A Proposal for Revising Threatened Species Protection in the Czech Republic

Pavel Pešout, Jan Šíma, Eliška Blažejová, Lenka Tomášková, Paula Filipová, Jana Fuglíková, Radek Hejda, Karel Chobot, Jindřiška Jelínková, Lenka Jeřábková, David Lacina, Ivan Mikuláš, Aleš Tenčík & Petr Vít

In the Czech Republic, principles of current special species protection come from the second half of the 1980s. They entered into practice by Act No. 114/1992 Gazette on Nature Conservation and Landscape Protection, as amended later, and since that time they – except small adjustments due to transposing and implementing the European Union legislation before joining the EU- have not been changed. Moreover, knowledge has been significantly improved during the thirty past years and the state of nature and the landscape has also significantly shifted across the whole country's territory. Long-term negative effects are currently amplified and multiplied by climate change impacts. It is clear that

species protection tools have been in many aspects outdated and their effectivity has been insufficient. We are not able to halt species richness/diversity decline and loss and to effectively protect, conserve or manage habitats of the individual species as a basic precondition of their survival. A lot of necessary changes can be reach only by those in methodologies and approaches in performing State/Public Administration and setting out economic/financial tools without changes in legislation. Nevertheless effective protection and providing the most threatened species with management need new legislation dealing with Special Species Protection, conservation and management



The Common frog (Rana temporaria) currently the fastest disappearing frog in the Czech landscape, not included in the current decree, newly proposed between Specially Protected Species in the 3rd level of protection. © Martin Waldhauser



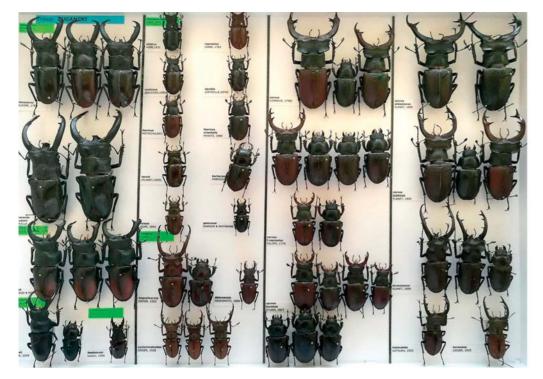
The Marsh fritillary (*Euphydryas aurinia*), an endangered butterfly according to the Red List of Threatened Species of the Czech Republic, which is among the most endangered diurnal butterflies in Europe (in the Czech Republic, it occurs only in western Bohemia), is not included in the current decree, and therefore the Nature Conservation Agency of the Czech Republic cannot prepare and implement an Action Plan/Recovery Programme for it. © Václav John

Act No. 114/1992 Gazette on Nature and Landscape Protection, as amended later (hereinafter the ANCLP) combines the so-called General Species Protection of species, ensuring all populations of wild species protection from destruction or damage, with Special Species Protection, which ensures protection of selected rare and endangered species. The list of these species is given by the implementing legislation, Decree No. 395/1992 Gazette (hereinafter the Decree). Simultaneously, through Special Species Protection and the so-called General Protection of Wild Birds, the transposition of the Habitats Directive (92/43/EEC) and the Birds Directive (2009/147/EC) is ensured in the ANCLP, which both include requirements relating to the protection of individual species. Wild vertebrates are further protected by the provisions of Act No. 246/1992 Gazette on the Protection of Animals against Cruelty, as amended, which also includes provisions relating to wild animals and reflects, inter alia, the requirements of the abovementioned Directives in prohibited hunting methods or wild animal trapping. The protection

of some so-called conflict wild animal species is further strengthened by Act No. 115/2000 Gazette on Compensation for Damage Caused by Selected Specially Protected Animals. The prevention and remediation of environmental damage to protected species or natural habitats is part (along with other areas) of Act No. 167/2008 Gazette on Prevention and Remedying Environmental Damage — however, due to a number of conceptual and procedural ambiguities, the latter has not yet been applied in practice.

