

## STATUS AND NUMBERS OF ESTONIAN BIRDS, 2003–2008

Jaanus Elts<sup>1</sup>, Andres Kuresoo, Eerik Leibak, Aivar Leito, Agu Leivits,  
Vilju Lilleleht, Leho Luigujõe, Eve Mägi, Rein Nellis, Renno Nellis &  
Margus Ots

Estonian Ornithological Society, PO Box 227, 51002 Tartu.

<sup>1</sup>e-mail: Jaanus.Elts@eo.y.ee

In cooperation with: Sven Aun, Margus Ellermaa, Tarmo Evestus, Riho Kinks, Tiit Leito, Heikki Luhamaa, Asko Lõhmus, Mati Martinson, Riho Männik, Triin Paakspuu, Hannes Pehlak, Raul Rosenvall, Mati Salumäe, Gunnar Sein, Urmas Sellis, Indrek and Jaak Tammekänd, Aarne and Eet Tuule, Joosep Tuvi, Tarvo Valko, Veljo Volke, Ülo Väli.

**Summary.** The current paper includes the new taxonomic list of Estonian breeding and wintering bird species and their abundance estimates. Up to 01.01.2009, official list of Estonian birds contains 371 bird species (366 species belong to categories A-C and 5 species to category D). Breeding has been confirmed in 225 species (210 regular). 158 species have been observed in winter (109 regularly) and 215 species on migration (204 regularly). 110 species are encountered occasionally. In 23 species there was strong increase and in 19 species strong decrease in breeding numbers during 1991–2008. According to this study 13.4–20.4 million pairs of birds are breeding and 3.5–9.4 million birds are wintering in Estonia.

### Introduction

There are four reviews published about status and numbers of Estonian birds (Lilleleht & Leibak 1993, Leibak *et al.* 1994, Lõhmus *et al.* 1998, Elts *et al.* 2003). According to how bird species change their distribution, how their abundance is affected by changes in quality of environment, and how our knowledge evolves, the faunistic information must be re-examined. In current article the new taxonomic list of Estonian birds is presented, as well as estimated abundance of

breeding and wintering birds, and their trends. The level of our knowledge concerning different species is also estimated to allow plan further work more efficiently.

## Material and methods

Initial dataset comprised all sources available to the collective of authors, but primarily data and regional summaries (mainly from Pärnumaa, Saaremaa, Läänerema, Hiumaa and Tartumaa) collected by various projects of Estonian Ornithological Society, special studies and Estonian Rarities Committee. Great help was of transect counts implemented during the project of EOS's Breeding Bird Atlas. There was 9 discussions for reconciliation of evaluations, about six-hour each, which, including preparatory works, makes far more than 600 manhours.

Abundance of a bird species was characterized in two ways. The first of which (henceforth: **category of occurrence**) is based on the standards of Association of European Rarities Committees (AERC TAC 2003) and reveals itself in five occasions<sup>1</sup>:

**A** – species which has been recorded in an apparently wild state at least once between 01.01.1950–01.01.2009;

**B** – species, which has been recorded in an apparently wild state only before 1950;

**C** – released or escaped species which has established a self-supporting breeding population in the own country; also birds coming from a category C population of another country (with the species not breeding in the own country);

**D** – every species unless it is almost certainly a genuine vagrant (in which case it enters Cat. A), or almost certainly an escape from captivity (Cat. E);

**E** – escapes from captivity (cages, aviaries).

---

<sup>1</sup> Abbreviations here and henceforth like in Table 1.

**Status** was determined similarly to previous (Lilleleht & Leibak 1993, Lõhmus *et al.* 1998, Elts *et al.* 2003):

**H** – regular breeder;

**S** – summer visitor;

**L** – passage migrant;

**T** – winterer;

( ) – irregular (breeder etc.);

[ ] – occasional (breeder etc.)<sup>2</sup>

**E** – vagrant;

**int** – introduced.

A species was considered occasional breeder/winterer etc. if its occurrence fitted in this pattern in 1971–2008. Irregular or regular breeders etc. were however determined by occurrence pattern in the last 18 years (1991–2008) or (if status considerably changed in the period) according to the latest years. Birds **breeding abundance** (the size of breeding population) was estimated as a number of breeding pairs. In case of some species or groups, that do not form constant breeding pairs (e.g. gallinaceous, some waders), or whose populations include many territorial specimen (e.g. raptors, passerines on the verge of area), the number of male specimen or breeding territories were considered as the breeding pairs. In the case of Spotted Eagle (*Aquila clanga*), mixed pairs with Lesser Spotted Eagle (*Aquila pomarina*) were also considered as pairs of this species.

Breeding abundance was estimated:

- As interval (minimum-maximum), that takes into account both the year-to-year variations and inaccuracy in estimation. The purpose was, that actual abundance would remain in the presented interval.

---

<sup>2</sup> Abundance is stated only if occasional wintering or breeding has taken place in 2003–2008.

- On the basis of data from 2003–2008, except when:
  - 1) Abundance in recent years has drastically increased/decreased (e.g. Cormorant, Goshawk) – in that case the latest data (preferably from 2008) was considered.
  - 2) Only one (or few) further count has been done at the present century – the estimation based on dataset of exact count (irrespective of the year).

Most of the abundance estimations have been made on the ground of insufficient information and therefore must be taken critically. To make it possible to orientate in their veracity, the method(s) for obtaining the estimations and extent of their reliability are adduced.

**Evaluation methods** are shown for breeding estimates:

- 1 – complete count (a full or near-full census);
- 2 – expert estimate (the best estimate in the opinion of experts studying the population of the species);
- 3 – compilation (an estimate derived from a number of sources);
- 4 – extrapolation (extrapolation from sample counts in different habitats and/or random plots);
- 5 – a rough estimation from the previous estimate using known recent trend for correction (the previous method is shown before the slash in the table, e.g. 2/5 – previously an expert estimate);
- 6 – a rough estimate – based on Estonian regional estimations and density of population in neighbouring countries (Southern Finland, Latvia).

**Reliability** divides estimations in three main groups:

- A – a reliable quantitative data for last years;
- B – generally well known, but quantitative data is insufficient or incomplete;
- C – (up-to-date) data is (almost) missing.

Two-letter combination is used on occasions, when reliability of data remained between two categories and the first letter indicates the category the estimation rather belongs to. C-B, for instance, means that

quantitative data about the species is absent, but rate of occurrence is known.

The specification of changes in abundance (**trends**) during 1991–2008 was based on Europe-wide criterions (Hildén & Saris 1990) that were in use also previously (Lilleleht & Leibak 1993, Lõhmus *et al.* 1998, Elts *et al.* 2003):

- e extinct as a regular breeder during given period;
- strong decrease (over 50%);
- moderate decrease (10–50%);
- (-) probable decrease (no clear proof);
- 0 stable, no detectable changes ();
- (0) probably stable;
- f fluctuated widely without a clear trend ;
- (+) probable increase (no clear proof);
- + moderate increase (10–50%);
- ++ strong increase (over 50%);
- (n) newcomer, with a few sporadic records;
- n newcomer, as a regular breeder/winterer;
- ? trend unknown.

When, during the period, clearly distinguishable trends in the abundance of the species were observed, they were suitably expressed by dividing the estimations with comma.

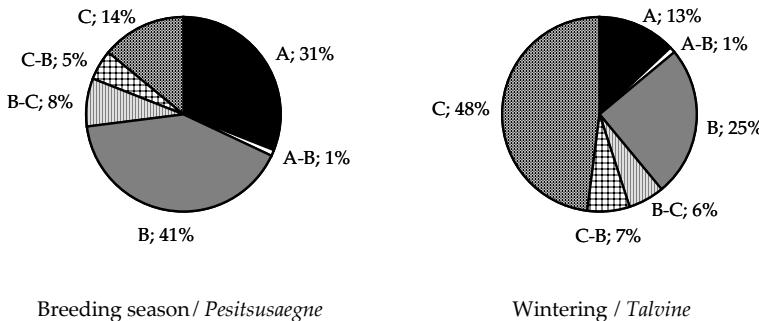
The main source in estimation of trends during breeding-time of many species was the data of point counts. Previous estimations of the trends were overviewed and modified in cases if new, specified or corrective data was available.

The abundance of birds in winter was estimated as of January, and it is presented as the number of individuals. Data from mid-winter waterfowl counts; Christmas Bird Counts (for mainland species) were used as basic data and also data concerning the migration of species (combined with the number of individuals during breeding season, average number of recruitments and expected autumnal death rate of these young). For most species the obtained estimations were very rough and reliability is hard to determine. Yet authors hope that current estimations are more precise than previous.

## Results and Discussion

The results are summarized in the Tables 1 and 2. Systematic order and Latin names are given according to "AERC TAC's Taxonomic Recommendations" (AERC TAC 2003). Details about rare species can be found on the Estonian Rarities Committee (HK 2009) website.

Reliable numerical data was available for 31% of breeding species and for 13% of wintering species (Figure 1), whereas the quantitative data for about 14% breeding species and 48% wintering species was insufficient. Therefore we are glad to admit that comparing to previous population estimates (Elts et al. 2003), the quality of data about breeding birds has improved, especially in case of the species with the reliable data. The major part in improvement of the quality of the data is based on transect counts carried out during the Breeding Bird Atlas project. Whereas the quality of data concerning wintering birds has remained practically the same as previously.

