R. watershed, Tumninskii Range, middle Chope R., light larch forest with dwarf pine, about 800 m a.s.l., 2 *sad*; 20.09.91.
244. KhT, VbD, Bureya R. watershed, Tuyun R. mouth, 1 *ad* male; 25.05.92. Kept in KhSNR (No. 537).
245. KhT, KD, KSNR, Gorin R. right bank, Zolotoi creek mouth, 4 *ad*; 14.07.93.
246. AR, ArD, Dikan R. watershed, Pogorelka R. left bank, apiary, 1 *ad* female; 3.06.94. Kept in KhSNR (No. 587).
247. KhT, VbD, Tyrma R. watershed, upper Bukondzho R., (Sutyr' R. tributary), birch-larch forest, 1 *ad* female; 11.09.95.
248. KhT, KhD, Kur R. watershed, close to Yuzhnaya Bargarga R. mouth, 1 *ad*; 15.07.98 (V. M. Sapaev, 1998, personal communication).

The amphibians and reptiles occurrences and lists of habitats given in the present paper allow us to have a more precise idea about more real boundaries of the animals' ranges.

Some locations are new for Priamurye and the Far East continental part. So, *Bufo gargarizans* is dis-

<sup>5</sup> Without exact species name; oral description is most corresponded to *Agkistrodon intermedius*.

