BIRD SPECIES WHICH ARE BECOMING EXTINCT AND RED DATA BOOKS FOR BIRD SPECIES OF TÜRKİYE

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ÖZET:

Bu çalışmada Türkiye'de yaşayan ve soyları tükenmekte olan kuş türleri üzerinde durulmuştur. Doğabilimciler, gerekli koruyucu tedbirleri almak, kuş, bitki ve hayvan türlerinin karşı karşıya kaldıkları tehlikeleri belirlemek için "Kırmızı Listeler" hazırlar. Hazırlanan bu listeler doğal zenginliği ve çevreyi koruma ile ilgili her kesimden insanı ilgilendirdiğinden uluslararası bir nitelik taşır. Türkiye'de yaşayan kuş türlerinin yok olmalarının nedenleri iki ana başlık altında toplanabilir: 1. Soy tükenmesini dolaysız olarak etkileyen tüketici baskılar, 2. Soy tükenmesi olayından dolaylı olarak etkilenen kuş türleri. Çalışmada ayrıca tehlike altındaki kuş türleri için hazırlanan "Kırmızı Listelerin" işlevlerinden de söz edilmektedir. İnsanların yıkıcı etkisinin bir sonucu olarak, Türkiye'de yaşayan kuş türlerinin pek çoğunun soyu tükenmeyle karşı karşıyadır. Kuşlarla ilgili gözlemler ve saptamalar kuş türleriyle ilgili olan tehlike boyutunun, nüfus yoğunluğunu yansıtan çalışmalarda belirlenebilir. Bunun yanında soyları tükenme tehlikesi altında olan kuş türleri için hazırlanan "Kırmızı Listelerin" ne tür amaçlar sunacağı irdelenmiştir ve Nonpasseres grubundaki kuş türlerinin Anadolu için tükenme dereceleri verilmiştir.

ANAHTAR SÖZCÜKLER: Kırmızı listeler; kuşlar; Türkiye.

ABSTRACT:

In this study, the bird species which are becoming extinct in Türkiye are examined. Natural scientists prepare "Red Data Books" for taking the necessary preventive measures and for determining the dangers with which the bird, plant, and animal species are confronted. The books prepared have an attribute of international importance since they concern the people who are interested in protecting nature from all sectors. The reasons why the bird species disappear are analysed in two main groups: 1. As a result of the consumer pressures of our people that directly pave the way to extinction. 2.The bird species that are indirectly influenced on the path to extinction. The functions of the "Red Data Books" which are prepared for the endangered bird species are also mentioned in the study. That many of the bird species living in Türkiye are faced with extinction, the censuses, the observations and findings related with the bird species, the degree of endangerement related with the bird species are determined from the studies that reflect the size of population of those species. In addition to this, the objectives of the Red Data Books are scrutinized. Extinction degrees of the Nonpasseres Groups of bird species in Anatolia are given.

KEY WORDS : Red data books; birds; Türkiye.

1. INTRODUCTION

Natural scientists prepare "RED DATA BOOKS" for the bird species, or in a broad sense, the plant and animal species, that live in Turkey or are becoming extinct in specific regions, for taking the required preventive measures and for determining the dangers with which they are confronted. The books prepared have an attribute of international importance from the aspect of protecting natural wealth and are of interest to people from all sectors who are concerned with protecting nature [1-11].

If it is considered that in the past 300 years over 65 species of birds have disappeared solely due to the negative consumer pressure applied by humanity, then it is understood how important these books are from the viewpoint of bird protection [12]. For this reason, it is necessary to prepare "Red Data Books" for all the living creatures in Türkiye, and if possible, to print them with colored photographs. Thus, a general idea will be obtained concerning the concentrations of the populations of bird species that are endangered in Türkiye at the moment. In this manner, the situation will also be learned by the public and the required assistance will be requested from them. In this way these books will also form the point of departure for the institutions and organizations related to the preservation of nature and will ensure that the required protective preventive measures are taken as soon as possible for the species that are endangered [4;6;7].