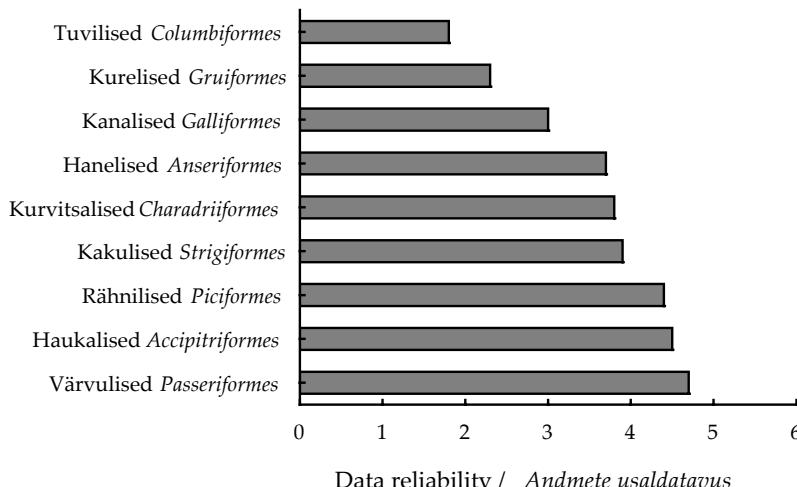


**Figure 1.** Distribution of number estimates during breeding and wintering. A indicates the highest and C the lowest reliability.

**Joonis 1.** Pesitsusaegsete ja talviste arvukus-hinnangute jaotus usaldatavuse järgi. A tähistab kõige usaldatavamaid, C kõige vähem usaldatavaid hinnanguid.

The data about breeding bird vary in different bird orders (Figure 2). The best-studied birds are *Passeriformes*, but also *Piciformes* and *Accipitriformes*. The poorest current data available is for *Columbiformes* – we do not have reliable data for none of the five species. Order of

*Gruiformes* stands out with its clear polarization: if the data for Crane (*Grus grus*) has maximum reliability and for Corncrake (*Crex crex*) the quality is average, then our knowledge about the abundance of the remaining five species is very poor.



**Figure 2.** The average quality of estimates of most numerous breeding bird orders. Compared are only orders that contain at least 5 species represented in Estonia. The scale of reliability: 1 = least reliable data (C), 6 = most reliable data (A).

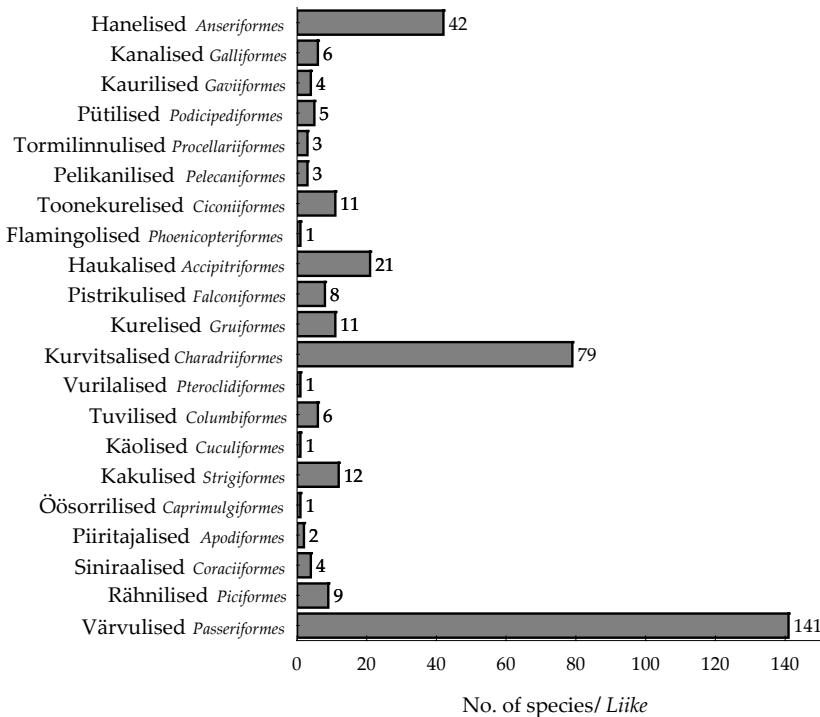
*Joonis 2. Haudelinnustiku andmete keskmise kvaliteeti arvukamates linnuseltsides. Võrdlusse on võetud vaid need seltsid, mis on meie linnustikus esindatud vähemalt 5 liigiga. Usaldatavuse skaala: 1=vähemusaldatav andmestik (C), 6=usaldatav andmestik (A).*

#### Composition of avifauna

Up to 01.01.2009 there are 371 species in the official list of Estonian birds, 366 of which are of natural origin or introduced (categories A–C) and have formed regular populations in Estonia or in neighbouring countries; 5 species are of unknown origin (category D). Species of category E (10 species) are not considered in the official list. There are only species in category E that have escaped from captivity and can survive in local conditions. Therefore the register does not include many southern (non-holarctic) exotic species escaped from captivity, such as Budgerigar (*Melopsittacus undulatus*), Myna (*Acridotheres tristis*),

Grey Crowned Crane (*Balearica regulorum*) etc., that most likely cannot survive long in Estonian nature. There are 225 species breeding in Estonia, 210 of which are regular breeders. In winter we have 158 species (109 regularly) and 215 species on migration (204 regularly). There are also 110 species of occasional visitors in the list of Estonian birds.

The most numerous orders of our avifauna are *Passeriformes* (141 species); *Charadriiformes* and *Anseriformes* are also large orders, while 4 orders are represented with only one species (Figure 3).



**Figure 3.** Species richness of bird orders encountered in Estonia (numbers denote the number of species).

*Joonis 3. Eestis kohatud linnuliikide jaotus seltside lõikes (tulba kõrval olev number näitab liikide arvu).*

### *Abundance during breeding season and its trends*

According to our estimations, there are 13.4–20.4 million pairs of birds breeding in Estonia, whereby 0.7–1.2 million of these pairs are non-passerines and 12.7 – 19.2 million are passerines. The most numerous breeder is Chaffinch (*Fringilla coelebs*) with 1.7 – 2.2 million pairs; Willow Warblers (*Phylloscopus sibilatrix*) are also more than million pairs in numbers. Maximum estimation of Robin (*Erithacus rubecula*) and Whitethroat (*Sylvia communis*) is also exceeding the million pairs. Remarkable growth in abundance during 1991–2008 was stated on 23 species, 10 of which were non-passerines. Remarkable decrease was observed in case of 14 non-passerine and 5 passerine. Thus, according to new estimates, the number of strongly decreasing non-passerines has doubled.

The working group had to admit, that previous estimations of some species (Lilleleht & Leibak 1993, Leibak *et al.* 1994, Lõhmus *et al.* 1998, Elts *et al.* 2003) have been inaccurate because of the insufficient data. In recent years our knowledge about Black Stork (*Ciconia nigra*), Corncrake and many Passeriformes have significantly improved. For example, on the basis of new data the abundance estimate for Hazel Grouse (*Bonasa bonasia*) was significantly increased. However, the new abundance estimation for Black Stork, based on telemetry studies by Eagle Club, is lesser than previous: the new estimate refers not to drastic decrease of abundance of the species, but rather more precise data about territory use of the species (U. Sellis, personal communication).

### *Abundance during winter*

Abundance of wintering birds depends on conditions during previous season, especially on breeding success, autumnal migration and wintering conditions, so the number of our winterers can widely fluctuate. According to current estimations 0.5–1.7 million individuals of non-passerines and 3.0–7.7 million passerines arrives or stays in Estonia, making 3.5–9.4 million birds as total amount of winterers. In fair winters the margin of half a million specimen can be crossed by

Long-tailed Duck (*Clangula hyemalis*), Goldcrest (*Regulus regulus*), Willow Tit (*Parus montanus*), Great Tit (*Parus major*) and Common Redpoll (*Carduelis flammea*), whereby the most numerous of them is Willow Tit (estimated as 0.6–1.2 million individuals).

During the last 18 years the abundance of wintering White-tailed Eagle (*Haliaeetus albicilla*), Buzzard (*Buteo buteo*), Tufted Duck (*Aythya fuligula*), Smew (*Mergus albellus*) and Mute Swan (*Cygnus olor*) has remarkably increased. Among passerines the Greenfinch (*Carduelis chloris*) and Bearded Tit (*Panurus biarmicus*) have shown significant increase, but wintering population of the latter is strongly fluctuating. Meanwhile, the number of wintering Merlins (*Falco columbarius*), Collared Doves (*Streptopelia decaocto*), Goshawks (*Accipiter gentilis*) and House Sparrows (*Passer domesticus*) has strikingly decreased. The abundance of Mallard (*Anas platyrhynchos*) decreased during the first half of the given period of time, but it has recovered successfully in recent years.

We may conclude that there is much to do in adjustment of population estimates, let alone observing the abundance trends. We hope that Breeding Bird Atlas project, that is nearing completion, helps to arrange our knowledge about the current distribution of our breeding birds. Meanwhile, all planners of counts and other research projects should keep in mind, that census results must be representative and suit for generalizations. The critical observations of datasheets reveals, that we still have orders of birds, whose population estimates are based rather on opinions than on count data. We need effective estimations with wide-area replications to eliminate abovementioned deficiencies.

