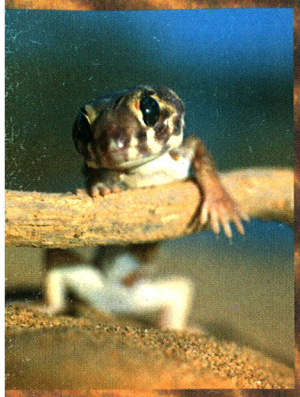

ABSTRACTS

ASIAN HERPETOLOGICAL MEETING

3

THIRD ASIAN HERPETOLOGICAL MEETING

A B S T R A C T S

KAZAKHSTAN

ALMATY

1-5 SEPTEMBER

1998

lizards from 35 genera and 6 families. All species occuring within these limits were assigned tieigth faunal groups according to similarity of the ranges and origin. Points were plotted on blank maps in the center of each 2.5^0x2.5^0 trapeze, and the number of species of each group was established. A total of 23 sites were studied in thisproposed transition zone. The studied territory was referred to a certain realm on the basis of predominance (50% or more of the number of species) of the Palaearctic or Indomalayan species. The regions where none of these groups exceed 50% were referred to as transition zones. Vast transition zone between palaearctic and Indomalayan realms is formed in lowland territories, in the Indus valley and central China. The boundary is much more distinct in the mountain regions. Therefore, it is more correct to consider the territory with mixed fauna as a transition zone between the realms and not to draw a linear boundary between the m.

THE HERPETOFAUNA OF THE UTVA-ILEK INTERFLUVE

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The material was collected in 1989-1991 from the territory limited in the SouthBelogorka village.The received data supplement the generalized materials on the Herpetofauna of the Western Kazakstan (Paraskiv,1965; Paraskiv, Butovskiy, 1960). *Bofo viridis* inhabits in all places. *Rana ridibunda* is common in the valleys of the Rivers Utva Karaoba, Berezovka, Akbulak, Sukbulak, and Aschi. *Rana arvalis* is registered alond the utva, Karaoba and Acshi Rivers. *Pelobates fuscus* is found along the Utva and Karaoba Rivers, between the Tungush and Berezovka villages, as well as in the region of Karachaganak. *Bombina bombina* is registered along the river Karaoba, Utva and Uspenovka. *Laxerta vivipara* is known through findings near Uralsk and above. We have obtained this species in more eastern part - near the Oblavka village, which is one of the southest points of the species area in the Western Kazakstan. *Lacerta agilis* is spreaded everywhere, altough in adjoining regions it is known by single findings only. *Vipera ursini* is indicated mainly in Volga-Ural interfluve. It was found by us near Sulukbulak Lake, close to Aksay town and the villagesKim, akbulak, Bestau, between Tungush and Berezovka. *Elaphe dione* is known in the valley of Ural river, near the village Koloverntoye. Our findings near the village Aksu and Aktau mointain are the most northern of this snake spreading in this region. *Natrix natrix* was obserwed near Belogorka, Aksu and Zharsuat villages. *Natrix tesselata* was registered near the village Akbulak, Sukbulak and Aksu, which are attributed to the most Northern locations of the grass-snake in the Western Kazakstan. *Emys orbicularis* was found near the villages Aksu, Belogorka, Akbulak along the rivers Sukbulak, Karaoba and not far from Aksay town. Thus, the herpetofauna of the interfluve includes 5 species of amphibians and 7 species of reptiles. *Bufo viridis* and the frogs (except of *Pelobates fuscus*) and *Laxereta agilis* are comparatively numerous.

Ayaguz green toads and diploid and tetraploid specimens from other localities earlier examined was based on 20 body proportion characters and body weigth and proposed a tetraploidity of the Ayaguz specimens. Subsequent karyiological analysis confirmed the tetraploid level of the Ayaguz population. The present data push the northern boundary of tetraploid green toad range in Kazakhstan to 48°00' N and 80°25' that is comparable with norhtern boundary of *B. danatensis* distribution in Western Mongolia (Orlova, Terbish, 1986).

THE UTILITY OF UNCONVENTIONAL INTEGUMENTARY CHARACTERS IN THE RECONSTRUCTION OF GEKKONOID LIZARD PHYLOGENIES

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Patterns of gross scalation have traditionally been employed in gekkonoid systematics,but have frequently proven to be difficult to use in phylogenetic studies. Such features are often highly homoplastic and their polarity may be especially difficult to assess. Histological and biomechanical properties of the dermis and epidermis, as well as surface microstructures as evaluated by scanning electron microscopy are more difficult to observe than gross scalation features, but appear to provide characters that are more amenable to phylogenetic analysis. In particular, the morphology of the cutaneous sensillae, the size and branching structure of subdigital setae, and the configuration of the superficial dermis appear to provide evidence for the monophyly of certain gekkonoid taxa. The congruence of these characters with existing generic and infrageneric phylogenies drawn from the Gekkonidae and Diplodactylidae is evaluated.

