

door onderzoek van de dichthesen van de waifauna, anderzijds door Voedselonderzoek bv. onderzoek van maaginhouden. Er is van de hoeveelheid en van de aard van het opgenomen voedsel maar weinig bekend. Meer weet men van de hoeveelheden, die aanwezig zijn. Globale berekeningen, gebaseerd op tellingen in proefvakken, maken het aannemelijk, dat één ha wad gemiddeld per jaar 2 000 - 5 000 kg dierlijk "voedsel" produceert; met dichthesen die al naar gelang de aard van het wad variëren van 100 - 40 000 individuen per ha. Schattingenderwijs worden daarvan al naar gelang de omstandigheden 3% - 30% door de vogels geconsumeerd, aannemende, dat een gemiddelde wad-vogel 150 gram voedsel per dag nodig heeft.

De tijdens het kamp verrichte tellingen van prooivangsten van fouragerende vogels geven vergelijkbare uitkomsten. De gemiddelden berekend per minuut waren: Rosse grutto (*Limosa lapponica*) 22; Tureluur (*Tringa totanus*) 23; Groenpootruiter (*Tr. nebularia*) 25; Scholekster (*Haematopus ostralegus*) 9, allen op slikhoudend zandig wad; Bontbekkleivier (*Charadrius hiaticula*) 10, op zandig wad. Steenloper (*Arenaria interpres*) bij aanspoelsel 36; Kleine Pievier (*Charadrius dubius*) op zandstrandje 40; Drietenzandloper (*Grocethia alba*) en Regeompulp (*Numenius phaeopus*) op Noordzeestrand respectievelijk 15 en 12. Rekening houdend met de aard van het voedsel, mag men de hoeveelheid voedsel door een vogel als de Rosse Grutto per dag opgenomen taxeren op 150 - 200 g. Deze vogel fourageert ten naaste bij 14 uur per dag vooral natuurlijk bij laag water en verkrijgt per minuut ongeveer 0,2 g. binnen. Volgens de verhoudingen zoals die op de Boschplaat gelden wordt dit voedsel dagelijks opgehaald op 0,5 - 1 ha. De resultaten van het onderzoek zijn nog slechts oriënterend, maar wel kan daaruit blijken, dat door nauwkeurig waarnemen op korte afstand nog waardevolle gegevens omtrent de voedselbiologie kunnen worden verkregen.

Het waarnemen van de vogelwereld geschiedde zo intens, dat er in deze eerste decade van September 1953 vernoedelijk naar weinig vogelsoorten onopgemerkt bleven. Het eiland werd in alle richtingen door tal van excursies afgespeurd. Het totaal aantal waargenomen soorten bedroeg op de laatste dag 130. De excursie-rapporten werden dagelijks verwerkt. De resultaten zijn samengevat in de soortenlijst van bijlage 1. Er zijn daarin per waarnemingsgebied genoteerd de grootste aantallen individuen van één soort, die in één etmaal werden waargenomen. Deze lijst geeft een volledig zij het voor de enkele waarnemer een geflakteerd beeld. De verschillen tussen de diverse landschappen komt er duidelijk tot uiting, niet de verschillen van de ene dag op de andere. Deze stelden de deelnemers in staat langs indirecte weg iets van de trek te zien, al was het slechts van enkele soorten. Dit was bv. opvallend bij de Grauwé Ganzen (*Anser anser*), waarvan er op 1 September 10, op 6 September 58 en op 7 September reeds ongeveer 100 dieren aanwezig waren, welke gang van zaken vergelijkbaar was met die van vorige jaren. De Zwemeendentrek was goed aan de gang, al vielen de verschillen tussen de ene dag en de andere niet zo op. Vrijwel alle soorten, die er in begin September mochten worden verwacht werden waargenomen. De grote betekenis die het reservaat Boschplaat voor de trekkende eenden heeft werd door de waarnemingen duidelijk bevestigd. De trek van Zwart- en de Grote Zee-eenden (*Oidemia nigra* en *O. fusca*) was langs de Noordzeekust in volle gang. Tellingen teonden aan, dat er per dag ten naastebij 10 000 zwarte Zee-eenden passeerden, een enkele keer werden achter de branding fouragerende

ronde troepen gezien die op een 15 000 vogels werden geschat.