In the Czech Republic, the current landscape is mostly made up of a mosaic of intensively cultivated areas, abandoned or variously degraded areas, and built-up areas. At the same time, building-up and impassability of the landscape has been increasing, inappropriate agricultural, forestry, and pond management persists, and the negative process of landscape homogenization has been continuing. It is obvious that both the species bound to the last fragments of original natural habitats and the traditionally managed and used landscape until the first half of the 20th century are on

the verge of extinction. We are therefore witnessing the mass extinction of entire guilds of species (e.g. ČÍŽEK et al. 2009, VERMOUZEK at al. 2018). A necessary step to the overall improvement of the state of the landscape and its use is not a legislative change, but better use of the existing legislative instruments of general nature conservation nd landscape protection (LACINA & PEŠOUT 2018); for example, changing the paradigm of the Territorial System of Ecological Sustainability (TSES), a national multilevel ecological network (HLAVÁČ & PEŠOUT 2017), more consistent application of Significant Landscape Element (SLE) protection and other tools of general nature conservation (PEŠOUT & HOŠEK 2012), and the use of land-use/territorial planning tools both for the protection of valuable areas and of species (PEŠOUT et al. 2018 a, 2018b) and better targeting of subvention programmes/subsidy schemes for landscape management (e.g. ČÁMSKÁ 2018). The acute need for change in our approach to the use of nature and the landscape is also reflected in new European Union's legislation on nature restoration (Nature Restoration Law), which is



The current Special Species Protection in insects leads to penalties and criminalization of entomologists keeping Specially Protected Species individuals in collections, while not ensuring effective habitat conservation, protection and management.
© Nature Conservation Agency of the Czech Republic Archive

currently being discussed, and should be reflected in the Czech Republic in the near future (HAVEL 2022, STEJSKAL 2022).

Landscape protection as a whole is complemented by area-based/territorial nature conservation - Specially Protected Areas and Natura 2000 sites create islands or stepping stones for part of the natural values and populations of the individual endangered species. In Specially Protected Areas, the planning and implementation of management, as well as its evaluation are ensured, also with regard to endangered species, if they are the subject of protection of the respective protected areas, or are a quality indicator of a protected habitat. However, Specially Protected Areas can only ensure the long-term survival of a small group of organisms; they can only partially affect the condition of most endangered species even with the best management.

Although essential, the Special Species Protection is therefore just one part and not the be-all and end-all in the mosaic of the above nature conservation tools, prioritizing the management and protection of the most endangered species. However, the thirty-year-old concept of the Special Species Protection based primarily on the protection of individuals has already been outdated and does not fulfil this function. For a number of years, there have been discussions among the professional/expert public

about the necessity of changes in the relevant part of the ANCLO (see e.g. HOŠEK & DUŠEK 2015) and the shortcomings of the existing legislation have been repeatedly identified. The Ministry of the Environment of the Czech Republic (MoE) commissioned an analysis of legal instruments in, inter alia, species protection (TUHÁČEK 2008) and a comparative analysis of legal regulations in nature conservtion in selected European countries and their parts (Bavaria, Upper Austria, Poland, Slovenia, Sweden, Slovakia). The first proposal for the recategorization of Specially Protected Species (hereinafter SPS) was developed in 2008, and the first complete revision of SPS based on the MoE assignment was prepared by the Nature Conservation Agency of the Czech Republic (NCA CR) and discussed with the professional/expert public in 2010 - 2011 (HORODYSKÁ et al. 2011). The evaluation of the Special Species Protection application and the formulation of terms of reference for its revision are included in two basic conceptual documents: National Biodiversity Strategy of the Czech Republic (MACH et al. 2016) and State Nature Conservation and Landscape Protection Programme (SNCLP) 2020-2025 (MACH et al. 2020). Specifically, the SNCLP formulates the main goal as follows: "it is necessary to revise the existing system based on the protection of all individuals and to focus more on the protection of habitats and local populations and to differentiate the protection of individuals according to the degree and way of individual species endangerment".