2. THE REASONS WHY THE BIRD SPECIES DISAPPEAR

We can collect into two main groups the reasons for bird species living in Türkiye decreasing to a level of disappearance or to completely disappearing:

2.1. A. As a result of the consumer pressures of our people that directly pave the way to extinction:

In this group are unconscious hunting at large rates to take advantage of bird flesh and feathers; the collecting of bird's eggs and selling on the market: the feeding of bird pecies with fish in which their feeding is not making any negative influence on the natural balance, but the suffering of damages by

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these species as a result of a wrong evaluation by the fishermen;and with these thought as well, the merciless killing of our predatory bird species with the pretext that they eat poultry and sheep or goats.

2.2. B. In this group are the bird species that are indirectly influenced on the path to extinction. We can list these reasons which are given below:

Causes can be enumareted such as the destroying and changing of the natural habitats where birds are living by fires in the forests and by drying up of the marshy areas; the pollution of the aquatic areas with waste chemicals, for example; such as insecticides and petroleum products and the transitions to the birds of the discarded poisons into the food chain and as a result of their being of affected, the dying out of their lines by reducing the reproductive capacities some species.

3. WHAT ARE THE FUNCTIONS OF THE RED DATA BOOKS WHICH INCLUDE THE ENDANGERED SPECIES ?

As mentioned above, as a result of influential negative pressures on the natural environment, many plant and animal species are also decreasing together with the birds. Morover, they are disappearing. Putting a stop to this is a national duty that concerns all of us.

Because the studies carried out concerning the Anatolian flora and fauna are very limited, it is rather difficult to make lists, outside of a few exceptions, of the species that were found previously and are not represented today because the studies reflecting the situation of the populations have only started to be made recently. It can be stated that Anatolia has found a transit region for many species of animals and has a rich fauna. It is estimated that the number of animal species living in Türkiye today is between 60.000 - 70.000. As a result of the destructive pressure of our people, many of the bird species living in Türkiye are faced with extinction. The latest example of this consists of the Bald Ibis, Geronticus eremita. For carrying out successfully the preservation programs for our bird species that are faced with the danger of extinction, just as in the example of International Union for the Conservation of Natures' (IUCNs) "RED DATA BOOKS", it has been attempted to determine to what extent the living bird species in Türkiye are endangered. For this, the censuses, observations and findings were made concerning the birds in Türkiye by the Turkish people and foreigners, from towards the end of the last century up untill the present, along with the situation of the Ankara and Environs bird populations that have been chosen as a pilot region by us, as well as the results of the

observations made at the Bandırma Kuş Cenneti (Bird Paradise) and the Kayseri Sultansazlığı have been recorded in a computer and it has been attempted to put forward the situation of the populations. The degree of endangerement for the bird species living in Türkiye will be determined from the studies which will be able to give the size of population of that species, while if these studies are not satisfactory then they will be determined by making estimates.

4. WHAT OBJECTIVE WILL BE SERVED BY THE RED DATA BOOKS THAT ARE PREPARED FOR THE BIRD SPECIES WHICH ARE IN DANGER OF BECOMING EXTINCT ?

In particular, the Red Data Books have been arranged in a manner that will serve the objectives given below. They participate in services that pave the way:

a. To give information to the public and especially the responsible institutions and organizations and the international official organizations on the dangers faced by the bird populations in Türkiye;

b. To apply protection and care-in of a very effective manner and if necessary to apply new sanctions from this viewpoint in the regions where the species that are in danger of becoming extinct are living, as the continuity of the existing populations of the many species will only be procured by protecting their environment and biotopes;

c. To hinder the interventions that will be made in the preservation areas and to give guidance to those responsible "Protection of Nature and Environment" in the establishment of new preservation areas for the endangered species;

d. To give the required preliminary information to all the organization which make plans for organizing the environment and giving the necessary assistance to this;

e. To make research on the rarest species that are living in Türkiye and for formulating and preparing a program from the aspect of the size and development of these populations;

f. To put forth and obtain new and complete basic information for performing and managing active protective preventive measures from an ecological point of view when appling the preservation program for the endangered bird species;

g. To make announcements to all the institutions of secondary and higher education on which species are faced with the danger of becoming extinct and for this reason the necessity of protecting them and setting forth and making known the reasons for these