BOUNDARY BETWEEN THE PALEARCTIC AND INDOMALAYAN HERPETOFAUNAL REALMS

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A proposed transition zone between Palaearctic and Indomalayan herpetofaunal realms was studied to determine the boundary between the m. This zone was limited by the northern and western boundaries of the ranges of Indomalayan lizard genera, which penetrate far to the north and west (*Calotes* in the west, to Iran and Afganistan; *Japalura* in the north, to northern India; and *Gekko* in the east, in China and Korea), on the one hand, and the southern and eastern boundaries of the ranges of Palaearctic lizard genera, which penetrate to the southh and east (*Uromastyx* and *Acanthodactylus* in India, *Laudakia* in Nepal, and *Eremias* in China and Korea) on the other hand. This territory houses 87 sopecies of

THE REFUGES OF *RANODON SIBIRICUS* [HYNOBIIDAE] IN THE SPRAWNING STREAMS

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Key words: refuges, eggclutches, displasement

In the region of Kyssyksay River (the basin of the Borokhudzir River) the favourite newt's refuges in the spawning streams are the cavities under the stones disposed in water or on land along the water edge. From 105 individuals registered 13 July 1987 during the control account 79 (75.2%) were found such refuges. 16 June 1989 from 85 newts 51 (60%) were found under stones. Usually under one cover there are about 1-27 *Ranodon sibiricus* . Often the accumulation cosist of the one-sized, semi-adult individuals and the larvae, the adults are more rare and the species of the first year as an exception only. The adults gather by 3-4 individuals only occasionally, In short supply of the stones the groups arise more often. They come apart and then arise again on places where were absent day before. There rae preferable refuges whichstand never empty but the number and the age composition of them are changing. 33 marked newts in day-time were found in the marking places but after first night they disappeared and their refuges were occupied by other individuals. Several newts showed some affection towards the refuges used by them during 2-3 days. The opinion that the newts quard their layings must be confirmed. We have found under 77 eggclutches only 14 (18%) of adults. Usually the cavities under the stones have several entries and the newts are well washed by water. Sometimes they present close space with single narrow entry and animals live inside cooped, doubled up. They avoid dry places, although encounter on sunny slopes, under the stones warmed throroughly at a distance of 15-27 meters from water edge, as well as in shallow habitable field-voles' burrows with dry litter. The animals do not leave the uneasily localities near the stands of the shepherds, where they inhabit in shallow dams. In the spring polluted by swipping they use as refuges all kinds of plastic and glass bottles, old foot-wear, thepieces of rubber nad cardboard.

ON THE CHANGE OF *RANODON SIBIRICUS* [HYNOBIIDAE] WEIGHT

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Key words: larvae, mass, length, trauma.

Information on the body weight of the triton-endemic species of Dzhungar Alatau Mountains is given is only few works (Narbayeva, Brushko, 1985; Brushko, Narbayeva, 1986). During growth processing the change of the total newt's body weight in different age groups (78-167 mm) is irregular. Sharp weight augmantation is registered in animals 118-137 mm long. In June and August of 1984 their weight in comparison with the individuals of the lesser size was greater on 2.9 nad 2.6 g. relatively. The larvae with incomplete metamorphosis (n=27) 72-82 mm long from the local micropoulations of the Kyssykksay River's basin (right tributary of the Borokhudzir River) were different by weigth. 18-22 June of 1984 the newts from well preserved food reservoir have been distinguished by greater mass - 2.8 ±0.1 (Y=13.9%) as against 2.0 ±0.1 (Y=19.5%).During two months (June and August of 1984) of activity their weight was dounled 2.0 ±0.1 (Y=19.5%) up to 4.1 ±0.2 (Y=19%). There are annual differences in mass increasing. 2-98 July of 1985 the weight of one sized larvae was twice as much than in August of 1984. They weighted 8.6±0.16 (Y=5%) and 4.1±0.2 (Y=19%). Low coefficient of the weight variation testify to more homogenous physiological state of animals and, it is possible, to more favourable living conditions this year. The traumas, deformities and diseases affect negatively the newt mass. Among 431 individuals 47 (10.9%) were traumatized. More often we have found the animals with deformed and shorted tails, without fingers and with scars. In the basin of the Kyssyksay River the biggest newts (179-230 mm long) weight was 28.6-32.8 g. In the basin of the Koksu River specimens of 260-270 mm long reach 42-49 g.

BIRDS FEED WITH REPTILES IN THE GOBI DESERT OF MONGOLIA PROPORTION OF BIRDS AND REPTILES

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This report shows the percentage of lizards and snakes in the diet of 3 species of diurnal birds of prey, 2 species of nocturnal birds of prey and Macqueen's or Houbara Bustard (*Chlamydotis undulata*), 2 species of Great Gray Shrike, Central Asian Shrike (*Lanius excubitor, L. isabellinus*), Northern Raven (*Corvus corax*) and Henderson's Ground Jay (*Podoces hendersoni*) which in habit the Gobi desert of Mongolia. The Mongolian Gobi Desert is on the northern edge of the Deserts of the World. The reptile prey of raptors of the more sheltered habits eg, oasis, rocks and bushes is compared with raptors in other parts of the world. The report also includes information on snake damage to eggs and chicks.

11-OXYCORTICOSTEROIDS CONTENTS IN THE BLOOD PLASMA AND ADRENALS BY INTOXICATION WITH SUBTOXICAL DOSE OF *NAJA OXIANA* VENOM

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Key words: *Naja oxiana* venom, hormobes, adrenals, intoxication.