Shortcomings of current legislation

Special species protection in the current ANCLP setting is not effective. The list of SPS is, on the basis of the authorization established by the ANCLP, listed in the Decree, but it has not been changed, except for partial amendments in 2006, when it had been supplemented with "European" species (modified following the transposition of the requirements for the strict protection of selected species according to Directive 92/43/EEC) and in 2013, when the Great cormorant (Phalacrocorax carbo) was delisted. During the 30 years of its validity, however, there have been significant changes in the occurrence of and abundance in of a number of species and a significant expansion of knowledge; the list is therefore severely outdated (ŠÍMA ZMEŠKALOVÁ 2018). Although it includes a large number of species, many of them are missing from the list or are classified in the wrong category. As a rule, the permitted exceptions repeatedly concern only a small range of species. The fossilization of the protected species list thus limits not only the legal protection of species that have become threatened with extinction over time, but also the possibilities of the State Nature Conservancy authorities to use active tools for the management of these species (e.g. Action Plans/Recovery Programmes).

The current names of the SPS categories are inappropriate; they do not and cannot reflect the threat to the species. Tools supposed to rationalize the strict protection of species in selected cases have hardly been used (e.g., agreements on management of land with the occurrence of critically and highly endangered plant species; or opinions on certain interventions in the natural development, i.e. ontogenesis, of endangered animal species). The protection of Highly Endangered Species and Critically Endangered Species is formulated identically in the ANCLP, the degree of protection is only used to a limited extent (or, due to the lists being out-of-date, it cannot even be used) when assessing the seriousness of the offence. In the case of many SPS, it is not essential to protect each individual, as it is currently set up, but to preserve the populations and habitats of these species. In the case of many species, current regulation is therefore unnecessarily strict and leads to widespread violations of legal prohibitions in a common landscape use and management, legal uncertainty for landowners and landscape users, as well as to some beneficial limitation of professional/expert activities, and necessarily to the actual resignation to enforcing the prohibitions provided by law. There is also a proliferation of speculative use of damages for the difficulty of agricultural and forestry management and management of fishponds as a result of legal restrictions. Moreover, in most current cases of granting exemptions, it is not possible to estimate in advance the specific number of individuals that will be affected by the permitted intention, so in fact the decision is made to affect the given local population.

A fundamental shortcoming is the practically unenforceable setting of the SPS habitat protection, where proof of its violation is conditional on proof that a harmful intervention caused the death, injury, or disruption of a SPS natural development (in practice, usually proven by the presence of dead individuals).

Principles of the proposed revision

Proposal for a new adjustment, or revision of the Special Species Protection in the Czech Republic is based on the following five main principles, which try to eliminate the fundamental shortcomings of the current legislation:

Prioritization in threatened species management separated from that in their legal protection

Priorities for active threatened species management will be determined exclusively by the degree of threat according to continuously updated Red Lists. National Red Lists have always been published by NCA CR in cooperation with academic institutions and scientific societies; this professional activity should now be anchored directly in the ANCLP. The result of this change is the possibility to use active tools of species protection (e.g. Action Plans/Recovery Programmes) for any species threatened with extinction in the Czech Republic that meets the relevant criteria (ZMEŠKALOVÁ 2017, KOSTIUKOVÁ & ČEPELOVÁ 2017), even if it is not included in the SPS list. Furthermore, it is proposed to add a new tool for the species management at a regional, i.e. subnational level - a regional Action Plan/Recovery Programme and formal supplementing of national ones.

2. Introducing prioritization in natural habitat management

The Czech Republic has high-quality, regularly updated data on the distribution of natural habitats and is one of the first European countries to issue a Red List of Threatened Habitats (CHYTRÝ *et al.* 2020). The aim of the amendment is to include natural habitats in the prioritization of management and to direct nature conservation resources primarily to habitats threatened with extinction. In



The Water caltrop ($Trapa\ natans$) can establish large viable populations locally. Among the main causes of threat are degradation or loss of its habitats due to intensive fishpond management. It is not important to protect individuals, but local populations; that is why the species is newly proposed to the 3^{rd} level of protection. \odot Barbora Čepelová

this context, the possibility of using the Action Plans/Recovery Programmes also for threatened natural habitats will be newly introduced.

