

Mindre meddelelser

Plastic, snor m.m. i reder af Solsort *Turdus merula*

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Det har ofte undret mig, hvor tilsyneladende hyppigt Solsort *Turdus merula* anvender plastic, snor m.m. som redemateriale. Forekomsten af disse kunstige materialer i solsortereder omtales imidlertid kun ganske kort i monografierne om arten (Snow 1958, Simms 1978, Stephan 1985, Cramp 1988, Glutz von Blotzheim & Bauer 1988) og andre steder alene på baggrund af undersøgelser af enkelte reder (f.eks. Braun 1973, Herbert 1986). Jeg undersøgte derfor et antal reder i februar 1999.

Det drejede sig om 81 reder fra et landsbyagtigt villaområde i Åbyhøj, 70 reder fra et boligblokområde i den nordvestlige del af Århus og 71 reder fra et åbent kratbevokset område langs Århus Å nedstrøms Brabrand Sø. Delområder (krat, levende hegn, hække) inden for disse tre områder blev udvalgt og systematisk gennemført for alle reder, som jeg derefter forsigtigt nedtog og på stedet undersøgte for redemateriale.

Der var kunstige materialer i 171 (77%) af de i alt 222 reder. Hyppigheden var med henholdsvis 83% og 82% størst i boligblok- og villaområdet, mod 65% i det kratbevoksede område; forskellen er statistisk signifikant ($G = 7,70$; $df = 2$; $p = 0,02$).

Det nøjagtige antal stykker af de forskellige typer af kunstige materialer kunne bestemmes for 153 af rederne med kunstigt materiale. Antal stykker pr rede var i gennemsnit 7 og varierede fra 1 til 38. Der var ingen signifikant forskel mellem rederne fra villa-, boligblok- og kratområdet i antallet af kunstige materialer pr. rede (Kruskall-Wallis test; $H = 1,65$; $df = 2$; $p = 0,4$). Tydeligvis dominerede gennemsnitligt plastic (Tabel 1), og kulørt materiale udgjorde kun 3,5% (37/1058). Det gennemsnitlige plastic var den bløde og tynde type, der anvendes til poser og til indpakning af alt muligt. De kunstige materialer var udelukkende anvendt som en del af redeunderlaget, ofte sammenklinet med den ovenfor liggende redeskål af jord. De var altså aldrig opblandet i jordlaget eller anvendt som foring af redeskålen.

Undersøgelsen tyder på, at Solsorte i by- og bynære områder hyppigt anvender kunstige materialer (især gennemsnitligt tyndt plastic) ved konstruktionen af redens ydre lag. Flere af disse materialer er formentlig mere end fyldestgørende erstatninger for naturlige redematerialer, og solsortehunnen vil som følge deraf spare tid og energi under redebygningen. En mulig omkostning

Tabel 1. Forekomst af kunstige materialer i 153 solsortereder.
Occurrence of man-made materials in 153 nests of Blackbirds.

	Stykker <i>Items</i>		Reder <i>Nests</i>	
	N	%	N	%
Gennemsnitligt plastic <i>Transparent plastic</i>	871	82,3	146	95
Hvidt snor <i>White string</i>	93	8,8	46	30
Hvidt plasticbånd <i>White plastic tape</i>	23	2,2	13	8
Hvidt papir <i>White paper</i>	8	0,8	3	2
Hvidt garn <i>White cotton</i>	4	0,4	1	1
Hvidt plastic <i>White plastic</i>	1	0,1	1	1
Hvidt skumgummi <i>White foam rubber</i>	1	0,1	1	1
Brunt papir <i>Brown paper</i>	7	0,7	2	1
Brunt plasticbånd <i>Brown plastic tape</i>	2	0,2	1	1
Brun snor <i>Brown string</i>	1	0,1	1	1
Sort plasticbånd <i>Black plastic tape</i>	2	0,2	2	1
Sort plasticsnor <i>Black plastic string</i>	1	0,1	1	1
Sølvpapir <i>Silver paper</i>	7	0,7	3	2
Blå snor <i>Blue string</i>	20	1,9	9	6
Blåt plasticbånd <i>Blue plastic tape</i>	6	0,6	5	3
Rød plasticsnor <i>Red plastic string</i>	1	0,1	1	1
Rødt plasticbånd <i>Red plastic tape</i>	1	0,1	1	1
Grønt mejsenet <i>Green peanut bag</i>	4	0,4	3	2
Grøn snor <i>Green string</i>	1	0,1	1	1
Gult plasticbånd <i>Yellow plastic tape</i>	4	0,4	4	3

ved brugen af kunstige materialer er en øget risiko for redeprædation, idet disse materialer ofte stritter iøjnefaldende frem fra redeunderlaget.