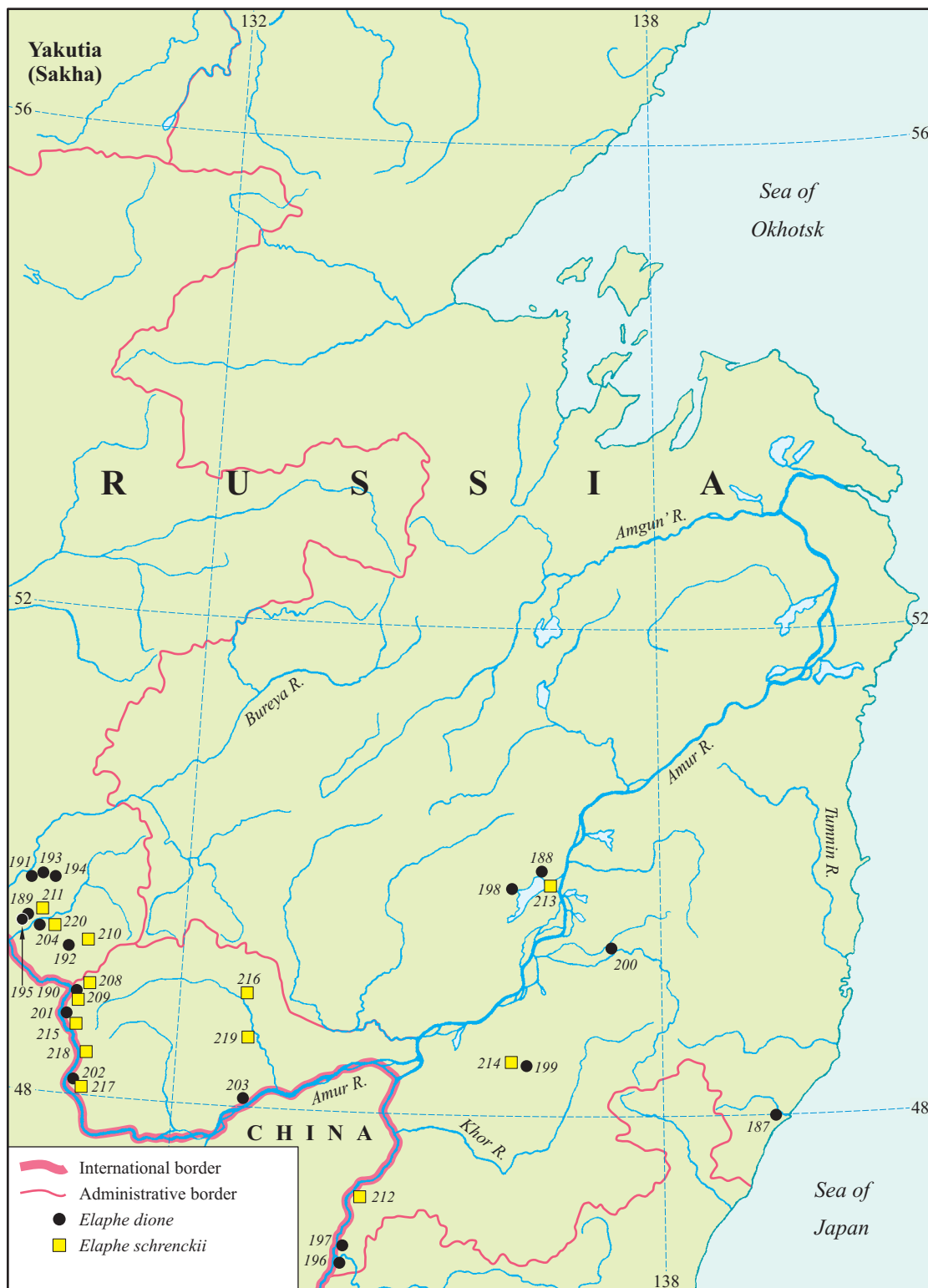


Fig. 6. Locations of *Elaphe schrenckii* and *E. dione*.