3. Special Species Protection based on their habitat conservation

The primary goal of the proposed regulation for all SPS categories is the enforceable protection and conservation of their habitats, even when a specific specially protected species does not occur in a given habitat (e.g. regular reproduction sites for amphibians, bat hibernation shelters/wintering grounds). Protection conditions (prohibition) regarding the destruction or damage of a habitat will be introduced directly, and it will no longer be necessary to prove "intervention into the habitat" through contravening the ban on harmful interference in the natural development of specific individuals. At the same time, it will be possible to introduce the restriction of such activity and the timely implementation of corrective measures when damage to the habitat begins.

 Introducing classification of Specially Protected Species reflecting the level of the species protection Endangered species or groups of species require a different intensity and type of protection, conservation and management. In some Critically Endangered Species, it is necessary to protect literally every individual, in other species, the protection of habitats and species at the level of their local populations is sufficient (see Box 1). It is not easy to establish cross-sectional legal protection conditions for different groups of organisms with different life strategies (fungi, vascular plants, insects, vertebrates). It is necessary to know the degree of species endangerment, but also their characteristics and habitat requirements (different approach for species with high population dynamics and species with more conservative life strategies and naturally low numbers, etc.) and the reasons for endangerment (different approach for species directly pursued and species threatened by environmental changes, etc.). If we want to avoid unreasonably strict set-up, all that remains is to differentiate the protection conditions in more detail. It will still be necessary to reflect the requirements of the EU legislation and ensure adequate transposition of provisions in species protection, which will also be reflected in the form of protection conditions within the categories.

NEWLY PROPOSED SPECIALLY PROTECTED SPECIES CATEGORIES

1st protection level

All habitats (natural and modified) of species of this level are protected. All individuals of these species are protected from capture, picking, removal, killing, keeping, disturbance, etc. All activities that may cause harm to individuals of these species can only be carried out on the basis of an authorized exception. An agreement for common management can be concluded with the owner or tenant of the land plot.

2nd protection level

All habitats (natural and modified) of species of this level are protected. All individuals of these species are protected from capture, picking, removal, killing, keeping, disturbance, etc. Interventions in the natural development of these species that occurred unintentionally, as part of common agricultural and forest management, road transport, and passage through the land-scape are not prohibited, but only if the habitat is not damaged and if the activity does not threaten the species´ local population (such interventions are prohibited and can only be carried out on the basis of an exception). These are activities that result in the unintentional killing or damage of organisms (typically the negligent killing of an animal on the road or damage to protected plants during agricultural land management), which cannot be eliminated even if the precautionary principle is respected; on the contrary, their implementation is often as a condition for

preserving the existence of the species at the site (e.g. mowing meadows). However, if the manager becomes aware of the occurrence of a SPS, they must not kill, damage, or disturb it without exception (e.g. nesting harriers (Circus spp.) during work on fields), because such an action could no longer be considered an unintentional interference with the natural development of a plant, animal, or fungus.

3rd protection level

All habitats of species of this level are protected. For selected species, the implementing decree could specify, within the framework of more detailed protection conditions, that protection is narrowed only to the protection of the natural habitat, which is the habitat of the respective species. The aim is to avoid cases where protection would be applied to Specially Protected Species that also occur in a habitat heavily altered by humans, for example a selected halophilous species in a roadside ditch. Species included in this category are not protected at the level of each individual, but their local population must not be threatened or their habitat damaged. These are therefore species not threatened by the direct destruction of individuals, but are threatened by the destruction of or damage to habitats, or systematic activity threatening the local population (e.g. repeated management intervention at an inappropriate time).

5. Using the Specially Protected Species category only in species where it is meaningful

This principle is for including a species in the Specially Protected Species list which will be applied during developing the implementing decree. A high level of threat is a basic prerequisite for the selection of a species, but not the only one. It is essential to evaluate the meaningfulness of introducing legal prohibitions for the protection of each individual endangered species. For example, it is clear that weeds that are limited by seed cleaning do not primarily belong to the SPS (in this context, it should be emphasized that the active management of these species is not limited by not including them in the SPS). Similarly, it makes no sense to include species that only a very limited number of specialists can determine among SPS (in selected cases, the inclusion of the entire genus may be a solution). For some groups of species commonly found together in the same habitat, it may be sufficient to include only the selected so-called flagship species (see Box 2 for details).