**Table 1.** Status and numbers of Estonian birds. See text for abbreviations.

**Tabel 1.** Eesti lindude pesitsusaegne staatus ja areukus. Lihhendite seletused on esitatud tekstis.

Liik	Species	Kategooria	Staatus	Haudepaaride arv	Trend		Meetod	Usaldatavus		
					Category	Status	No. of breeding pairs	Trend 1971-90	Trend 1991-2008	Method
<b>Hanelised Aseriformes</b>										
Kühmnokk-luik ( <i>Cygnus olor</i> )	A	HLT	3000-3500		++	+	1	A		
Mustluik ( <i>C. atratus</i> )*	E	E								
Väikeluik ( <i>C. columbianus</i> )**	A	SLT								
Laululuik ( <i>C. cygnus</i> )	A	HLT	70-100	+	+	3	A			
Rabahani ( <i>Anser fabilis</i> )	A	L(T)								
Lühhinokk-hani ( <i>A. brachyrhynchus</i> )	A	L								
Suuri-laukhani ( <i>A. albifrons</i> )	A	[S]L								
Väike-laukhani ( <i>A. erythropus</i> )	A	L								
Hallhani ( <i>A. anser</i> )	A	HL(T)	600-700	+	-	1	A			
Vööthani ( <i>A. indicus</i> )*	E	E								
DE	E									
Lumehani ( <i>A. caerulescens</i> )*	E	E								
Väike-lumehani ( <i>A. rossii</i> )*	C	SL(T)								
Kanada lagle ( <i>Branta canadensis</i> )**	A	HL[T]	100-160	n,++	++,-	1	A			
Valgepöök-lagle ( <i>B. leucopsis</i> )	A	SL								
Musttagle ( <i>B. bernicla</i> )****	A	[H]L								
Punakael-lagle ( <i>B. ruficollis</i> )	BD	E								
Tulipart ( <i>Tadorna ferruginea</i> )*	A	HL[T]	800-1200	++	(+)	1,6	B			
Ristpart ( <i>T. tadorna</i> )	E	E								
Mörsjäpart ( <i>Aix sponsa</i> )*	E	E								
Mandarinipart ( <i>A. galericulata</i> )*	A	HL(T)	100-200	n	++	3	C			
Viupart ( <i>Anas penelope</i> )	A	E								
Ameerika viupart ( <i>A. americana</i> )*	A	HL(T)	2000-3000	++	++	3	B-C			
Rääkspart ( <i>A. strepera</i> )	A									

Kuupart ( <i>A. formosa</i> )*	E	E	2000-3000	0	0	3	C
Pilpart ( <i>A. crecca</i> )	A	HLT					
Ameerika pilpart ( <i>A. carolinensis</i> )*	A	E					
Sinikael-part ( <i>A. platyrhynchos</i> )	A	HLT	30 000-50 000	0	(0)	4	B
Soopart ( <i>A. acuta</i> )	A	HL[T]	50-100	--	--	3	C
Rägapart ( <i>A. querquedula</i> )	A	HL	500-1000	-	--	3	B-C
Sini-rägapart ( <i>A. discors</i> )*	A	E					
Puna-rägapart ( <i>A. cyanoptera</i> )*	E	E					
Luisnokk-part ( <i>A. clypeata</i> )	A	HL	1000-1500	-	-	3	B-C
Punanokk-varvart ( <i>Netta rufina</i> )*	A	E					
Punapea-varvart ( <i>Aythya ferina</i> )	A	HLT	1000-1500	+	-	3/5	B-C
Valgesilm-varvart ( <i>A. nyroca</i> )*	A	E					
Tuttvarvart ( <i>A. fuligula</i> )	A	HLT	4000-6000	+,-	-	3	B-C
Merivart ( <i>A. marila</i> )	A	HLT	1-10	--	--	2	B
Hähk ( <i>Somateria mollissima</i> )	A	HLT	3000-7000	++	--	2	A-B
Kuningrahk ( <i>S. spectabilis</i> )	A	L[T]					
Kirjuhahk ( <i>Polysticta stelleri</i> )	A	(S)L T					
Aul ( <i>Clangula hyemalis</i> )	A	SLT					
Mustvaeraas ( <i>Melanitta nigra</i> )	A	SLT					
Prillvaeraas ( <i>M. perspicillata</i> )*	A	E					
Tömmavaeraas ( <i>M. fusca</i> )	A	HLT	400-700	--	(+)	3	B-C
Läänesöökas ( <i>Bucephala islandica</i> )*	D	E					
Söökas ( <i>B. clangula</i> )	A	HLT	3000-5000	++	++	3	B
Kübarkoskel ( <i>Lophodytes cucullatus</i> )*	D	E					
Väikekoskel ( <i>Mergus albellus</i> )	A	[S]LT	800-1200	-	+	2/5	B
Rohukoskel ( <i>M. serrator</i> )	A	HLT	1500-2000	,+	0	2	B
Jääkoskel ( <i>M. merganser</i> )	A	HT	30 000-60 000	-	-,-	4	A
	A	HT	50-150	--	,,-	4	B

#### Kanalised Galliformes

- Laanepüü (Bonaesa bonasia)  
Rabapüü (Lagopus lagopus)

Teder ( <i>Tetrao tetrix</i> )	A	H T	6000-12 000	-,0	-	3	C
Metsis ( <i>T. urogallus</i> )	A	H T	1200-2000	,0	0	2	B
Nurmikana ( <i>Lerix perdix</i> )	A	H T	4000-8000	-	(-)	2/5,6	C
Pöldvett ( <i>Coturnix coturnix</i> )	A	H	50-5000	--	++	6	C-B
Faasan ( <i>Phasianus colchicus</i> )	E	S tint					
<b>Kaurilised Gaviiformes</b>							
Punakurk-kaur ( <i>Gavia stellata</i> )*	A	S LT					
Järvekaur ( <i>G. arctica</i> )	A	H L T	3-10	-	(-)	3	C
Jääkaur ( <i>G. immer</i> )*	A	E					
Tundrakaur ( <i>G. adamsii</i> )*	A	L [T]					
<b>Püttilised Podicipediformes</b>							
Väike-pütt ( <i>Tachybaptus ruficollis</i> )	A	H (T)	10-30	n	0	6	C-B
Tuttpütt ( <i>Podiceps cristatus</i> )	A	H L T	2000-3000	+	(0)	3/5	C
Hallpösk-pütt ( <i>P. grisegena</i> )	A	H L T	300-400	0	0	3/5	C
Sarvikpütt ( <i>P. auritus</i> )	A	H L (T)	200-400	-	(0)	3/5	C
Mustkael-pütt ( <i>P. nigricollis</i> )*	A	E [H]		(n)			
<b>Tormillnnilised Procellariiformes</b>							
Atlantise tormilind ( <i>Calonectris diomedea</i> )*	A	E					
Baleaari tormilind ( <i>Puffinus mauretanicus</i> )*	A	E					
Põhja-tormipääsu ( <i>Oceanodroma leucorhoa</i> )*	A	E					
<b>Pelikanilised Pelecaniformes</b>							
Suula ( <i>Morus bassanus</i> )*	A	E					
Kormoran ( <i>Phalacrocorax carbo</i> )	A	H L T	9000-14 000	n,++	++	1	A
Pelikan ( <i>Pelecanus onocrotalus</i> )*	D	E					
<b>Toonekurelised Ciconiiformes</b>							
Hüüüp ( <i>Botaurus stellaris</i> )	A	H L (T)	300-500	+0	0	3	B
Välkehüüp ( <i>Ixobrychus minutus</i> )*	A	E		e			
Ööhäigur ( <i>Nycticorax nycticorax</i> )*	A	E					

Süidhaigur ( <i>Egretta garzetta</i> )*	A	E						
Hobehaigur ( <i>Casmerodius albus</i> )**	A	S						
Hallhaigur ( <i>Ardea cinerea</i> )	A	HL T	1500-2000	+	+,-		3/5	C-B
Purpurhaigur ( <i>A. purpurea</i> )*	A	E						
Must-toonekurg ( <i>Ciconia nigra</i> )	A	H	70-80	+,-	-	1		A
Välge-toonekurg ( <i>C. ciconia</i> )	A	H[T]	4000-5000	++	++	3/5	B	
Tömmuilibis ( <i>Plegadis falcinellus</i> )*	A	E						
Luisnokk-iilnis ( <i>Platalea leucorodia</i> )*	A	E						
<b>Flamingolised Phoenicopteriformes</b>								
Heleflamingo ( <i>Phoenicopterus roseus</i> )*	D	E						
<b>Haukalised Accipitriformes</b>								
Herilaseviu ( <i>Pernis apivorus</i> )	A	HL	900-1300	0	+	4		B
Must-harksaba ( <i>Miltous migrans</i> )	A	[H] L		--	e	3		B
Puna-harksaba ( <i>M. milvus</i> )*	A	E						
Merikotkas ( <i>Haliaeetus albicilla</i> )	A	HL T	150-170	-,+,-	++	1		A
Hiid-merikotkas ( <i>H. pelagicus</i> )*	E	E						
Raipekkotkas ( <i>Neophron percnopterus</i> )*	A	E						
Kaeluskotkas ( <i>Gyps fulvus</i> )*	A	E						
Raisakotkas ( <i>Aegypius monachus</i> )*	BD	E						
Madukotkas ( <i>Circaetus gallicus</i> )*	A	(H)	0-5	0	(-)	2/5		B
Roo-loorkull ( <i>Circus aeruginosus</i> )	A	HL [T]	500-1000	++	0	2		B
Väjä-loorkull ( <i>C. cyaneus</i> )*	A	HL T	100-200	-	--	4		B
Stepi-loorkull ( <i>C. macrourus</i> )*	A	E						
Soo-loorkull ( <i>C. pygargus</i> )	A	H	300-500	++	+	4		B
Kanakkull ( <i>Accipiter gentilis</i> )	A	HL T	300-500	0	--	4		B
Raudkull ( <i>A. nisus</i> )	A	HL T	1500-3000	(+)	0	4		B-C
Hiineviu ( <i>Buteo buteo</i> )	A	HL T	5000-6000	+	+	4		B
Karvasjalg-viui ( <i>B. lagopus</i> )	A	L T						
Väike-konnakkotkas ( <i>Aquila pomarina</i> )	A	H	500-600	(+)	0	2		B
Suur-konnakkotkas ( <i>A. clanga</i> )	A	H	10-20	?	-	1		A