Summary: Man-made materials in nests of Blackbirds

Plastic, string, etc. are often used as nest material by Blackbirds *Turdus merula*. To investigate the quantitative aspects of this behaviour, I examined 222 Blackbird nests in February 1999 near the city of Århus, eastern Jutland. Man-made materials occurred in 77% of all nests. The frequency of occurrence varied significantly from 83% and 82% in two urban areas (N = 151) to 65% in a scrub area (N = 71). Careful disassembly of 153 nests with man-made material yielded 1058 pieces (Table 1; mean 7, range 1-38). Transparent plastic was the commonest man-made material in the nests.

Referencer

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Prevalence of *Borrelia burgdorferi* sensu lato in ectoparasites in nesting boxes in Denmark

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Introduction

The list of known carriers and possible vectors of Lyme Borreliosis in Western Europe includes *Ixodes ricinus*, *I. trianguliceps*, *I. hexagonus*, *I. acuminatus*, *I. uriae*, *Dermacentor reticulatus* and *Haemaphysalis punctata* (Hillyard 1996). *I. ricinus* is considered the most important vector in relation to the epidemiology in Europe. The other European *Ixodes* ticks, being nidicolous species (Hillyard 1996), are primarily suspected of influencing the epizootiology by serving as vectors within the nest areas of rodents and birds. Tick species from other genera than *Ixodes* are generally considered as carriers rather than vectors because they have a limited potential for transmitting *Borrelia burgdorferi* sensu lato transstadially, i.e. from larva to nymph and from nymph to adult tick (Mulkow et al. 1992, Lane et al. 1994, Tälleklint 1996). There is also some evidence that several other arthropods might serve as carriers of *B. burgdorferi* sensu lato (Magnarelli & Anderson 1988, Zeman, 1998), and therefore potentially could contribute to its transmission.

More than 20 tick species have been accounted for in Denmark (Doss et al. 1978), many being parasites on birds. The human pathogenic *Borrelia burgdorferi* sensu lato genospecies (*Borrelia burgdorferi* sensu stricto, *B. afzelii* and *B. garinii*) have been found in ticks collected from birds (Jensen et al. in press, P. M. Jensen, unpubl. data), and the importance of birds in the transmission *B. burgdorferi* is now recognized as being of equal or perhaps greater importance than the tick-mammal inter-

face. Like rodent nest (Maupin et al. 1994), birds nest may be suspected of providing an environment which amplifies the transmission, and the practice of placing nest boxes in inhabited areas might increase Lyme Borreliosis risk locally.

The purpose of this study was to examine the transmission potential of ectoparasites in nest box material and to determine whether ectoparasites in the nest environment possibly could enhance the transmission of *B. burgdorferi* sensu lato under Danish conditions.

Materials and methods

In May and July 1995 nest material from a total of 49 nesting boxes were collected. Previous visual observations were used to identify the bird species which had occupied the nest boxes. Nest material was removed from each box, placed in plastic bags and transported to the laboratory, where the material was examined using a stereo-microscope. Bloodsucking ectoparasites, i.e. fleas and ticks, were crushed on a slide. The hemolymph of the ectoparasites was then analysed for *B. burgdorferi* sensu lato presence by immunofluorescent antibodies (IFA) (Landbo & Flöng 1992). In addition, approximately 50 1-3 week old birds occupying nest boxes were inspected for the presence of ticks in June 1995.

Results and discussion

Ticks were only recovered from one bird nest, previously occupied by Pied Flycatcher *Ficedula hypoleuca* (Table