In addition to the above principles, the objective of the proposed legislative change is also to clarify the adjustment and eliminate partial shortcomings of the transposition of the mentioned EU legislation for species protection. This concerns, for example, the determination of the procedure in cases where species protected at the level of the EU as a whole are involved, which are not commonly found in the Czech Republic and are imported into the Czech Republic. The proposal also uses the development of the Nature Conservancy Information System (NCIS) and introduces procedures that reduce the administrative burden and support the computerisation of the State/Public Administration.

Introducing new terms

The ANCLP's draft revision envisages introduction of some new terms or supplementation/modification of existing terminology. Above all, it earmarks protected species of fungi, which until now have been classified as Specially Protected Species of plants. Although it is legislation that may not

necessarily reflect biological knowledge, the including fungi among plants has no longer been defensible at present.

The ANCLP's current wording uses the term "population", but it is not defined for legal purposes and is thus based on the scientific definition of the term. Due to the fact that this definition is very broad and variable, especially when it comes to the determination of spatial, i.e. territorial parameters, it is difficult to use when applying it within legal framework. For the ANCLP purposes, it is therefore newly proposed to define the term "population" and "local population" for a group of individuals of the same species living in the area defined by the boundaries of the continuous habitat of the species at a given site, or confined by the continuous occurrence of a species at a given site. The aim is to differentiate a part of the population/separate subpopulation for the evaluation of prohibitions in Special Species Protection, where the level of the whole population is too broad (with exceptions e.g. endemic species). The level of population will continue to be used in General Species Protection.

The proposal includes supplementation to the definition of the term "habitat", which should now also apply to local population; also, in response to the previous interpretation difficulties, areas necessary for migration and other natural movements of the species are also explicitly marked as part of habitat.

The ANCSP uses the term "regular management"; for revision purposes, it is made more precise by adding some forestry and agricultural activities.

As part of the amendment, with regard to the introduction of new terminology, it will be necessary to amend other ANCLP provisions and other legal regulations including the terminology, for example Act No. 40/2009 Gazette.. the Criminal Code.

FAQ

The NCA CR processed the proposal on the basis of the MoE assignment using previous documents in the past six months. There was an effort to involve the science community in the preparation of the initial proposal. Therefore, the proposal was continuously discussed with specialists and scientific societies for individual groups of organisms. Below, we present responses to the most frequently asked questions that could help with overall understanding of the proposal.

1. Is it possible to direct the landscape use by means of a proposal for Special Species Protection?

CRITERIA FOR INCLUDING SPECIES IN THE NEWLY PROPOSED SPECIALLY PROTECTED SPECIES CATEGORIES

Cross-sectional criteria:

- The species is taxonomically established, evaluated in the Red List as threatened (i.e. Critically Endangered CR, Endangered EN or Vulnerable VU), or Near Threatened (NT). An extinct (EX) or data-deficient (DD) species can only be included if new knowledge leading to a change in categorization is available.
- In the case of numerous taxonomic groups or lower threat categories, it is a flagship or attractive species, threatened by collecting or gathering for non-scientific purposes.
- It is a species that can be protected through legal prohibitions and restrictions.
- Species from Annex IV of the Habitats Directive requiring strict protection, including the protection of individuals, must be included in the 1st or 2nd protection level, even if they are not threatened in the Czech Republic.

Specific criteria for 1st protection level:

- Species from the CR or EN category, in justified cases also VU.
- The species requires the protection of each individual

Specific criteria for 2nd protection level:

- Species from the CR or EN category, in justified cases also from lower categories.
- A species requiring the protection of individuals, with the exception of common management and landscape use, if it does not mean a threat to the local population or damage to the habitat.
- A species requiring common management for its survival.

Specific criteria for 3rd protection level:

A species not requiring the protection of individuals, and the protection of habitats and local populations is sufficient.

According to the criteria above, the first indicative Specially Protected Species list has been prepared.