Table 1. Rate and endangering Group of Birdspecies in Birdfamily (in Nonpasseresgroup) in Anatolien (N:Number of Birdspecies in Nonpasseres-Group; (n): Number of Birdspecies in IUCN criteria; ( )*: Number of not endangered bird Species. .

Birdsfamily (Nonpasseres Group)	Number of the Birdspecies in Birdfamily	A.1.1 n	A.1.1 %	A.1.2 n	A.1.2 %	A.2 n	A.2 %	A.3 n	A.3 %	A.4 n	A.4 %	B.2 n	B.2 %	B.3 n	B.3 %
Nonpasseres-Groups	246	2	0,8	32	13,2	63	26,0	50	20,7	27	11,2	46	19,0	22	9,1
1. Gaviidae	4							1	25			2	50	1	25
2. Podicipedidae	5					3	60	1	20			1	20		
3. Procellaridae	2					2	100								
4. Hydrobatidae	1											1	100		
5. Sulidae	1													1	100
6. Pelecanidae	2					2	100								
7. Phalacrocoracidae	3					2	66,7	1	33,3						
8. Ardeidae	9					5	55,6	4	44,4						
9. Anhingidae	1	1	100												
10. Ciconiidae	2					1	50	1	50						
11. Plegadidae	3	1	33,3			1	33,3	1	33,3						
12. Phoenicopteridae	1					1	100								
13. Anatidae	33			3	9,1	6	18,2	3	9,1	8	24,2	11	33,2	2	6,1
14. Accipitridae	29			4	13,8	9	31,0	10	34,5	2	6,9	3	10,3	1	3,4
15. Pandionidae	1			1	100										
16. Falconidae	9			2	22,2	3	33,3	2	22,1	1	11,1	1	11,1		
17. Tetraonidae	1			1	100										
18. Phasianidae	8			3	37,5	3	37,5	1	12,5	1	12,5				
19. Rallidae	8			1	12,5	2	25	1	12,5	4	50				
20. Gruidae	3			2	66,7							1	33,3		
21. Otididae	3			3	100										
22. Haematopodidae	2							2	100						
23. Recurvirostridae	2							1	50	1	50				
24. Charadriidae	15					7	46,7	1	6,7	1	6,7	5	33,3	1	6,7
25. Scolopacidae	25							3	12			14	56	8	32
26. Burhinidae	1							1	100						
27. Phaloropodidae	2											2	100		
28. Glareolidae	3					1	33,3	1	33,3					1	33,3
29. Stercorariidae	3							1	33,3			1	33,3	1	33,3
30. Laridae (1)*	11					1	9,1			1	9,1	2	18,2	6	54,5
31. Sternidae	10					5	50	1	10	2	20	2	20		
32. Pteroclidae	4			4	100										
33. Columbidae (2)*	6							3	50	1	16,7				
34. Cuculidae (1)*	2									1	50				
35. Strigidae	9			5	55,6	2	22,2	2	22,2						
36. Tytonidae	1					1	100								
37. Camprimulgidae	1					1	100								
38. Apodidae	4							2	50	2	50				
39. Alcedinidae	3			3	100										
40. Meropidae	2					1	50			1	50				
41. Coracidae	1					1	100								
42. Upupidae	1					1	100								
43. Iyngidae	1							1	100						
44. Picidae	8					2	25	5	62,5	1	12,5				

dangers and by taking the required preventive measures, the putting into practice of the sanctions [4].