Stepikotkas ( <i>A. nipalensis</i> )*	A	E						
Kaljukotkas ( <i>A. chrysaeos</i> )	A	HLT	50-60	+	+	1	A	A
Kalakotkas ( <i>Pandion haliaetus</i> )	A	HL	50-60	+	++	1	A	A
<b>Pistrikulised Falconiformes</b>								
Stepi-tuuletallaja ( <i>Falco naumanni</i> )*	A	E						
Tuuletallaja ( <i>F. tinunculus</i> )	A	HL [T]	150-300	--	-	4	B-C	
Ameerika tuuletallaja ( <i>F. sparverius</i> )*	E	E						
Punajalg-pistrik ( <i>F. vespertinus</i> )	A	[H]L					C	
Väikepistrik ( <i>F. columbarius</i> )	A	HLT	15-30	--	--	3	B-C	
Loöopistrik ( <i>F. subbuteo</i> )	A	HL	500-800	,0	0	4	B	
Jahipistrik ( <i>F. rusticolus</i> )*	A	E						
Rabapistrik ( <i>F. peregrinus</i> )**	A	SL (T)		e				
<b>Kurelised Gruiformes</b>								
Rooriguk ( <i>Rallus aquaticus</i> )	A	HLT	1000-2000	+	0	3,6	C	
Tüplihuik ( <i>Porzana porzana</i> )	A	HL	1000-10 000	-	0	3	C	
Väikehuik ( <i>P. parva</i> )*	A	H	20-100	-	0	3	C	
Värblihuik ( <i>P. pusilla</i> )*	A	E						
Rukkirääk ( <i>Crex crex</i> )	A	HL	30 000-50 000	-	+	4	B	
Tait ( <i>Gallinula chloropus</i> )	A	HL (T)	700-1500	+	0	6	C	
Lauk ( <i>Fulica atra</i> )	A	HLT	3000-5000	(0)	-	3/5	C-B	
Sookurg ( <i>Grus grus</i> )	A	HL [T]	6500-7500	++	+	4	A	
Neitsikurg ( <i>G. virgo</i> )*	A	E						
Väiketrapp ( <i>Tetrax tetrax</i> )*	B	E						
Suurtrapp ( <i>Otis tarda</i> )*	A	E						
<b>Kurvitsalised Charadriiformes</b>								
Merik (Haematopus ostralegus)	A	HL	3000-4000	(0)	0	2/5	C	
Karkjal (Himantopus himantopus)*	A	E						
Naaskelhnokk (Recurvirostra avosetta)	A	H	150-300	+	+	3	B	
Jämejalg (Burhinus oedicnemus)*	A	E						

Könnu-pääsujooksur ( <i>Glaeola pratinacola</i> )*	A	E						
Stepi-pääsujooksur ( <i>G. nordmanni</i> )*	A	E						
Väiketüll ( <i>Charadrius dubius</i> )	A	HL	1000-2000	+	-†	6	C	
Liivatüll ( <i>C. hiaticula</i> )	A	HL	1000-2000	-	--	3	B	
Mustjalg-tüll ( <i>C. alexandrinus</i> )*	A	E						
Roosterind-tüll ( <i>C. morinellus</i> )*	A	L						
Tundraruüt ( <i>Pluvialis fulva</i> )	A	E						
Riiüt ( <i>P. apricaria</i> )	A	HL	3000-4000	0	0-	4	B	
Piili ( <i>P. squatarola</i> )	A	L						
Valgesaba-kiivitaja ( <i>Vanellus leucurus</i> )*	A	E						
Kiivitaja ( <i>V. vanellus</i> )	A	HL [T] [S] L [T]	40 000-60 000	--	+	3	B	
Suurküldi ( <i>Calidris canutus</i> )	A	A						
Leeterüdi ( <i>C. alba</i> )	A	L						
Väikerüdi ( <i>C. minuta</i> )	A	L						
Värbrüdi ( <i>C. temminckii</i> )**	A	[H] L						
Kiripuga-rüdi ( <i>C. melanotos</i> )*	A	E						
Älverüdi ( <i>C. acuminata</i> )*	A	E						
Kõvernokk-rüdi ( <i>C. ferruginea</i> )	A	L						
Merirüdi ( <i>C. maritima</i> )	A	L T						
Soorüdi ( <i>C. apina</i> )	A	HL [T]	200-250	-	--	1	A	
Plütt ( <i>Limicola falcinellus</i> )	A	L						
Ruugerüdi ( <i>Tringites subruficollis</i> )*	A	E						
Tukkas ( <i>Philomachus pugnax</i> )	A	HL	20-50	0-	--	2	B	
Mudanepp ( <i>Lymnocryptes minimus</i> )	A	HL (T)	20-50	0	(0)	2,6	C	
Tikutaja ( <i>Gallinago gallinago</i> )	A	HL (T)	30 000-50 000	(0)	(0)	3	B	
Rohunepp ( <i>G. media</i> )	A	H	400-600	-	(-)	2	A-B	
Metskurvitits ( <i>Scolopax rusticola</i> )	A	HL (T)	30 000-60 000	(+)	(0)	3	B	
Mustsaba-vigle ( <i>Limosa limosa</i> )	A	H	500-700	-	-	2,4	B	
Vöötsaba-vigle ( <i>L. lapponica</i> )	A	L						
Väikekoovitaja ( <i>Numenius phaeopus</i> )	A	HL	500-800	+	+†	4	B	
Suurkoovitaja ( <i>N. arquata</i> )	A	HL	3000-5000	(-)	-†	3	B	

Tunetilader ( <i>Tringa erythropus</i> )	A	S L	HL [T]	5000-7000	-	-	3	B
Punajalg-tilder ( <i>T. totanus</i> )	A	(H)	0-5		(n)	2	A	A
Lammtilder ( <i>T. stagnatilis</i> )*	A	HL	300-400	+	++	4	B	B
Heletilader ( <i>T. nebularia</i> )	A	HL	15 000-25 000	(0)	+	4	B	B
Metstilder ( <i>T. ochropus</i> )	A	HL	3000-4000	0	0	4	B	B
Mudatilader ( <i>T. glareola</i> )	A	E						
Halkibu ( <i>Xenis cinereus</i> )*	A	HL	5000-10 000	0	0	5,6	C	C
Vihitaja ( <i>Actitis hypoleucos</i> )	A	HL [T]	100-150	--	-	3	B	B
Kivirullija ( <i>Arenaria interpres</i> )	A	E						
Suur-veetallaja ( <i>Phalaropus tricolor</i> )*	A	SL						
Veetallaja ( <i>P. lobatus</i> )	A	E						
Puna-veetallaja ( <i>P. fulicarius</i> )*	A	E						
Laisaba-ämn ( <i>Stercorarius pomarinus</i> )	A	[S] L						
Söödikämn ( <i>S. parasiticus</i> )	A	SL						
Pikksaba-ämn ( <i>S. longicaudus</i> )*	A	[S](L)						
Suuränn ( <i>S. skua</i> )*	A	E						
Karbuskajakas ( <i>Larus melanocephalus</i> )*	A	E						
Väikekajakas ( <i>L. minutus</i> )*	A	HL (T)	500-1000	(-)	--	3	B	B
Harksaba-kajakas ( <i>L. sabini</i> )*	A	E						
Näerukajakas ( <i>L. ridibundus</i> )	A	HL T	30 000-50 000	+/-	-	3	B	B
Kalakajakas ( <i>L. canus</i> )	A	HL T	10 000-15 000	--	0	3	B	B
Tömmukajakas ( <i>L. fuscus</i> )	A	HL (T)	50-100	--	-	3	B-C	B-C
Höbekajakas ( <i>L. argentatus</i> )	A	HL T	20 000-30 000	++	+,-	3		
Löuna-höbekajakas ( <i>L. michahellis</i> )*	A	E						
Koldjaig-höbekajakas ( <i>L. cachinnans</i> )*	A	E						
Polaarkajakas ( <i>L. glaucopterus</i> )*	A	(L) T						
Jääkajakas ( <i>L. hyperboreus</i> )*	A	HL T	2000-3000	++	+,-	2	B	B
Merikajakas ( <i>L. marinus</i> )	A	E						
Roosakajakas ( <i>Rhodostethia rosea</i> )*	A	L [T]						
Kaljukajakas ( <i>Rissa tridactyla</i> )	A	E						
Vandellkajakas ( <i>Pugophilus eburnea</i> )*	A	E						

