



BREVIA

Observations on birds breeding on the islands in Eru bay during 1986 – 2005

Linda Metsaorg¹, Meelis Allemann² & Kaja Peterson^{3*}

¹PO Box. 4, Turbuneeme village, Kuusalu county, Harjumaa 74707,

²Vihasoo village, Kuusalu county, Harjumaa 74703, ³Suvila 27a-1, Tallinn 10912

*E-mail: Kaja.Peterson@seit.ee

There are approximately one hundred islands on the southern coast of the Gulf of Finland, in North Estonia. Nevertheless, the possibilities for making observations on the birds in this area have been somewhat more limited than it has been on the islands in western Estonia. The southern coast of the Gulf of Finland is the political frontier of the former Soviet Union and thus an area where free movement has been strictly prohibited for more than fifty years. Observations that have been made on the bird fauna of the Gulf of Finland are mostly based on expeditions. Special attention must be paid on expeditions carried out by the former Institute of Zoology and Botany under the direction of O. Renno in 1971–1975 (Renno, 1976) and J. Aua in 1991. Some time later special counts have been carried out in certain groups of islands, e.g. by T. Leito and E. Mägi on islands located in Kolga Bay (Leito & Mägi, 2002). The last great expedition on the islands in Eru bay took place on the 20th of June in 2007 and was directed by Leho Luigujõe, Monika Laurits, Hannes Pehlak and Triin Ivandi from the Estonian Ornithological Society.

Eru Bay is located in Lahemaa National Park, between Pärисpea and Käsmu peninsula, belonging to Kuusalu rural municipality. In the southern part of the Eru Bay there are larger islands: Kasispea Large, Medium and Small Island – altogether 2.1 ha. According to the list of Estonian maritime archipelago, prepared by A. Loopman (1996), there are altogether six islands in Eru Bay. In addition to the three islands

mentioned before, A. Loopmann also describes three more nameless islets, two of which are located East and one Northwest of the estuarine area of Loobu River. Locals consider only the three larger islands as islands whereas the other three are considered as longshore bars reaching the water surface. Water depth varied around the islands – being 0.2–0.4 m surrounding the Small and the Medium Island whereas 2.5–5.2 m near the Large Island. During low tide it is even possible to reach the Small Island by foot while the other two islands are accessible by boat. Even though the seabed near the estuaries of Loobu River is rather muddy and covered by reedbed, the close surroundings are rocky, sandy and solid. Low tide uncovers a longshore bar in the area that lies between the islands and the reedbed. This particular area is an important staging point for thousands of birds during migration.

The Small Island nearest to Kasispea village can easily be identified by a tall rowan tree and a red-berried elder. The coastal area of this island is mostly surrounded by rocks while the beach is gravely and the core is grassland. The Medium Island is open land with neither trees nor bushes. Also the shore is gravely and the altitude is rather low. On the Large Island, there is a tall pine growing and at least ten aspens. The Large Island has the most marine environment since the water that is surrounding the isle is the deepest of the three. Also the marine environment results from the fact that the Large Island lies further away from inhabited coast like Kasispea, Vihasoo and Eru.

Observations on the bird fauna at Eru Bay have been carried out for a long period and mostly due to the initiative of a few local people. Bird counts and ringing has been carried out on the islands in Eru Bay since 1976 by Meelis Allemann from Vihasoo village and since 1986 by L. Metsaorg from Turbuneeme village together with assistance. During 1970–1972 the islands have been visited by Mati Kahru (1971, 1972). Counts have been carried out during one single day while all species together with nests encountered within as well as in the surroundings of the islands have been registered and also nestlings have been ringed. M. Allemann has carried out observations on the two most numerous species on the islands – Mute Swan (*Cygnus olor*) and Common Eider (*Somateria mollissima*) - by registering the encountered nests and making

all-year random counts. Therefore, L. Metsaorg together with his assistants has visited the islands in the beginning of June during high breeding season and registered all the species and nests encountered during 1-2 days. The current study consists of the unpublished data by L. Metsorg and M. Allemann and published data by K. Peterson (1995).

The islands are popular observation areas, on one hand, because of the rather high number of birds breeding on such a small area while on the other hand the islands are well approachable. Observations on the bird fauna breeding on Kasispea islands have been carried out for 20 years, during 1986-2005. During this period several changes have occurred in the bird fauna and in the total number of breeding pairs. In these 20 years breeding attempts of 15 different species have been registered on these three islands: 10 species on Small and Medium Island and 14 on the Large Island (Table 1). The most numerous species on all the islands is Herring Gull (*Larus argentatus*) with 253 breeding pairs registered on all three islands during only one year (2004). During 1996-2006 a total of 1458 Herring Gull nestlings were ringed on the islands that have later been reported in Latvia, Lithuania, Poland, Denmark, Germany, Italy, Sweden and Finland. The second most numerous species is Mute Swan whose numbers in 2004 on all three islands reached up to 58 pairs. The third place in the row of the most numerous species is Common Gull (*Larus canus*) whose numbers however have been fluctuating on the islands. For instance, there were 11 breeding pairs on the Small Island in 2004 whereas not a single pair was registered the following year. Common Gull was also absent from the Medium Island in 1987, 1988, 2004 and from the Large Island in 1986-1988 and 2004. According to M. Allemann the last Black-headed Gull (*Larus ridibundus*) encounter on the islands was in 1978, even though he had ringed 10 nestlings in 1976, 119 in 1977 and 499 in 1978. Since 1979 no Black-headed Gulls have been registered on the islands. Also the last Arctic terns (*Sterna paradisaea*) were registered on the islands in 1977 and 1978 when M. Allemann ringed 18 and 25 nestlings respectively. Common Eider has been registered on the Medium and

Table 1. The number of breeding pairs on islets of Eru bay ("-" denotes that no count was carried out during the particular year; "0" denotes that no nests were found during counts). Data from 1986–1988 and 2003–2006 by L. Metsaorg; 1995–2002 by M. Allemaa.