Op werden interessante roofvogelwaarnemingen gedaan. Gedurende de eerste dagen van het kamp trok de Grauw kiekendief (*Circus pygargus*) nog vrij talrijk door, meer dan eens konden 4 exemplaren tegelijkertijd worden waargenomen, soms in gezelschap van Bruine kiekendieven (*Circus aeruginosus*) of van een Blauwe kiekendief (*Circus cyaneus*), die geregeld tot in de laatste dagen werden gezien.

Het Boschplaat-wad was bevolkt door tienduizenden steltlopers: de grootste groepen vormden de Schaleksters (*Himantopus ostralegus*) met ongeveer 20 000 stuks, de Wulpens (*Numerius aquata*) met ongeveer 5 000 en de Bonte Strandlopers (*Calidris alpina*) eveneens met ongeveer 5 000 individuen. De plevieren waren niet zo talrijk. Bontbekplevier (*Charadrius hiaticula*) en strandplevier (*Charadrius alexandrinus*) gaven de voorkeur aan het zandwad van de Noordsvaarder boven het slakkiger Boschplaat-wad. Van beide soorten werden troepen gezien van ongeveer 300 dieren.

De watersnip (*Capella gallinago*) was één van de weinige soorten, waarvan geregeld directe trek werd waargenomen, vooral in de morgenuren passeerden betrekkelijk hoog overvliegend geregeld troepjes tot 20 à 30 exemplaren. De trek van de grutto (*Limosa limosa*) was practisch voorbij, er werden nog slechts enkelingen gezien, da Rosse grutto (*Limosa lapponica*) was daarentegen reeds talrijk. Hoewel het hoogtepunt van de wintertrek voorbij was, werden alle soorten, die mochten worden verwacht gezien, de tureluur (*Tringa totanus*) en de groppootruiter (*Tringa nebularia*) zelfs in troepen van omstreeks 300; zij gaven duidelijk de voorkeur aan het slakkige wad. De kaneet strandloper (*Calidris canutus*) waren niet zo talrijk als anders, maar de krombekstrandloper (*Calidris testacea*) en de kleine strandloper (*Calidris minuta*) werden in relatief grote groepen gezien, vooral op Vlieland, resp. 60 en 140 stuks.

De aanwezigheid van trekkende kamphanen (*Philonachus pugnax*) zowel op Terschelling als op Vlieland was een verrassing, evenals de groep van bijna 40 lepelaars (*Platalea leucorodia*) op de Boschplaat, van ongeveer 1 000 kluten (*Recurvirostra avocetta*) en een Grauw Franjepoot (*Phalaropus lobatus*) op het Posthuiswad van Vlieland.

Het stormachtige weer bracht nogal wat jagers bij de kust, zodat menigeen sowel Grote Jagers (*Stercorarius skua*) als de Kleine Jager (*Stercorarius parasiticus*) zeer fraai heeft kunnen observeren. Van de neeuwen en sterns zijn slechts de doortrekkende Britse en Scandinavische kleine Mantelneeuwen (*Larus fuscus Graellsii* en *L.f. fuscus*) van het Noordzeestrand, de Drieteermeeuw (*Rissa tridactyla*) van de waddenzee en de beide Zwarte sterns (*Chlidonias niger*) het vermelden waard.