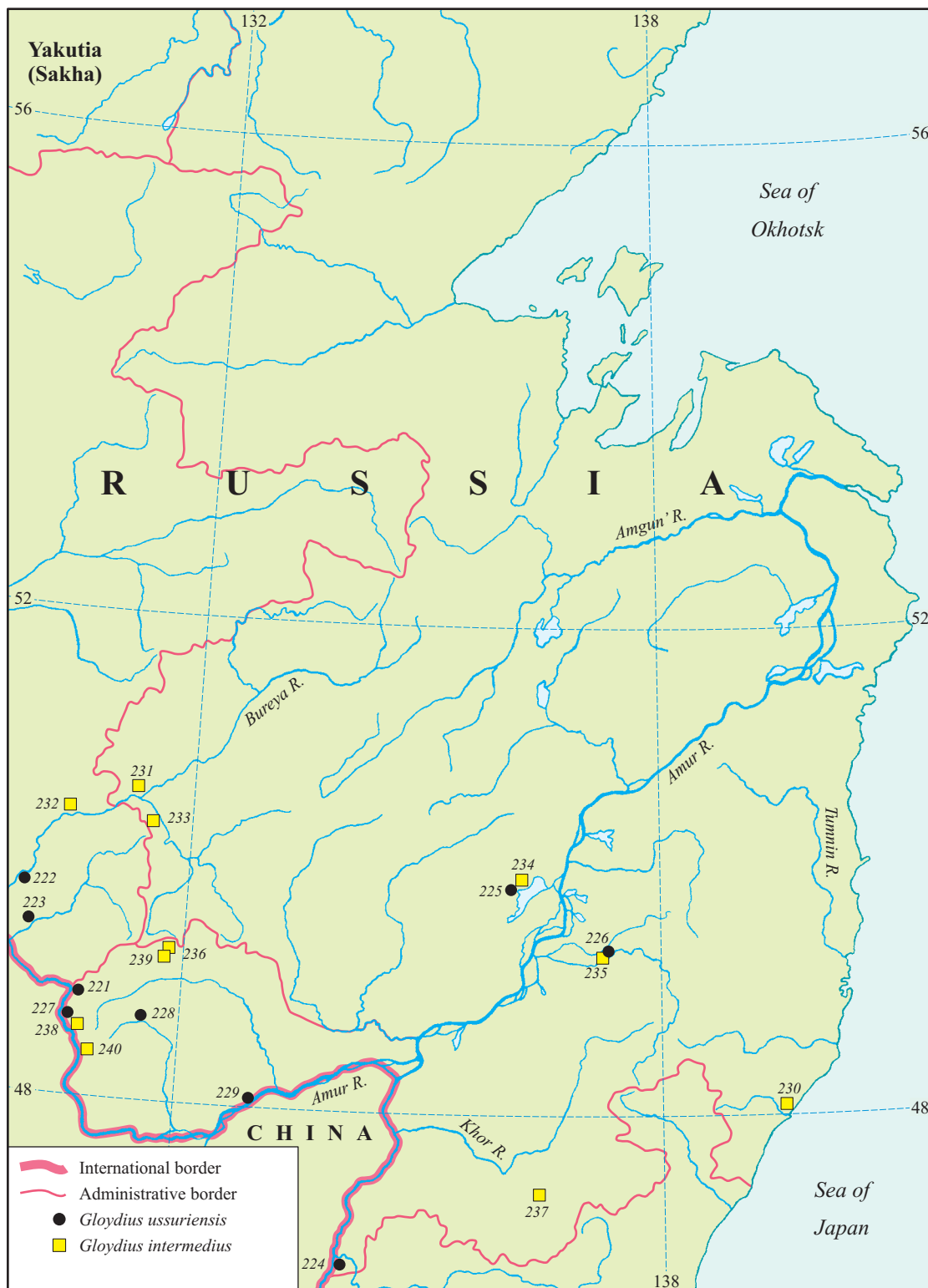


Fig. 7. Locations of *Gloydus intermedius* and *G. ussuriensis*.

tributed further to the north, than it was given before (Bannikov et al., 1977).

The records of *Hyla japonica* outside its known range (P. Osipenko, Sukpai) can be explained by high adaptation of the species to human activity. Occurrences of *H. japonica* in Bureya R. valley allow us to suppose a long-term “channel” which joins the populations of Verkhnebureinskaya plane (vicinity of Chegdomyn) (Bannikov et al., 1977; Tagirova, 1984; Kuzmin, 1995) with the main part of its range.

The records of *Rana chensinensis* in Bureya R. watershed allow us to consider this species to be more widely spread in the continental part of the Far East. It is proved by the fact that the species winters in mountain rivers and streams with stony bottoms (Kostenko and Belova, 1972; Korotkov, 1974; Strelkov, 1978). Such cases are numerous in the mountain areas of the examined territories.

*Amphiesma vibakari* was first noted in Priamur’e in 1959 in vicinity of Ommi (KhT, AD) (Kistiyakovsky and Smogorzhevsky, 1964), but since then there has been no other registrations in the same area. The meetings of this species after 1985 (Tagirova, 1986) allow us to suppose the existing of several populations, conventionally grouped into “Malyi Khingan” and “Khekhtsir.” The peculiarity of this species is its attraction to the valleys’ habitats in the mountain and foothill landscapes. It is remarkable that snakes were often noted not far from the water — small mountain and upland rivers and streams (Tarasov, 1995; Adnagulov, 1997). In Japan this species is a semiaquatic one (Morigushi, 1988). Apparently, *A. vibakari* is more widely spread in Priamur’e, but it is very difficult to find and observe this species because of its reserved life.<sup>6</sup>

The range of *Elaphe rufodorsata* given in the literature not accurate: “approximately to Zeya and Bureya rivers area” (Bannikov et al., 1977, pp. 283 – 284). Present locations data (vicinity of Voskresenovka) are first reliable information about this species in EAR. According to earlier published information (Tarasov et al., 1998), the extreme locations are more to the west, than those presented in this paper.

The information on the *Gloydius intermedius* and *Vipera sachalinensis* records confirm the opinion of

Korotkov (1985), that these species are competitors, and *V. sachalinensis* distribution to the south is “constrained” by *G. intermedius*.