Table 1. L. Metsaoru (1986-1988. a. ja 2003-2006. a.) ja M. Allemaa (1995–2002. a.) andmed Eru lahe Loosaarte haudelinnustiku kohta ("-" – loendust ei tehtud; "0" – liiki ei leitud)

Species/Liik	No. of breeding pairs yearly / Paaride arv aastati													
	1986	1987	1988	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Small Island / Väikelood														
CYGOLO	5	3	1	14	8	12	7	0	0	12	5	5	7	12
ANAPLA	1	0	1	-	-	-	-	-	-	-	-	0	0	2
ANACLY	0	0	0	-	-	-	-	-	-	-	-	1	1	0
AYTFUL	8	5	0	-	-	-	-	-	-	-	-	0	0	1
SOMMOL	0	0	0	0	0	8	0	0	2	2	0	0	0	0
MELFUS	1	1	0	-	-	-	-	-	-	-	-	0	0	0
HAEOST	0	0	0	-	-	-	-	-	-	-	-	1	1	0
LARCAN	0	0	0	-	-	-	-	-	-	-	-	0	11	0
LARARG	30	42	48	-	-	-	-	-	-	-	-	54	53	71
LARMAR	1	6	2	-	-	-	-	-	-	-	-	0	0	1
Total / Kokku	46	57	52	14	8	20	7	0	2	14	5	61	73	87
Medium Island / Keskmine lood														
CYGOLO	0	1	1	1	3	1	6	1	-	8	16	4	4	7
ANAPLA	0	3	1	-	-	-	-	-	-	-	0	1	1	1
AYTFUL	2	7	2	-	-	-	-	-	-	-	0	0	2	2
SOMMOL	0	1	0	4	5	3	1	3	-	4	3	7	4	5

MERMER	0	1	1	-	-	-	-	-	-	-	0	0	0	0
MERSER	0	0	1	-	-	-	-	-	-	-	0	0	1	0
PHACAR	0	0	0	-	-	2	-	-	-	-	0	0	0	0
LARCAN	18	0	0	-	-	-	-	-	-	-	12	12	0	0
LARARG	120	66	90	-	-	-	-	-	-	-	64	74	65	123
LARMAR	2	2	2	-	-	-	-	-	-	-	2	2	10	1
Total / Kokku	142	81	98	5	8	4	7	4	0	12	97	100	87	139

Large Island / Suurlood

CYGOLO	-	-	-	36	20	34	12	36	-	44	8	13	47	41
ANAPLA	-	-	-	-	-	-	-	-	-	-	3	6	4	-
ANACLY	-	-	-	-	-	-	-	-	-	-	2	2	0	-
AYTFUL	-	-	-	-	-	-	-	-	-	-	1	3	3	-
AYTMAR	-	-	-	-	-	-	-	-	-	-	0	0	0	-
SOMMOL	-	-	-	9	23	14	5	7	-	18	2	20	10	2
MELFUS	-	-	-	-	-	-	-	-	-	-	0	0	0	-
MERMER	-	-	-	-	-	-	-	-	-	-	0	0	0	-
MERSER	-	-	-	-	-	-	-	-	-	-	0	0	1	-
HAEOST	-	-	-	-	-	-	-	-	-	-	3	0	0	0
LARRID	-	-	-	-	-	-	-	-	-	-	0	0	0	-
LARCAN	-	-	-	-	-	-	-	-	-	-	16	26	0	-
LARARG	-	-	-	-	-	-	-	-	-	-	73	99	135	-
LARMAR	-	-	-	-	-	-	-	-	-	-	3	3	10	-
Total / Kokku	0	0	0	45	43	48	17	43	0	62	111	172	210	43

Large Island where the population has reached up to 7 and 20 pairs respectively in 2003.

The highest population concentration of birds was in 2004 with altogether 304 nests on all three islands. However, during the past five years (2001–2005) the population concentration has remained around 300 breeding pairs.

The main factors limiting breeding success are floods and nest predation. For example in 1996 and 2002 breeding of almost all the birds on the Small Island failed due to a fox that had come to the island in early spring. Therefore, in 2000, all the nests were destroyed by a storm that flooded the Small Island in end of May.

Flooding is usually the main reason for breeding failure on all the three islands.

Cormorants (*Phalacrocorax carbo*) have inhabited the Kasispea islands in 1997 when one breeding pair was registered on the coast of the Medium Island. However, this breeding attempt failed due to floods and there have no breeding pairs been registered during the consecutive years. Yet, Cormorants use the islands during spring and autumn migration as staging points (during an expedition on the 20th of June in 2007 the Estonian Ornithological Society registered 6 Cormorant nests on the Small Island and 123 nests on the Large Island). An interesting finding has also been a breeding attempt of the Canada Goose (*Branta canadensis*) on the Small Island in 1994 that however failed.

The significance of the bird fauna on the islands in Eru bay has been recognized on international basis and the bay together with the islands has been included in the list of important Bird Areas of European Union importance (code EE073) (Kuus & Kalamees, 2003). The Bird Area of Eru Bay is a part of the Bird Area of Lahemaa and protected according to the protection procedure of Lahemaa National Park.

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