12 POVZETEK

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V okviru projekta Neobiota Slovenije smo z velikim konzorcijem strokovnjakov s področja biologije združili obstoječe znanje o tujerodnih vrstah v Sloveniji.

Delo smo razdelili v tri glavne vsebinske skope:

1. V uvodnem delu smo temeljito obdelali splošno problematiko invazivk v Sloveniji. Skušali smo uskladiti izrazoslovje, predstavili smo poti vnosa in vektorje razširjanja tujerodnih vrst in pripravili pregled zakonodaje, povezane s problematiko invazivk (globalni, evropske in slovenske). Na podlagi analize protokolov za presojo tveganja na področju tujerodnih vrst, ki jih uporabljajo različne evropske države, smo izbrali najprimernejšega in ga prilagodili za slovenske razmere. Ovrednotili smo vplive tujerodnih vrst na dobrobit ljudi v Sloveniji ter vplive na naravo: na habitate, vrste in ekosisteme ter pripravili kvantitativni model ene od razširjenih tujerodnih vrst v Sloveniji, ki ima močan potencial širjenja. Ta model smo želeli uporabiti za napovedovanje možnega širjenja vrste v prihodnjih desetletjih pod vplivom spremenjenih naravnih okoliščin.

2. V drugem delu smo se posvetili vsaki od velikih skupin organizmov posebej: obdelali smo problematiko tujerodnih vrst gliv, rastlin in živali. V posebnem poglavju smo obdelali pojavljanje tujerodnih vrst v Sredozemskem morju. Pri vsaki od obravnavanih skupin smo zbrali podatke o pojavljanju v Sloveniji, o načinu ogrožanja avtohtonih vrst in habitatov, s posebnim poudarkom na naravovarstveno pomembnih območjih. Ugotovili smo glavne vektorje vnosa vrst v Slovenijo in načine širjenja, analizirali možnosti monitoringa in predlagali načine nadzora in možnosti za odstranjevanje ali omejevanje širjenja.

3. V obliki preglednice smo zbrali vse obstoječe podatke za obdelane skupine in jih predstavili na standardiziran način. Za vsako smo podali: latinsko in slovensko ime, prvi podatek o pojavljanju v Sloveniji, domovino, pojavljanje v sosednjih državah, oceno stopnje naturaliziranosti in pogostosti ter trenda širjenja. Za podatke smo navedli zanesljivost ocene, saj je kakovost podatkov pri različnih taksonih različna in lahko vpliva na uporabnost podatkov. Pri vsakem taksonu smo izbrali ključni vir, ki se čim bolj izčrpno ukvarja s problematiko tujerodnosti taksona. Za invazivne tujerodne vrste smo zbrali še dodatne podatke in sicer: o razširjenosti v Sloveniji, o specifično ogroženih habitatnih tipih, višinskem pasu pojavljanja ter vektorjih in poteh širjenja. Rezultati tega projekta so pomemben kamen v mozaiku poznavanja tujerodnih vrst v Sloveniji. Pokazale so se vrzeli zaradi pomanjkanja strokovnjakov z določenih področij in taksonomske kritičnosti nekaterih skupin. Kakovost obdelanosti posamezne taksonomske skupine je zato še vedno precej raznolika. Znanje zbrano v uvodnih poglavjih je odlična osnova za pripravo strategije ravnanja s tujerodnimi vrstami Sloveniji.

Summary

In the project Neobiota Sloveniae a large consortium of experts from the field of biology (botany, zoology, mycology, ecology, forestry etc.) critically compiled the available knowledge on alien species in Slovenia.

First, in the introductory part, we thoroughly analyzed general problems of alien and especially invasive alien species (IAS). We tried to make a consensus of terminology regarding alien species issues between the experts. Variety of ways of introduction and spread of alien species and vectors of their movement were discussed. A review of legislation related to the issue of IAS (national, European and global) was also made. Based on the analysis of different protocols for assessing the risk of non-native species introductions used by various European countries, we have selected an appropriate protocol and adapted it to the Slovenian situation. Further, negative effects of non-native species for the welfare of community and impacts on nature (on habitats, species and ecosystems) have been assesed. As a case study, a quantitative model for prediction of the possible spread of one selected invasive species in the coming decades under the influence of changes in natural conditions was made. For this case study, *Robinia pseudaccacia*, one of the widespread IAS in Slovenia with a strong potential for further expansion was selected.

The second part of the project was focused in some of the major groups of organisms: we analyzed the issue of non-native species of fungi, vascular plants and several taxonomic groups of animals. In a separate section, we analyzed the occurrence of alien species in the Adriatic Sea. In each of assessed groups, we critically gathered data on the occurrence in Slovenia and on endangering of native species and habitats, with a special emphasis on the protected areas. We state the main vectors of introduction of species in Slovenia and the ways of their spreading, we also analysed the possibilities for regular monitoring of the IAS spread and proposed options for control or removal of respective IAS.

Third: in a data matrix we collected all of the existing data for the alien organisms and presented them in a standardized way. For each, we give: Latin and Slovenian name, the first data on the occurrence in Slovenia, information on its natural distribution, presence/absence in the neighboring countries, estimated degree and frequency of naturalization and trend of expansion. The reliability of each score also assessed, since the quality of data varies in different taxa and may affect the usefulness of the data. For each taxon, key literature source was added, which deals with the issue of the respective alien taxon most comprehensively. For IAS additional information was collected, namely: rough distribution in Slovenia, specifically endangered habitat types, altitude range of occurrence and vectors and paths of the spread.