De waarnemingen van de volgende in de lijst genoemde vogelsoorten zijn vooral interessant voor zover zij betrekking hebben op trekkers. De IJsvogel (*Alcedo atthis*), de gierzwaluwen (*Apus apus*) op 7 en 8 September en de Grote lijsters (*Turdus viscivorus*) mogen in dit verband worden genoemd. De tapuiten (*Oenanthe oenanthe*) en de paapjes (*Saxicola rubetra*) waren voornamelijk trekkers. Hun aantal waren de eerste dagen met stormachtig weer gering, maar na een enkele mooie dag en treknacht waren zij over het gehele eiland aanwezig, in totaal wel met honderden, en met het aanhouden-de goede weer, geleidelijk te verdwijnen. Tegelijk met hen verschenen Roodstaart (*Phoenicurus phoenicurus*), Bonte Vliegenvanger (*Musicapa hypoleuca*) en Fitis (*Phylloscopus trochilus*) eveneens talrijk, in mindere mate de andere zanger-

tjes, van welke de Fluiter (*Phylloscopus sibilatrix*), de Boompieper (*Ullula arborea*) en de Boompieper (*Arthus trivialis*) te vermelden zijn, nadat mij van Terschelling nog nimmer werden gezien. De Spreeuwel (*Hippolais icterina*) werd in Middenland nog niet jongen aangetroffen. De Kruisbekken-invalsje (*Loxia recurvirostra*) van de afgelopen zomer heeft ook Terschelling en Vlieland bereikt, waar enkele exemplaren zeer veel worden gezien. De waarnemingen van de Bonte kraaien (*Corvus cornix*) hebben meer alle waarschijnlijkheid zowel op Terschelling als op Vlieland, betrekking op de enkele broedparen, aangezien bekend is, dat hier geregeerd Bonte kraaien broeden. De bruinkoppen van de laatste dag hield zich op te midden van een troep Ringmusen; zoals met andere waarnemingen van deze vogelsoort moet dan bedacht zijn op ontsnapte hoofdvogels. De moeuwparel (*Plectrophenax nivalis*) van 6 September op het scher bij de wierschorren zijn de vroegste voorzover in de literatuur bekend.

Iedere avond werden de voornaamste waarnemingen van de afgelopen dag gesamenlijk besproken, waarbij deze meer dan eens vergeleken werden met de waarnemingen in vorige jaren op Terschelling gedaan. Bij waren daarmee doorgaans troffen in overeenstemming. De vergelijking ervan met trek en broedgegevens uit Denemarken, Duitsland, Engeland, Schotland en Ierland leverde vanuit interessante gezichtspunten op.

Het internationale ornithologische kamp heeft door dit alles aan de doelmatigheid veel geboden dat voor de hoogte waard was. Bevonden zijn daartoe waardevolle gegevens bekend geworden die ons in staat stellen de thans onderzochte uitspanningen met elkaar te vergelijken. De grote betekenis die de scherven en slijfsten van het natuurreservaat "Boschplast" op Terschelling en die van het natuurreservaat "de Noordduinen" op Vlieland voor de trekkers hebben werd nog eens overtuigend bevestigd, te meer daar blok dat beide reservaten denk mij geringe verschillen in aard, ook voor verschillende vogelgroepen van belang zijn.

Utrecht, 21 September 1953.

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Nederlandsche Ornithologische Vereeniging
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NEDERLANDSCHE ORNITHOLOGISCHE VEREENIGING.

International Field Ornithologists' Camp Terschelling

Address: Veldbiologisch Station
KM.paal 18
Oosterend, Terschelling.

Wetenschappelijk
Archief NB
Dossier ID 15B

Excursions. Roughly speaking the island of Terschelling is composed of: sandy beach and dunes in the North, ancient coastal ridge on which villages and arable land are situated in the middle, salt marshes and tidal flats in the South. Both the eastern and western ends of the island are formed by a large sand bank which by the action of currents were joined to the island over a century ago. The eastern bank, the Bosplaat, where our camp will be held is now also covered by dunes and salt marshes.

The Wadden sea is a very shallow sea, falling dry over large areas at low tide, which then become a feeding ground for thousands of waders, gulls, etc. When they are forced back by the rising tide the birds go to certain refuges on the south coast of the island. Our field work will partly consist in making regular counts or estimates of the birds at these and similar refuges, in order to get an idea of the fluctuations in numbers and species brought about by migration.