The references to persons who have given the information are left for some messages. It means, that the information requires additional verification. It is especially fair for species at the periphery of their distribution ranges, for example, for *A. vibakari* (locations 184, 186). We do not give the available information on records of “strange, unusual” reptiles and amphibians in some places of the Priamur’e intentionally. According to an oral description, a snake like *A. vibakari* was found on the southern and southeast slopes of Pompeevskii Range (EAR), and “*E. rufodorsata*” was met in the northwest part of Vandan Range foot (lower Kur River, Khabarovsk Territory). There is a message on a single record (without capture) of “*Coluber spinalis*” in the northern part of BKhSNR in early 1990s. This species was specified for vicinity of Khabarovsk as a doubtful one (Emelinov, 1929).

The presented data allow us to make changes in field guides and handbooks. These data will be used as a base for cadastre of the Russian Far East amphibians and reptiles.

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## REFERENCES

- Adnagulov E. V. (1996a), “On Some Rare Amphibians and Reptiles of the Southern Parts of the Khabarovsk Territory,” in: Cedar Broad-leaved Forests of the Far East, *Proc. of Int. Conf. September 30 – October 6, 1996*, Khabarovsk, DalNIILKh, Khabarovsk, pp. 191 – 192.
- Adnagulov E. V. (1996b), “On the Protection of Amphibians and Reptiles in the Khabarovsk Territory,” in: *Abstrs. of the Grodekov’s Readings, Part III*, Khabarovsk-Territory Museum for Local Lore, Khabarovsk, pp. 101 – 103 [in Russian].
- Adnagulov E. V. (1997), “On the findings of *Amphiesma vibakari* in Bolshekhkhtsirskii Reserve,” in: *Abstrs. of the IIIrd Far Eastern Conf. on Nature Reserves and Environmental Protection*, Dal’nauka, Vladivostok, pp. 13 – 14 [in Russian].
- Adnagulov E. V. (1998), “On the herpetofauna of the Khabarovsk,” in: N. A. Narbut and K. P. Karavanov

<sup>6</sup> On August 25, 1999, an adult individual of *Amphiesma vibakari* was found by A. M. Dolgikh at the BKhSNR on Ussuri R. stony bank in about 500 m from the first location in 1991 (Adnagulov, 1997; K. N. Tkachenko, 1999, personal communication).

