

Brief ecological overview of south-udmurt sacral territory Lud near the village Kuzebaev of Alnashsky District of Udmurt Republic

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Sacral territory of South udmurts *Lud* (etymology of the word is not clear) near the village *Kuzebaev* (Udmurt *Kyzëbaŭ* [kuz'io'baŭ] < *kyzë* [kū'ziō] «master, owner, proprietor» + *baŭ* [baŭ] «rich man, kulak»; local Yiddish (Alnashic subdialect of Udmurt Idiom¹⁻²) קוזיבאָײַ [kuz'io'baŭ], [kuz'io'baŭ] < Udmurt *Kyzëbaŭ*, קוזעבאָײַ [kuzə'baŭ], [kuz'ə'baŭ], [kuz'ɪ'baŭ], קוזעבאָײַעװ [kuz'ɪ'bajevō] < Russian *Кызѣбаево* [kuz'ɪ'bajevō], וואָס'יאַפ(אַ)נדאָפּ [və'sɪaf(ə)ndɔɤf] < Yiddish וואָס'יאַפ(אַ)ן [və'sɪaf(ə)n-] «priestly, sacerdotal (the word was used only in relation to udmurt pagan priests)» < Udmurt *бӧсрӧс* [və'sɪas'] «pagan priest in udmurt ethnic religion» + Yiddish דאָרף [dɔɤf], [dɔɤf] «village») in Alnashsky District of Udmurt Republic (the Russian Federation) was earlier studied for ecological state³⁻⁶. The current research (2013-2014) can be considered the monitoring continuation of these works.

The natural-cult object is located on the left side of southern exposure of Varzi River's valley on territory of archeological site of Mazunino culture (III-IV centuries AD)⁷ and in the locality of hill fort "Kuzebaevskoe I" (XVIII-XIX centuries AD)⁸.

The vegetation of object is strongly sparse stand of trees represented where *Abies sibirica* Ledeb. was dominated, *Picea × fennica* (Regl.) Kom. is rarely observed. Broad-leaved species are presented *Acer platanoides* L. and single pieces of *Tilia cordata* Mill., *Ulmus laevis* Pall., *Quercus robur* L. Shrub layer is presented *Euonymus verrucosus* Scop., *Sorbus aucuparia* L., *Corylus avellana* L. In the herbage there is a large number of forest-steppe species (for

example *Phlomis tuberosa* L., *Nepeta pannonica* L., *Asparagus officinalis* L., *Ajuga genevensis* L., *Lavatera thuringiaca* L., *Eryngium planum* L., *Salvia glutinosa* L. and other), as well as pratal and ecotone (forest-marginal) plants (for example *Origanum vulgare* L., *Plantago stepposa* Opiz., *Turritis glabra* L., *Verbascum nigrum* L. and other) that is connected with geographical location of Alnashsky District in the south of Udmurtia where the steppe formation of the territory.

We want to note that around the sacral place anthropogenic ecosystems are located: agroecosystems (cultivated fields, grasslands and greenlands) and damaged natural ecosystems (ruderal roadside communities, waste grounds, Varzi River's damaged floodplain). One may assume that as a result their influences the adventive species of plants penetrate on the sacral territory. We recorded 25 such species: *Consolida regalis* L., *Urtica urens* L., *Chenopodium hybridum* L., *Fallopia convolvulus* (L.) A. Löve, *Berteroa incana* (L.) DC., *Camelina microcarpa* Andr., *Capsella bursa-pastoris* (L.) Medik., *Sisymbrium Loeselii* L., *Melilotus albus* Medik., *Melilotus officinalis* (L.) Pall., *Pastinaca sylvestris* Mill., *Collomia linearis* Nutt., *Cynoglossum officinale* L., *Leonurus quinquelobatus* Gilib., *Carduus thoermeri* Weinm., *Cichorium intybus* L., *Vicia sativa* L., *Vicia cracca* L., *Vicia faba* L., *Chenopodium glaucum* L., *Chenopodium album* L., *Potentilla anserine* L., *Artemisia vulgaris* L., *Artemisia absinthium* L., *Bromus inermis* Leyss.

Notability that only the first 16 listed alien species have been recorded in the early 2000s⁹ that only confirms the assumption of increasing anthropogenic pressure on the ecosystem of sacral area.

On the territory of object *Lud* was revealed 103 vascular plant species; in the early 2000s – 95 species¹⁰, which is probably connected with increase in the number of adventive species.

We also found two species of plants in relation to which must be realized monitoring on the territory of Udmurt Republic¹¹ – *Campanula rapunculoides* L. и *Pyrethrum corymbosum* (L.) Scop.

Interestingly, that we have not found vegetation of *Dianthus versicolor* Fisch. ex Link, although this species was recorded in the early 2000s in the composition of flora of the territory of natural-cult object *Lud*¹².

Thus, the ecological state of the sacral territory *Lud* continues to follow on regressive type: there is an increase of adventive species of plants and the gradual replacement of species of native flora, stand of trees' shrinking and degradation of shrub layer; successional processes occur in the direction of anthropogenization of territory.

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