	A	E					
Näerutiiri ( <i>Sterna nilotica</i> )*	A	HL	150-250	0	-	2	A
Räusktiiri ( <i>S. caspia</i> )	A	H	600-900	++	0	2	A
Tutt-tiiri ( <i>S. sandvicensis</i> )	A	HL	5000-7000	-	0	3	B-C
Jõgiitiiri ( <i>S. hirundo</i> )	A	HL	7000-10 000	-	0	2	B
Randiitiiri ( <i>S. paradisaea</i> )	A	HL	400-700	(-)	+	2	B-C
Väkitiiri ( <i>S. albifrons</i> )	A	E					
Habevires ( <i>Chlidonias hybrida</i> )*	A	H	1000-2500	+	-	3	B
Mustviires ( <i>C. niger</i> )	A	E (H)	0-30			1	A
Valgetib-vires ( <i>C. leucopterus</i> )*	A	L (T)				1	
Lõunatirk ( <i>Uria aalge</i> )	A	H LT	1-10	n	0	3	C
Alk ( <i>Alca torda</i> )**	A	H LT	20-40	0	0	1	A
Kräüssel ( <i>Cephalus grylle</i> )	A	E					
Vääikealk ( <i>Alle alle</i> )*	A						
<b>Vurilised Pterodidiiformes</b>							
Stepivurnil ( <i>Syrphactus paradoxus</i> )*	B	E					
<b>Tuvilised Columbiformes</b>							
Kodututvi ( <i>Columba livia</i> )	C	H T int	40 000-80 000	+	0	3,6	C
Õõnetutvi ( <i>C. oenas</i> )	A	HL (T)	500-1000	(-)	(-)	3	C-B
Kaelustutvi ( <i>C. palumbus</i> )	A	HL (T)	50 000-80 000	(0)	(+)	4	B
Kaelus-turteltutvi ( <i>Streptopelia decaocto</i> )	A	HT	100-200	(++)	--	5	C
Turteltutvi ( <i>S. turtrur</i> )	A	HL	1000-3000	+	--	3/5	C
Suur-turteltutvi ( <i>S. orientalis</i> )*	A	E					
<b>Käolised Cuculiformes</b>							
Kägu ( <i>Cuculus canorus</i> )	A	HL	30 000-50 000	(-)	0,+	4	B
<b>Kakulised Strigiformes</b>							
Loorkakk ( <i>Tyto alba</i> )*	A	E					
Kassikakk ( <i>Bubo bubo</i> )	A	H T	60-120	0	-	2	B
Lumekakk ( <i>B. scandiacus</i> )	A	[L] [T]					
Viöötkakk ( <i>Surnia ulula</i> )***15.IV-31.VII	A	[H] L (T)					

Värakkalk ( <i>Glaucidium passerinum</i> )	A	H L T	600-1200	(0)	+	4	B
Kivikkalk ( <i>Athene noctua</i> )*	B	E					
Kodukakk ( <i>Strix aluco</i> )	A	H (L) T	1000-2000	-	0	4	B
Händkakk ( <i>S. uralensis</i> )	A	H (L) T	1500-2500	++	0	4	B
Habekakk ( <i>S. nebulosa</i> )*	A	S T					
Körvukräts ( <i>Asio otus</i> )	A	H L T	500-4000	f	f	4	B
Sooräts ( <i>A. flammeus</i> )	A	HL [T]	10-300	-	f	3	B-C
Karvasalg-kakk ( <i>Aegolius funereus</i> )	A	H L T	200-400	f	-	4	B
<b>Öösornilised Caprimulgiformes</b>							
Öösorr ( <i>Caprimulgus europaeus</i> )	A	H L	10 000-20 000	-	0	3	C
<b>Piiritajalised Apodiformes</b>							
Piiritaja ( <i>Apus apus</i> )	A	H L	70 000-150 000	+	0	3	C
Suurpiiritaja ( <i>A. melba</i> )*	A	E					
<b>Sinirütlised Coraciiformes</b>							
Jäälind ( <i>Alcedo atthis</i> )	A	H T	100-500	-	0	3/5	B-C
Mesilasenäpp ( <i>Merops apiaster</i> )*	A	E					
Siniraag ( <i>Coracias garrulus</i> )	A	H	1-5	--	-	2	A
Väenukägu ( <i>Upupa epops</i> )	A	H	5-10	-	0	2	B
<b>Rähnilised Piciformes</b>							
Väänkääl ( <i>Lynx torquilla</i> )	A	H L	5000-10 000	0-	-	4	B
Hallpea-rähn ( <i>Picus canus</i> )	A	H T	3000-5000	+	(0)	4	B
Roherähn ( <i>P. viridis</i> )	A	H T	50-100	--	--	2	B
Muisträhn ( <i>Dryocopus martius</i> )	A	H T	6000-9000	+	+	4	A
Suur-kirjurähn ( <i>Dendrocopos major</i> )	A	H L T	50 000-100 000	0	+	4	A
Tamme-kirjurähn ( <i>D. medius</i> )	A	H T	50-200	++	2	B	
Valgeselg-kirjurähn ( <i>D. leucotos</i> )	A	H T	3000-6000	+	+	3	B
Väike-kirjurähn ( <i>D. minor</i> )	A	H L T	5000-8000	0	(0)	4	B
Laanerähn ( <i>Picoides tridactylus</i> )	A	H (L) T	3000-5000	(+)	+	4	B

### Värvulised Passeriformes

Stepilööke ( <i>Melanocorypha calandra</i> )*	A	E						
Välia-välkelööke ( <i>Calandrella brachydactyla</i> )*	A	E	(H) [T]	0-5	--	0	3	B
Tuttilööke ( <i>Galerida cristata</i> )*	A	H	L [T]	10 000-20 000	--	(+)	4	B
Nõmmelööke ( <i>Lullula arborea</i> )	A	H	L T	400 000-700 000	-	-	4	A
Pöldlööke ( <i>Alauda arvensis</i> )	A	L	[T]					
Sarviklööke ( <i>Eremophila alpestris</i> )	A	H	L [T]	10 000-20 000	(+)	--	3	C-B
Kaldapääsuke ( <i>Riparia riparia</i> )	A	H	L	100 000-200 000	-	--	3	C-B
Suitsupääsuke ( <i>Hirundo rustica</i> )	A	H	L					
Roostepääsuke ( <i>H. daurica</i> )*	A	E						
Räästapääsuke ( <i>Delichon urbicum</i> )	A	H	L	80 000-150 000	+,-	-	3	C-B
Niidukiuur ( <i>Arthus richardii</i> )*	A	E	E					
Mongoolia kiur ( <i>A. godlewskii</i> )*	A	E						
Nõmmekiuur ( <i>A. campestris</i> )	A	H						
Taigakiuur ( <i>A. hodgsoni</i> )*	A	E						
Metskiur ( <i>A. trivialis</i> )	A	H	L	500 000-800 000	(+)	-	4	B
Sookiuur ( <i>A. pratensis</i> )	A	H	L [T]	150 000-200 000	(-)	-	4	A
Tundrakiuur ( <i>A. cererinus</i> )	A	H	L [T]	5-10	0	(0)	3	B
Randkiur ( <i>A. petrosus</i> )**	A	H	L	10 000-20 000	(0)	-	3	B
Hänilane ( <i>Motacilla flava</i> )****	A	H		40-80		n,+	2	A
Kuldähnilane ( <i>M. citreola</i> )	A	H		1-5	0	0	2	B
Jögvästrik ( <i>M. cinerea</i> )*	A	H	L [T]	150 000-200 000	0	+	4	B
Linavästrik ( <i>M. alba</i> )	A	L	T [S]					
Südisaba ( <i>Bombycilla garrulus</i> )**	A	H	L T	1-10	(n)	0	2	B
Vesippapp ( <i>Cinclus cinclus</i> )	A	H	L T	250 000-300 000	(0)	+	4	A
Käblik ( <i>Troglodytes troglodytes</i> )	A	H	L T	250 000-350 000	+	(+)	4	A
Võsaraat ( <i>Prunella modularis</i> )	A	E						
Mägiraat ( <i>P. collaris</i> )*	A	H	L T	700 000-1 100 000	+	0	4	A
Punarind ( <i>Erithacus rubecula</i> )	A	H	L	130 000-200 000	+	+	4	B
Ööbik ( <i>Luscinia lusciniia</i> )	A	E						
Rubiniinööbik ( <i>L. calliope</i> )*	A	E						