Ecological studies will form another part of the field work. They will deal with questions such as: at what time (in relation to high tide) do the various species leave the refuges to fly to the muds and when do they return? How is their dispersal on the muds, has it any connection with the distribution of food or is it mainly a case of length of feet and depth of water? Tide and weather permitting excursions will be held in the night to find out what species feed at night as well as at daytime and what species feed at daytime only.

Besides this field work other excursions will be held, in which, while not neglecting the birds, more attention will be paid to scenery and historical features of the island. Trips to other islands are included in the programme. The results of our observations will be compared and discussed daily in the late afternoon or evening. We intend to invite some experts to give talks about subjects related to the island and our field study.

Requisites. The station does not provide blankets and sheets. Warm and weatherproof clothing and gum boots are also essential. Besides the regular ornithological equipment I would advise you to bring an electric torch for evening and night excursions, and also because there is no electricity at the station. As shops are miles off your private stock of cigarettes etc. should be sufficient for the first few days.

Routes. As the camp excursions begin early Septembre 1st and a preliminary talk will be held on Monday evening our visitors are requested to arrive on Monday, August 31st by the afternoon boat leaving Harlingen Haven at 14.15. Harlingen is connected by railway via Leeuwarden to the principal cities and by bus to Alkmaar in the west of Holland. If you let me know by which train you intend to arrive in Holland (early on Monday morning if possible) I will find the best connection for you. Excursion days are 1-10 Septembre inclusive, departure is early on the 11th.

If you have any special wishes (e.g. vegetarian food), or any further questions please state them to

Miss Gré van der Baan
Sloterkade 68-I
Amsterdam-West.

200
Dr. M. Bouw

Birds observed during the international ornithological camp
31 Augustus - 11 September 1953
(maximum numbers per day)

Gem. Terschelling I
Niet geb.
Bijlage 1.

	Terschel- ling Bosch- plaat	Terschel- ling South- coast	Terschel- ling North sea coast	Vlieland a.c.	Griend a.e.	Terschel- ling polder etc.	Terschel- ling dunes
- Redthroated Diver (<i>Colymbus stellatus</i>)	-	-	2	-	-	-	-
Blacknecked Grebe (<i>Podiceps nigricollis</i>)	-	2	-	-	-	-	-
Dabchick (<i>Podiceps ruficollis</i>)	-	-	-	-	-	2	6
- Storm-petrel (<i>Hydrobates pelagicus</i>)	-	1	-	1	-	-	-
- Gannet (<i>Sula bassana</i>)	-	-	8	-	-	-	-
Cormoran (<i>Phalacrocorax carbo sinensis</i>)	30	2	-	50-100	80	-	-
Heron (<i>Ardea cinerea</i>)	5	10	-	3	-	3	3
Spoonbill (<i>Platalea leucorodia</i>)	38	-	-	1	-	-	-
Greylag (<i>Anser anser</i>)	100	1	-	-	-	-	-
Shelduck (<i>Tadorna tadorna</i>)	1000	200	-	500	15	-	-
Mallard (<i>Anas platyrhynchos</i>)	100	6	-	80	50	10	3
Gadwall (<i>Anas strepera</i>)	14	-	-	-	-	-	-
Teal (<i>Anas crecca</i>)	500	2000	2	1000	4	20	3
Wigeon (<i>Anas penelope</i>)	200	1000	10	20	-	-	-
Pintail (<i>Anas acuta</i>)	80	50	-	8	-	-	-
Shoveler (<i>Spatula clypeata</i>)	20	-	-	30	-	-	-
Eider (<i>Somateria mollissima</i>)	150	100	250	600	200	-	-
- Sooter (<i>Oidemia nigra</i>)	-	-	15000	10	-	-	-
- Velvet sooter (<i>Oidemia fusca</i>)	-	-	20	-	-	-	-
Redbreasted Merganser (<i>Mergus serrator</i>)	-	9	-	-	-	-	-
Marsh-harrier (<i>Circus aeruginosus</i>)	4	1	-	5	1	1	4
Montagu's Harrier (<i>Circus pygargus</i>)	1	-	-	-	-	-	4
Hen-harrier (<i>Circus cyaneus</i>)	-	1	-	-	-	1	3
Sparrow hawk (<i>Accipiter nisus</i>)	1	-	-	1	2	-	2
Buzzard (<i>Buteo buteo</i>)	2	-	-	-	-	-	-
Peregrine Falcon (<i>Falco peregrinus</i>)	1	1	-	1	-	-	-
Hobby (<i>Falco subbuteo</i>)	-	1	-	-	-	-	-
Merlin (<i>Falco columbarius</i>)	1	-	-	1	-	-	-
Kestrel (<i>Falco tinnunculus</i>)	4	2	-	2	-	2	2
Quail (<i>Coturnix coturnix</i>)	-	1	-	-	-	-	-
Pheasant (<i>Phasianus colchicus</i>)	-	-	-	28	-	2	2
Waterrail (<i>Rallus aquaticus</i>)	-	-	-	3	-	-	1
Moorhen (<i>Gallinula chloropus</i>)	-	-	-	-	-	-	-