- (eds.), *Far East Geography Problems, Vol. 21, Khabarovsk: How It Is at Now-a-Days (Ecological Condition)*, Izd. Priamursk. Geograf. Obshch., Khabarovsk, pp. 80 – 84 [in Russian].
- Ananjeva N. B., Borkin L. Ya., Darevsky I. S., and Orlov N. L.** (1998), *Amphibians and Reptiles. Encyclopedia of the Nature in Russia*, ABF, Moscow [in Russian].
- Annals of the Komsomol'skii State Nature Reserve** (1986) (in rights of manuscript), Komsomol'sk-na-Amure [in Russian].
- Bannikov A. G., Darevsky I. S., Ishchenko V. G., Rustamov A. K., and Szczerbak N. N.** (1977), *Field Guide to the Amphibians and Reptiles of the USSR Fauna*, Prosveshchenie, Moscow [in Russian].
- Borkin L. Ya. and Darevsky I. S.** (1987), "List of Amphibians and Reptiles of the USSR fauna," in: *Amphibians and Reptiles of the Protected Territories*, Moscow, pp. 128 – 141 [in Russian].
- Dabagyan N. V. and Sleptsova L. A.** (1975), "*Rana temporaria*," in: *Objects of Developmental Biology*, Nauka, Moscow, pp. 442 – 462 [in Russian].
- Dolgikh A. M.** (1993), "Amphibians and Reptiles," in: V. E. Sokolov (ed.), *Flora and Fauna of the Reserves, No. 53. Vertebrate animals of the Bolshekhokhtskii State Nature Reserve*, Moscow, pp. 10 – 15 [in Russian].
- Kistyakovskiy A. B. and Smogorzhevskiy L. A.** (1964), "New data on the distribution of reptiles and amphibians in Priamur'e," in: *Problems of Herpetology*, Izd. LGU, Leningrad, p. 34 [in Russian].
- Korotkov Yu. M.** (1974), "Materials on the systematic, distribution and ecology of the Asiatic Grass Frog — *Rana semiplicata* Nikolsky," in: *Fauna and Ecology of the Terrestrial Vertebrates in the South of the Far Eastern of the USSR*, IBSS DVNTs Akad. Nauk SSSR, Vladivostok, pp. 172 – 180 [*Proc. IBSS FEB*, 17(120)] [in Russian].
- Korotkov Yu. M.** (1985), *Terrestrial Reptiles of the Far East of the USSR*, Vladivostok [in Russian].
- Kostenko V. A. and Belova V. T.** (1972), "Composition of hibernating populations of *Rana semiplicata* in the south of the Far East Marine Territory," *Zool. Zh.*, 51(10), 1588 – 1590 [in Russian].
- Kuzmin S. L.** (1995), *Die Amphibien Rußlands und Angrenzender Gebiete*, Westarp Wissenschaften, Magdeburg, (*Die Neue Brehm-Bücherei*, Bd. 627).
- Morigushi H.** (1988), "Notes on measurement of body sizes of natricine snake, *Amphiesma vibakari*," *Snake*, 20, 162.
- Orlov N. L. and Barabanov A. A.** (1999), "Analysis of nomenclature, classification, and distribution of the *Agkistrodon halys* – *Agkistrodon intermedius* Complexes: a Critical Review," *Russ. J. Herpetol.*, 6(3), 167 – 192.
- Shlotgauer S. D. and Voronov B. A.** (1997), "Dzhugdzhurskii State Nature Reserve," *Byull. DVO RAN*, 3(73), 57 – 63 [in Russian].
- Strelnikov D. G.** (1978), "Amphibians and Reptiles of the Lazo State Nature Reserve," in: *Herpetofauna of the Far East and Siberia. Preprint*, Izd. IBSS DVNTs AN SSSR, Vladivostok, pp. 27 – 29 [in Russian].
- Sytina L. I., Medvedeva I. M., and Godina L. B.** (1987), *Development of the Siberian Newt*, Nauka, Moscow [in Russian].
- Tagirova V. T.** (1984), *Amphibians of the Priamur'e (systematic and ecology). Textbook for Students*, Izd. Khabarovskogo Pedinstituta, Khabarovsk [in Russian].
- Tagirova V. T.** (1986), "A record of colubrid snake, *Amphiesma vibakari* in Khingan Reserve," in: N. B. Ananjeva and L. J. Borkin (eds.), *Systematics and Ecology of Amphibians and Reptiles*, Izd. Zool. Inst. Akad. Nauk SSSR, Leningrad, p. 201 [in Russian].
- Tarasov I. G.** (1995), "Some results of herpetofaunal research in the Khinganskii nature reserve," in: *Abstr. of the 2nd Asian Herpetol. Meet.*, Ashgabat, Folium, Moscow, pp. 54 – 55.
- Tarasov I. G., Adnagulov E. V. and Bylkov A. F.** (1998), "On the fauna of amphibians and reptiles of the Evreiskaya Autonomous Region," in: *Biological Diversity of Animals in Siberia. Proc. of Sci. Conf. on 110th Annivers. of Zool. Investigation and Education in Siberia*, Tomsk, 110 – 111 [in Russian].
- Voronov B. A.** (1997), "Bochinskii State Nature Reserve," *Byull. DVO RAN*, 3(73), 66 – 71 [in Russian].
- Voronov B. A.** (1998), "Bolonskii State Nature Reserve," *Byull. DVO RAN*, 2(78), 57 – 65 [in Russian].