								C
Sinirind ( <i>L. specica</i> )	A	HL	10-50	(-)	?	6		
Sinisaba ( <i>Tarsiger cyanurus</i> )*	A	E [H]	5000-8000	++	3	B		
Must-lepalind ( <i>Phoenicurus ochruros</i> )	A	HL	15 000-20 000	(-)	4	B		
Lepalind ( <i>P. phoenicurus</i> )	A	HL	300 000-400 000	+	4	A		
Kadakatäks ( <i>Saxicola rubetra</i> )	A	E	20 000-30 000	0,-	0	B		
Kaelustäks ( <i>S. torquatus</i> )*	A	HL						
Kivistäks ( <i>Oenanthe oenanthe</i> )*	A	E						
Nunn-kivistäks ( <i>O. pleschanka</i> )*	A	E						
Körbe-kivistäks ( <i>O. deserti</i> )*	A	E						
Kivirästas ( <i>Monticola saxatilis</i> )*	A	E						
Kaelusrästas ( <i>Turdus torquatus</i> )	A	L						
Musträstas ( <i>T. merula</i> )	A	HL T	300 000-400 000	++	+	4	A	
Mustpuugu-rästas ( <i>T. ruficollis</i> )*	A	E						
Hallrästas ( <i>T. philomelos</i> )	A	HL T	100 000-200 000	-^	-	4	B	
Laulurästas ( <i>T. philomelos</i> )	A	HL [T]	350 000-500 000	(0)	(+)	4	A	
Vainurästas ( <i>T. iliacus</i> )	A	HL (T)	150 000-200 000	-	(-)	4	A	
Hoburästas ( <i>T. viscivorus</i> )	A	HL	25 000-35 000	-	0	4	B	
Vöösa-ritsiklind ( <i>Locustella naevia</i> )	A	HL	70 000-100 000	+	+	4	B	
Jõgi-ritsiklind ( <i>L. flavirostris</i> )	A	H	50 000-80 000	++	++	4	A	
Roo-ritsiklind ( <i>L. luscinioides</i> )	A	H	5000-10 000	n,++	++	3	B	
Tarna-roolind ( <i>Acrocephalus paludicola</i> )*	A	E						
Körkja-roolind ( <i>A. schoenobaenus</i> )	A	HL	150 000-250 000	+	+	4	A	
Tüigi-roolind ( <i>A. scirpaceus</i> )	A	HL	10 000-20 000	+	(+)	3	B	
Soo-roolind ( <i>A. palustris</i> )	A	HL	150 000-300 000	++	++	4	A	
Aed-roolind ( <i>A. dumetorum</i> )	A	H	50 000-100 000	++	++	4	B	
Padu-roolind ( <i>A. agricola</i> )*	A	E						
Räästas-roolind ( <i>A. aruaninaceus</i> )	A	H	10 000-15 000	+	+	3	B	
Leet-käosulane ( <i>Hippolais pallida</i> )*	A	E						
Välke-käosulane ( <i>H. caligata</i> )*	A	H						
Käosulane ( <i>H. icterina</i> )	A	HL	5-20					
Mustpea-põõsalind ( <i>Sylvia atricapilla</i> )	A	HL [T]	120 000-200 000	-0	n	2,4	B	
			300 000-500 000	+	++	4	A	
						4		
						4		

Aed-pöösalind ( <i>S. borin</i> )	A	HL	600 000-900 000	+	++	4	A
Vööt-pöösalind ( <i>S. nisoria</i> )	A	HL	15 000-25 000	+	+	4	B
Väike-pöösalind ( <i>S. curruca</i> )	A	HL	120 000-180 000	(+)	+	4	A
Pruunselg-pöösalind ( <i>S. communis</i> )	A	HL	600 000-1 000 000	++	++	4	A
Körbe-pöösalind ( <i>S. nana</i> )*	A	E	10 000-15 000	++	(0)	4	A
Rohe-lehelind ( <i>Phylloscopus trochiloides</i> )	A	H	10 000-15 000	++	(0)	4	A
Pöhja-lehelind ( <i>P. borealis</i> )*	A	E					
Kuld-lehelind ( <i>P. praequerulus</i> )	A	(L)					
Vööt-lehelind ( <i>P. inornatus</i> )	A	L					
Tuhk-lehelind ( <i>P. humei</i> )*	A	E					
Siberi lehelind ( <i>P. schwarzii</i> )*	A	E					
Tömmu-lehelind ( <i>P. fuscatus</i> )*	A	E					
Mets-lehelind ( <i>P. sibilatrix</i> )	A	HL	500 000-650 000	(+)	0	4	A
Väike-lehelind ( <i>P. collaris</i> )****	A	HL	500 000-650 000	+,-	0	4	A
Salu-lehelind ( <i>P. trochilus</i> )	A	HL	1 000 000-1 500 000	+	+	4	A
Pöialpoiss ( <i>Regulus regulus</i> )	A	HLT	300 000-400 000	+	(-)	4	A
Lääne-pöialpoiss ( <i>R. ignicapilla</i> )*	A	E					
Hall-kärbsenäpp ( <i>Muscicapa striata</i> )	A	HL	200 000-300 000	(0)	+,-	4	A
Väike-kärbsenäpp ( <i>Ficedula parva</i> )	A	H	50 000-80 000	+	++	4	A
Kaelus-kärbsenäpp ( <i>F. albicollis</i> )*	A	(H)	0-5		n	2	B
Must-kärbsenäpp ( <i>F. hypoleuca</i> )	A	HL	200 000-300 000	-,+	0	4	A
Roohabekas ( <i>Panurus biarmicus</i> )	A	HT	200-2000	n	++,-	2	B-C
Sabatiiane ( <i>Aegithalos caudatus</i> )****	A	HLT	40 000-90 000	(0)	(0)	3	B
Sootihane ( <i>Parus palustris</i> )	A	HT	60 000-100 000	-	0	4	A
Pöhjatihane ( <i>P. montanus</i> )	A	HLT	70 000-130 000	(+)	-	4	A
Taigatihane ( <i>P. cinctus</i> )*	A	E					
Tutt-tihane ( <i>P. cristatus</i> )	A	HT	80 000-140 000	-	0	4	A
Musstihane ( <i>P. atter</i> )	A	HLT	15 000-25 000	f	f	4	B
Sinithane ( <i>P. caeruleus</i> )	A	HLT	100 000-150 000	+	0	4	A
Lasuurtihane ( <i>P. cyanus</i> )*	A	E					
Rasvathane ( <i>P. major</i> )	A	HLT	300 000-400 000	+	+	4	A

Puukoristaja ( <i>Sitta europaea</i> )	A	H T	60 000-100 000	(0)	(+)	4	A
Porr ( <i>Certhia familiaris</i> )	A	HL T	100 000-200 000	+	0	4	A
Kukkurihane ( <i>Remiz pendulinus</i> )	A	H	200-400	++	+0	3,6	C-B
Peoleo ( <i>Oriolus oriolus</i> )	A	HL	30 000-50 000	-	+	4	A
Könnuögija ( <i>Lanius isabellinus</i> )*	A	E	40 000-60 000	-	-,+	4	A
Punaselg-ögjä ( <i>L. collaris</i> )	A	HL	300-600	(0)	0	2	B
Mustlauk-ögjä ( <i>L. minor</i> )*	A	E	30 000-50 000	++	+	4	A
Hallögjä ( <i>L. excubitor</i> )	A	HL T	15 000-30 000	++	-	4	A
Punapea-ögjä ( <i>L. senator</i> )*	A	E	5000-10 000	+	+	4	B
Pasknääär ( <i>Cinrrulus glandarius</i> )	A	HL T	20 000-50 000	(0)	+	3/5	C
Laanenääär ( <i>Perisoreus infaustus</i> )*	A	E	8000-12 000	+	(0)	1/5	B-C
Harakas ( <i>Pica pica</i> )	A	H T	40 000-70 000	+	-	4	B
Mäntsak ( <i>Nucifraga caryocatactes</i> )	A	H(L) T	4000-6000	++	-	3	B
Hakk ( <i>Corvus monedula</i> )	A	HL T	150 000-250 000	--	+	3	B
Künnivares ( <i>C. frugilegus</i> )	A	H T	90 000-130 000	(0)	-	3,6	C
Hallvares ( <i>C. corone</i> )****	A	HL T	60 000-100 000	+	0	4	B
Ronk ( <i>C. corax</i> )	A	H T	1700 000-2200 000	+	+	3	B
Kuldhnokk ( <i>Sturnus vulgaris</i> )	A	HL T	5-50	(0)	--	3	B
Roosa-kuldhnokk ( <i>S. roseus</i> )*	A	E	90 000-130 000	(0)	-	4	B
Koduvärblane ( <i>Passer domesticus</i> )	A	H T	50 000-80 000	+,-	0	3	C-B
Pöldvarblane ( <i>P. montanus</i> )	A	HL T	40 000-60 000	+,-( -)	++	4	A
Metsvint ( <i>Fringilla coelebs</i> )	A	HL T	100 000-150 000	0	+	4	A
Pöhjavint ( <i>F. montifringilla</i> )	A	HL T	40 000-60 000	(0)	0,-	4	A
Koldvint ( <i>Serinus serinus</i> )	A	H	100-300	0	0	4	A
Rohevint ( <i>Carduelis chloris</i> )	A	HL T	40 000-60 000	-,+	+	4	A
Ohakalind ( <i>C. carduelis</i> )	A	HL T	100 000-150 000	(0)	0,-	4	A
Siiiske ( <i>C. spinus</i> )	A	L T	40 000-60 000	--	(0)	4	A
Kanepilind ( <i>C. cannabina</i> )	A	[H] L T					
Mägi-kanepilind ( <i>C. flavirostris</i> )	A	L T					
Urvalind ( <i>C. flammmea</i> )***	A	L(T)					
Hele-urvalind ( <i>C. hornemannii</i> )	A						