More detailed information on individual species can be found at https://portal.nature.cz/karty-druhu/ including reason for their protection. It will also be possible to follow the updates of the list, which will be continuously updated based on comments.

	current Decree No. 395/1992 Gazette				new (indicative) list				Red List
group	Critically Endangered	Highly Endangered	Endangered	Total	1 st protection degree	2 nd protection degree	3 rd protection degree	Total	Total
Vascular plants	267	182	145	594	175	308	171	654	1608
Fungi	27	15	6	48	25	12	50	87	840
Lichens	0	0	0	0	0	16	13	29	1 317
Bryophytes	0	0	0	0	0	13	54	67	411
Invertebrates	45	43	137	225	13	43	247	303	5 703
Vertebrates	67	129	47	243	82	102	19	203	302
TOTAL	406	369	335	1110	295	494	383	1343	10 181

Comparison of the numbers of newly proposed Specially Protected Species with the current status and with the total number of species included in the Red Lists of the Czech Republic (as of 1 October 2022, the indicative list is continuously adjusted according to received comments and current knowledge).

Biodiversity protection outside Specially Protected Areas should be ensured primarily by General Nature Protection, the correct setting of economic tools, and the method of management on land owned by the State (especially in forests). Special Species Protection cannot replace deficiencies in the setting legislative, administrative, and economic tools determining general approaches to the use of nature of the landscape. However, the proposed protection conditions of the SPS will in all cases impose requirements to ensure that SPS habitats are not damaged and, depending on the characteristics of individual species (according to the newly categories), only allows in some cases the possibility of uninten-

tional killing of individuals, which, however, must not reach such an intensity that there is a threat to the local population. Simultaneously, the obligation to apply preventive measures will be included there

2. The term "local population" is newly introduced; will the State Nature Conservancy authority be able to identify it in specific cases?

Since 1992, the State Nature Conservancy authorities have been dealing with the term "population" when applying the ANCLP. Identifying "local population" will be easier for the State Nature Conservancy authorities than "population", parti-

cularly when both terms and thus the difference between them will be defined by the law.

3. In the second protection level, unintentional damage and disruption of the Specially Protected Species during common management is allowed, while the current so-called common management is the main cause of the decline in many species (?).

Legal prohibitions will still apply to management that damages the habitat or threatens the local population of the SPS, even though it might be understood as "common". In the same way, if the manager is alerted to the occurrence of the species, it can no longer be an "uninten-



The Scare swallowtail (Iphiclides podalirius), an attractive species of diurnal butterfly classified as Endangered in the current decree. It has been currently spreading in the Czech Republic, and that is why it is not newly proposed among the Specially Protected Species. © Václav John

tional" intervention in the natural development of the SPS, which is not covered by the legal prohibition.

4. It is necessary to maintain three levels of protection – would it not be possible to simplify them to two?

The proposal tries to establish a system enabling an adequate intensity of protection. In principle, two categories would be sufficient for differentiated protection: A. protection at the level of individuals and habitats, and B. protection at the level of populations and habitats. However, some species from group B. are priority species from the point of view of the European Communities/European Union, for which we have an obligation to protect them from intentional killing or damage, or they are species that are not threatened by common management, but it is necessary to limit the intentional damage

to individuals (e.g. illegal hunting/poaching). Therefore, it is necessary to maintain three-level protection. For example, in the case of two-level categorization of the SPS, the Stag beetle would have to be included in the strictest protection category.

Does the amendment have a chance of being discussed?

The proposal is currently being finalized by NCA CR under the leadership of the MoE in cooperation with specialists and scientific societies. The MoE will then discuss the proposal with regional authorities and other State Nature Conservancy authorities, the Ministry of Agriculture of the Czech Republic, representatives of landscape users, Czech-Moravian Hunting Association, Czech Anglers Union, and other institutions and organizations. After incorporating comments, the

official discussion on the ANCLP amendment should begin in 2023, with the assumption that the legislative process will be completed in 2024.

The task of revising Special Species Protection was included among the Czech Government's Programme priorities for its current term and is also included in the Government's legislative plan. Therefore, there is now a great chance to review the species protection, which has been discussed for more than a decade.

The list of references is attached to the online version of the article at www.casopis.ochranaprirody cz