5. ENDANGERED NONPASSERES SPECIES IN ANATOLIA; RESULTS AND DISCUSSION

According to Kiziroğlu (1993), 424 bird species were determined in our country. Of these species, 246 of them belong to Nonpasseres, 178 of them belong to Passeres. It can be pointed out that the number of the endangered species is 256 when the two groups are taken into consideration[4;6;7]. Environmental factors affect the Nonpasseres species much.

Degrees of danger Nonpasseres bird species according to families are given in Table 1. As is seen in the table two bird species became extinct (A.1.1 Group). These are the species named *Geronticus eremita* which belong to Anhingidae family containing the qualities of *Anhinga rufa* and Plegadidae families. The number is 8 [9] Bayern / Germany, whereas 19 in the whole country [13,14]. The number of bird species belonging to A.1.2 groups, that are in the danger of becoming extinct is 32 in Anatolia. On the other hand the number is 21 [9] in Bayern, while it is 32 [13-14] in the whole country. Since the species are in the danger of becoming extinct at any time, importance should be attached on this issue. The number of the species (A.2 group) that are in the danger of becoming extinct is 63 in Anatolia, while the number of the species in danger is 50. The number of the species (A.4 Group) which are in a hidden danger is 27 (At present the bird species which are in A.4 group could be in the danger of becoming extinct at any time) (See Table 1). The total number of the bird species mentioned is 174. Such species brood in Anatolia. For this reason, they belong to Group A. In addition to this group, there are species which do not brood or the migrating ones in Anatolia (B Group). The total number of this group is 68. In this group (B Group) the number of the Nonpasseres species is 46, on the other hand the number of the species that are in danger is 22 (B.3 Group).

One species of Laridae and Cuculidae and two species of Columbidae are not in the danger of becoming extinct.

The numbers of some of the species in A.1.2 Group in our country (the first number) and in Germany (the second number) [14] are as follows: a) Anatidae (3;2) ; b) Accipitridae (4;4) ; c) Falconidae (2;1) ; d) Tetraonidae (1;1) ; e) Gruidae (2;1) ; f) Phasianidae (3;2) ; g) Rallidae (1;1) ; h) Otididae (3; -) ; i) Scolopacidae (- ; 5) ; k) Pteroclidae (4 ; -) ; l) Strigidae (5;3) ; and m) Alcedinidae (3 ; -)

Birds-of-pray and of marsh (day and night) and the other Nonpasseres species which became extinct

(A.1.1) and which are in danger of extinction (A.1.2), (A.2) are shown in Table 2 and compared for Anatolia and Germany [13;14].

Table 2: Comparison of the bird species which are in danger of extinction (A.1.2), (A.2) in Anatolia and Germany.

	A.1.1.		A.1.2. + A.2	
	Anatolia	Germany	Anatolia	Germany
	n=(2)	(19)	(95)	(95)
Su ve bataklık Kuşları	2	8	46	52
Yırtıcı kuşlar	-	5	27	17
Night			8	-
Day			(19)	-
Other Nonpasseres	-	6	22	26

On the one hand, the number of the water birds and of marsh in Anatolia is 46, on the other hand, in Germany the same number is 52. Whereas 11 kinds of species (birds-of-pray and the other Nonpasseres) became extinct, there are no bird species that became extinct in this group. On the contrary, the number of the birds-of-pray in A.1.2 + A.2 is 27 in Anatolia, the number is 17 in Germany [15;16;17]. Therefore, 10 bird species are in more danger. It is the same for the families; Phasianidae, Otididae and Gruidae. The most important negativity is using insecticides [15;16;17;18;19]. The rate of extinction in both countries belongs to narrowing the areas for living, drying of the marshes and environmental pollution [16;17]. Artificial ways of treatment should be avoided in throughout Anatolia and the other areas.

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