Vöör-käbilind ( <i>Loxia leucoptera</i> )	A	(L) [T]						
Kuuse-käbilind ( <i>L. curvirostra</i> )	A	H L T	5000-75 000	f	f	3/5	B	
Määni-käbilind ( <i>L. pytyopsittacus</i> )	A	H (L) T	1000-3000	(0)	(0)	3/5	C	
Körbeleevike ( <i>Bucanetes githagineus</i> )*	A	E						
Karmiinleevike ( <i>Carpodacus erythrinus</i> )	A	HL						
Määnilleevike ( <i>Pinicola enucleator</i> )** 15.V-31.VII	A	(L)(T)	150 000-250 000	++	++	4	A	
Leevike ( <i>Pyrrhula pyrrhula</i> )	A	H L T	100 000-200 000	+	0	4	A	
Suurnnokk-vint ( <i>Coccothraustes coccothraustes</i> )	A	H L T	20 000-40 000	+	++	4	B	
Lapi istsitsitaja ( <i>Calidris lapponicus</i> )	A	L						
Hangelind ( <i>Plectrophenax nivalis</i> )	A	L T						
Talvike ( <i>Emberiza citrinella</i> )	A	H L T	150 000-200 000	(+),(-)	-	4	A	
Pööldtsitsitaja ( <i>E. hortulana</i> )	A	HL	300-600	0,-	--	3	C	
Põhjatsitsitaja ( <i>E. rustica</i> )*	A	[H] L						
Väiketsitsitaja ( <i>E. pusilla</i> )*	A	E						
Kuldtsitsitaja ( <i>E. aureola</i> )*	A	E						
Rootsitsitaja ( <i>E. schoeniclus</i> )	A	H L T	50 000-100 000	0	+	4	A	
Mustpea-tsitsitsitaja ( <i>E. melanacephala</i> )*	A	E						
Halltsitsitaja ( <i>E. calandra</i> )*	A	E [H]						

**Verification by the Rarities Committee is needed for / Linnuharulduse komisjonis kaitutavad käsitlusele:**

\* all records / kõik vaatised;

\*\* breeding records / pesitussteated;

\*\*\* records in given period / vaatused märgitud ajavahemikul;

\*\*\*\* all records about the following subspecies: *Cygnus columbianus columbianus*, *Branta bernicla hrota*, *Motacilla flava feldgei*, *Phylloscopus collybita tristis*, *Aegithalos caudatus europaeus* and *Corvus corone corone* / kõik vaatused järgmiste alamliikiide kohta: ameerika väikelukk (*Cygnus columbianus columbianus*), lääne-mustlaste (*Branta bernicla hrota*), kirde-mustlaste (*Branta bernicla nigricans*), mustpea-hänilane (*Motacilla flava feldgei*), siberi väike-lehetlind (*Phylloscopus collybita tristis*), lääne-sabathihane (*Aegithalos caudatus europaeus*) ja mustvarres (*Corvus corone corone*).

**Table 2.** Status and numbers of Estonian birds. See text for abbreviations.

*Tabel 2. Eesti lindude talvine staatus ja arvukus. Lühendite seletused on esitatud tekstis.*

Liik <i>Species</i>	Arvukus talvel <i>Winter numbers</i>	Trend 1991- 2008	Meetod <i>Method</i>	Usalda- tavus <i>Reliability</i>
<b>Hanelised Anseriformes</b>				
Kühmnokk-luik ( <i>Cygnus olor</i> )	5000-15 000	++	1	A
Väikeluik ( <i>C. columbianus</i> ) ****	5-30	n	1	A
Laululuik ( <i>C. cygnus</i> )	100-2000	+	1	A
Rabahani ( <i>Anser fabalis</i> )	0-10	(n)		
Hallhani ( <i>A. anser</i> )	0-5			
Kanada lagle ( <i>Branta canadensis</i> )**	0-20	+	1	A
Viupart ( <i>Anas penelope</i> )	0-20	+	1	A
Rääkspart ( <i>A. strepera</i> )	0-10	+	1	A
Piilpart ( <i>A. crecca</i> )	10-100	+	1	A
Sinikael-part ( <i>A. platyrhynchos</i> )	10 000-20 000	--,++	1	B
Punapea-vart ( <i>Aythya ferina</i> )	10-30	(0)	1	A
Tuttvart ( <i>A. fuligula</i> )	200-2000	++	1	B
Merivart ( <i>A. marila</i> )	100-2000	(+)	1	B
Hahk ( <i>Somateria mollissima</i> )	20-100	-	1	B
Kirjuhahk ( <i>Polysticta stelleri</i> )	1500-2500	+,-	1	A
Aul ( <i>Clangula hyemalis</i> )	100 000-500 000	(-)	1/5,6	C
Mustvaeras ( <i>Melanitta nigra</i> )	100-1000	(0)	1	B
Tömmuvaeras ( <i>M. fusca</i> )	20 000-200 000	(0)	1/5	C
Sötkas ( <i>Bucephala clangula</i> )	15 000-30 000	++,0	1	B
Väikekoskel ( <i>Mergus albellus</i> )	500-2000	++	1	B
Rohukoskel ( <i>M. serrator</i> )	300-1000	+,-	1	B
Jääkoskel ( <i>M. merganser</i> )	4000-8000	,+,0	1	B
<b>Kanalised Galliformes</b>				
Laanepüü ( <i>Bonasa bonasia</i> )	100 000-150 000	-,0	3,6	C-B
Rabapüü ( <i>Lagopus lagopus</i> )	200-400	+,-	2,6	B-C
Teder ( <i>Tetrao tetrix</i> )	20 000-40 000	-	3,6	C
Metsis ( <i>T. urogallus</i> )	3000-5500	0	2/6	B-C
Nurmikana ( <i>Perdix perdix</i> )	15 000-30 000	(-)	2/5,6	C
<b>Kaurilised Gaviiformes</b>				
Punakurk-kaur ( <i>Gavia stellata</i> ) **	5000-20 000	(0)	2/5	C
Järvekaur ( <i>G. arctica</i> )	200-1000	(0)	2/5	C
<b>Pütilised Podicipediformes</b>				
Väikepütt ( <i>Tachybaptus ruficollis</i> )	0-10	0	2	B

Tuttpütt ( <i>Podiceps cristatus</i> )	30-300	+	1	A
Hallpösk-pütt ( <i>P. griseogenus</i> )	10-30	(0)	1	A
Sarvikpütt ( <i>P. auritus</i> )	0-10		1	A
<b>Pelikanilised Pelecaniformes</b>				
Kormoran ( <i>Phalacrocorax carbo</i> )	100-300	+,-	1	A
<b>Toonekurelised Ciconiiformes</b>				
Hüüp ( <i>Botaurus stellaris</i> )	0-5	0	3	B
Hallhaigur ( <i>Ardea cinerea</i> )	30-300	++,0	1	A
<b>Haukalised Accipitriformes</b>				
Merikotkas ( <i>Haliaeetus albicilla</i> )	600-900	++	4	A-B
Välja-loorkull ( <i>Circus cyaneus</i> )	10-50	+	2/5	B
Kanakkull ( <i>Accipiter gentilis</i> )	300-500	--	3,6	C
Raudkull ( <i>A. nisus</i> )	1500-3000	(0)	3,6	C
Hiireviu ( <i>Buteo buteo</i> )	500-3000	++	3,6	B
Karvasjalg-viu ( <i>B. lagopus</i> )	10-300	0	2	C
Kaljukotkas ( <i>Aquila chrysaetos</i> )	150-200	+	4	B
<b>Pistrikulised Falconiformes</b>				
Väikepistrik ( <i>Falco columbarius</i> )	1-10	--	3	B
Rabapistrik ( <i>F. peregrinus</i> ) **	0-5	(0)	6	C
<b>Kurelised Gruiformes</b>				
Rooruik ( <i>Rallus aquaticus</i> )	1-20	n	2	C
Tait ( <i>Gallinula chloropus</i> )	0-5			
Lauk ( <i>Fulica atra</i> )	10-1500	+	1	A
<b>Kurvitsalised Charadriiformes</b>				
Merirüdi ( <i>Calidris maritima</i> )	50-150	n	2	B
Mudanupp ( <i>Lymnocryptes minimus</i> )	0-20	(0)	6	C
Tikutaja ( <i>Gallinago gallinago</i> )	0-5			
Metskurvits ( <i>Scolopax rusticola</i> )	0-20	(0)	6	C
Väikekajakas ( <i>Larus minutus</i> )	0-500	(0)	1/5	C
Naerukajakas ( <i>L. ridibundus</i> )	100-2000	+	2	B
Kalakajakas ( <i>L. canus</i> )	1000-10 000	0	2	B
Tömmukajakas ( <i>L. fuscus</i> )	0-5	0	2	B
Höbekajakas ( <i>L. argentatus</i> )	20 000-40 000	+	3	B
Jääkajakas ( <i>L. hyperboreus</i> )	1-5	n	1	A
Merikajakas ( <i>L. marinus</i> )	1000-2000	0	3	B
Lõunatirk ( <i>Uria aalge</i> )	0-25	(0)	3/5	C
Alk ( <i>Alca torda</i> ) **	300-1000	(0)	1/5	C
Krüüs sel ( <i>Cephus grylle</i> )	1000-3000	(0)	1/5	C