	Terschelling Bosch-plaat	Terschelling South-coast	Terschelling North sea coast	Vlieland a.e.	Griend a.e.	Terschelling polder etc.	Terschelling dunes
Coot (<i>Fulica atra</i>)	-	-	-	-	-	1	-
Oystercatcher (<i>Haematopus ostralegus</i>)	20000	1000	40	70-n	4	10	-
Lapwing (<i>Vanellus vanellus</i>)	100	150	-	10	-	100	35
Ringed Plover (<i>Charadrius hiaticula</i>)	40	300	15	7	8	-	-
Little Ringed Plover (<i>Charadrius dubius</i>)	-	2	-	-	-	-	-
Kentisch Plover (<i>Charadrius alexandrinus</i>)	1	300	-	-	-	-	-
Greyplover (<i>Squatarola squatarola</i>)	150	80	-	30	-	-	-
Golden plover (<i>Charadrius apricarius</i>)	22	250	2	200	-	300	-
Turnstone (<i>Arenaria interpres</i>)	50	250	20	250	5	-	-
Snipe (<i>Capella gallinago</i>)	8	51	-	100	-	5	-
Curlew (<i>Numenius aquata</i>)	5000	1200	200	3000	3000	800	4
Whimbrel (<i>Numenius phaeopus</i>)	4	50	6	3	-	-	20
Blacktailed Godwit (<i>Limosa limosa</i>)	-	1	-	1	-	-	-
Bartailed Godwit (<i>Limosa lapponica</i>)	500	3000	200	200+	5+	1000	-
Green sandpiper (<i>Tringa ochropus</i>)	4	10	-	-	-	-	10
Wood-sandpiper (<i>Tringa glareola</i>)	3	2	-	1	-	-	-
Common sandpiper (<i>Tringa hypoleuca</i>)	1	25	-	3	5	8	-
Redshank (<i>Tringa totanus</i>)	16	150	6	300	3	5	-
Spotted Redshank (<i>Tringa erythropus</i>)	2	5	-	1	-	-	-
Greenshank (<i>Tringa nebularia</i>)	40	280	1	200	6	80	-
Knot (<i>Calidris canutus</i>)	150	600	-	7	-	-	-
Little Stint (<i>Calidris minuta</i>)	12	4	-	150	7	-	-
Dunlin (<i>Calidris alpina</i>)	5000	250	20	80	4	-	-
Curlew sandpiper (<i>Calidris testacea</i>)	17	3	-	60	7	-	-
Sanderling (<i>Croceethia alba</i>)	100	50	100	32	-	-	-
Riff and Reeve (<i>Phildomachus pugnax</i>)	50	1	-	8	2	-	-
Red-necked Phalarope (<i>Phalaropus lobatus</i>)	-	-	-	1	-	-	-
Avocet (<i>Recurvirostra avocetta</i>)	-	-	-	1000	-	-	-
Great skua (<i>Stercorarius skua</i>)	-	-	3	1	-	-	-
Arctic skua (<i>Stercorarius parasiticus</i>)	1	-	7	-	-	-	-
Great Black-backed Gull (<i>Larus marinus</i>)	250	150	200	100	300	10	4
Brit. Lesser Black-backed Gull (<i>Larus fuscus graellsii</i>)	-	-	2	-	-	-	-
Scand. Lesser Bl.-backed Gull (<i>Larus fuscus fuscus</i>)	-	-	10	10	-	-	-
Herring Gull (<i>Larus argentatus</i>)	2500	400	100	600	20	100	-
Common Gull (<i>Larus canus</i>)	2000	600	40	700	2	600	-
Black-headed Gull (<i>Larus ridibundus</i>)	900	200	5	3000	1200	300	-
Kittiwake (<i>Rissa tridactyla</i>)	-	-	-	1	-	-	-