<b>Tuvilised Columbiformes</b>					
Kodutuvi ( <i>Columba livia</i> )	80 000-200 000	0	3	C	
Õõnetuvi ( <i>C. oenas</i> )	0-10	(0)	3	B	
Kaelustuvi ( <i>C. palumbus</i> )	0-20	(n)	3	B	
Kaelus-turteltuvi ( <i>Streptopelia decaocto</i> )	30-200	--	6	C	
<b>Kakulised Strigiformes</b>					
Kassikakk ( <i>Bubo bubo</i> )	150-300	-	2,6	B-C	
Lumekakk ( <i>B. scandiacus</i> )	0-1				
Vöötkakk ( <i>Surnia ulula</i> )***15IV-31.VII	0-20	(0)	2	B	
Värbkakk ( <i>Glaucidium passerinum</i> )	1000-3000	+	6	C	
Kodukakk ( <i>Strix aluco</i> )	3000-6000	0	2,6	B	
Händkakk ( <i>S. uralensis</i> )	4000-6000	0	2,6	B	
Habekakk ( <i>S. nebulosa</i> )*	1-10	0	2	C	
Körvukräts ( <i>Asio otus</i> )	100-400	(0)	6	C	
Karvasjalg-kakk ( <i>Aegolius funereus</i> )	100-1000	?	6	C	
<b>Siniraalised Coraciiformes</b>					
Jäälind ( <i>Alcedo atthis</i> )	10-100	f	2/5	B	
<b>Rähnilised Piciformes</b>					
Hallpea-rähn ( <i>Picus canus</i> )	5000-10 000	(0)	4,6	C-B	
Roherähn ( <i>P. viridis</i> )	100-200	-	4,6	C-B	
Musträhn ( <i>Dryocopus martius</i> )	10 000-20 000	(0)	4,6	B-C	
Suur-kirjurähn ( <i>Dendrocopos major</i> )	50 000-300 000	0	3,6	B-C	
Tamme-kirjurähn ( <i>D. medius</i> )	100-300	n	3	B-C	
Valgeselg-kirjurähn ( <i>D. leucotos</i> )	4000-8000	0	3	C-B	
Väike-kirjurähn ( <i>D. minor</i> )	8000-20 000	0	4,6	C-B	
Kolmvarvas-rähn ( <i>Picoides tridactylus</i> )	2000-5000	0	4,6	B-C	
<b>Värvulised Passeriformes</b>					
Pöldlõoke ( <i>Alauda arvensis</i> )	1-10	(0)	2	B	
Linavästrik ( <i>Motacilla alba</i> )	0-5	(0)	2	B	
Siidisaba ( <i>Bombycilla garrulus</i> ) **	500-20 000	f	6	C	
Vesipapp ( <i>Cinclus cinclus</i> )	100-300	(0)	2	B	
Käblik ( <i>Troglodytes troglodytes</i> )	50-500	(0)	6	C	
Punarind ( <i>Erithacus rubecula</i> )	10-100	0	6	C	
Musträstas ( <i>Turdus merula</i> )	5000-10 000	+	3,6	C	
Hallrästas ( <i>T. pilaris</i> )	1000-100 000	0	3,6	C	
Vainurästas ( <i>T. iliacus</i> )	0-25				
Mustpea-põõsalind ( <i>Sylvia atricapilla</i> )	0-5				
Pöialpoiss ( <i>Regulus regulus</i> )	200 000-600 000	0	3	C-B	
Roohabekas ( <i>Panurus biarmicus</i> )	100-3000	++,f	3,6	C	
Sabatihane ( <i>Aegithalos caudatus</i> ) ****	10 000-100 000	+	3,6	C	
Sootihane ( <i>Parus palustris</i> )	100 000-200 000	0	3,6	C	

Põhjatihane ( <i>P. montanus</i> )	300 000-600 000	0	3,6	C
Tutt-tihane ( <i>P. cristatus</i> )	200 000-300 000	0	3,6	C
Musttihane ( <i>P. ater</i> )	30 000-60 000	-	3,6	C
Sinitihane ( <i>P. caeruleus</i> )	200 000-400 000	+	3,6	C
Rasvatihane ( <i>P. major</i> )	600 000-1200 000	+	3,6	C
Puukoristaja ( <i>Sitta europaea</i> )	100 000-200 000	+	3,6	C
Porr ( <i>Certhia familiaris</i> )	150 000-300 000	(+)	3,6	C
Hallögja ( <i>Lanius excubitor</i> )	400-3000	+	4/5	B
Pasknääär ( <i>Garrulus glandarius</i> )	100 000-250 000	+,-	3,6	C
Harakas ( <i>Pica pica</i> )	40 000-80 000	-	3,6	C
Mänsak ( <i>Nucifraga caryocatactes</i> )	20 000-40 000	(0)	3,6	C
Hakk ( <i>Corvus monedula</i> )	100 000-200 000	+	3,6	C
Künnivares ( <i>C. frugilegus</i> )	100-300	+	3	B-C
Hallvares ( <i>C. corone</i> ) ***	150 000-300 000	-	3,6	C
Ronk ( <i>C. corax</i> )	15 000-25 000	-	3,6	C
Kuldnoch ( <i>Sturnus vulgaris</i> )	100-2000	+	3	C-B
Koduvarblane ( <i>Passer domesticus</i> )	200 000-300 000	--	3,6	C
Pöldvarblane ( <i>P. montanus</i> )	150 000-250 000	(+)	3,6	C
Metsvint ( <i>Fringilla coelebs</i> )	100-1000	+	3,6	C-B
Pöhjavint ( <i>F. montifringilla</i> )	10-500	(0)	3,6	C
Rohevint ( <i>Carduelis chloris</i> )	100 000-300 000	++	3,6	C
Ohakalind ( <i>C. carduelis</i> )	10 000-40 000	0	3,6	C
Siiiske ( <i>C. spinus</i> )	10 000-300 000	f	3,6	C
Kanepilind ( <i>C. cannabina</i> )	10-200	(0)	3	C
Mägi-kanepilind ( <i>C. flavirostris</i> )	10-200	(0)	3	C
Urvalind ( <i>C. flammea</i> )	10 000-500 000	f	3,6	C
Hele-urvalind ( <i>C. hornemannii</i> )	0-5 000	(0)	6/5	C
Kuuse-käbilind ( <i>Loxia curvirostra</i> )	1000-300 000	f	3,6	C
Männi-käbilind ( <i>L. pytyopsittacus</i> )	2000-15 000	(0)	3,6	C
Männilivevike ( <i>Pinicola enucleator</i> )*** 15.V-31.VII	0-100	(0)	6	C
Leevike ( <i>Pyrrhula pyrrhula</i> )	100 000-300 000	+	3,6	C
Suurnokk-vint ( <i>Coccothraustes coccothraustes</i> )	100-500	(+)	6	C
Hangelind ( <i>Plectrophenax nivalis</i> )	200-1000	(0)	3	C-B
Talvike ( <i>Emberiza citrinella</i> )	100 000-400 000	0	3,6	C
Rootsiitsitaja ( <i>E. schoeniclus</i> )	10-100	n	2	B

**Acknowledgements:** authors thank all participators in bird count.

### Eesti lindude staatus, pesitsusaegne ja talvine arvukus 2003–2008

**Kokkuvõte.** Artiklis esitatakse Eesti linnustiku uus liiginimestik ning hinnangud linnuliikide pesitsusaegse ja kesktalvise arvukuse ja nende muutuste kohta. Seisuga 01. 01. 2009 oli Eesti ametlikus lindude nimestikus 371 liiki (s.h. A-C kategooria liike 366 ja D-kategooria liike 5). Eestis pesitseb 225 liiki linde, kelledest 210 liiki on regulaarsed haudelinnud. Talvel esineb meil 158 linnuliiki (regulaarselt 109) ja läbirändel 215 liiki (regulaarselt 204). Eksikülalisi on Eesti lindude nimekirjas 110 liiki. Pesitsusaegse arvukuse tugevat tõusu aastatel 1991–2008 sedastati 23 liigi puhul, tugev langus oli täheldatav 19 liigil. Eestis pesitseb 13,4–20,4 miljonit paari linde ning talvitub 3,5–9,4 miljonit lindu.

**Literature:** — AERC TAC 2003. AERC TAC's Taxonomic Recommendations. Online version: [http://www.aerc.eu/aerc\\_tac.htm](http://www.aerc.eu/aerc_tac.htm) — HK 2009: Eesti Linnuharulduste Komisjoni koduleht: <http://www.eoy.ee> — Elts, J., Kuresoo, A., Leibak, E., Leito, A., Lilleleht, V., Luigujõe, L., Lõhmus, A., Mägi, E. & Ots, M. 2003. Eesti lindude staatus, pesitsusaegne ja talvine arvukus 1998–2002. Hirundo 16: 58–83. — Hildén, O. & Saris, F. 1990. A new project on population trends in European breeding birds. In: Štastný, K. & Bejček, V. (eds.) Bird Census and Atlas Studies. Proc. XIth Int. Conf. on Bird Census and Atlas Work: 353–360. Prague. — Leibak, E., Lilleleht, V. & Veromann, H. (eds.) 1994. Birds of Estonia. Status, Distribution and Numbers. Estonian Academy Publishers, Tallinn. — Lilleleht, V. & Leibak, E. 1993. Eesti lindude süstemaatiline nimestik, staatus ja arvukus. Hirundo 1/1993: 3–50. — Lõhmus, A., Kuresoo, A., Leibak, E., Leito, A., Lilleleht, V., Kose, M., Leivits, A., Luigujõe, L. & Sellis, U. 1998. Eesti lindude staatus, pesitsusaegne ja talvine arvukus. Hirundo 11: 63–83.