Terschelling
Nat. geb.

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	Terschel- ling	Terschel- ling Bosch- plaat.	Terschel- ling South- coast	Terschel- ling North sea coast	Viel a.	Griend a.	Terschel- ling polder etc.	Terschel- ling dunes
Black tern (<i>Chlidonias niger</i>)	-		1	1	-	-	-	-
Little tern (<i>Sterna albifrons</i>)	5		60	-	8	2	-	-
Sandwich Tern (<i>Sterna sandvicensis</i>)	6		100	250	100	100	-	-
Common Tern (<i>Sterna hirundo</i>)	20		30	5	15	25	-	-
Arctic Tern (<i>Sterna macrura</i>)	1		10	-	-	-	-	-
Gull-mot (<i>Uria aalge albionis</i>)	-		-	-	-	-	-	-
Turtle dove (<i>Streptopelia turtur</i>)	-		-	-	-	-	6	-
Stock-dove (<i>Columba oenas</i>)	1		-	-	9	-	3	2
Wood-pigeon (<i>Columba palumbus</i>)	-		-	12	-	6	4	2
Cuckoo (<i>Cuculus canorus</i>)	-		-	-	-	-	2	3
King-fisher (<i>Alcedo atthis</i>)	-		-	-	-	-	1	-
Short-eared Owl (<i>Asio flammeus</i>)	-		-	1	-	-	-	-
Swift (<i>Apus apus</i>)	-		-	-	-	-	3	-
Great spotted Woodpecker (<i>Dryobates major</i>)	-		-	-	1	-	1	-
Swallow (<i>Hirundo rustica</i>)	13		30	20	5	-	200	24
Martin (<i>Delichon urbica</i>)	2		50	-	-	-	40	-
Sand-martin (<i>Riparia riparia</i>)	-		2	-	-	-	10	-
Mistle Thrush (<i>Turdus viscivorus</i>)	-		-	-	-	-	2	-
Song thrush (<i>Turdus ericetorum</i>)	-		-	-	-	-	2	-
Black bird (<i>Turdus merula</i>)	-		-	-	-	-	1	-
Wheatear (<i>Oenanthe oenanthe</i>)	4		20	-	2	2	50	20
Whinchat (<i>Saxicola rubetra</i>)	1		-	-	1	-	100	50
Redstart (<i>Phoenicurus phoenicurus</i>)	-		-	-	2	-	25	40
Robin (<i>Erythacus rubecula</i>)	1		-	-	-	-	4	-
Hedge-sparrow (<i>Prunella modularis</i>)	-		-	-	-	-	1	-
Whitethroat (<i>Sylvia communis</i>)	-		-	-	-	-	3	1
Garden Warbler (<i>Sylvia borin</i>)	1		-	-	1	-	1	-
Blackcap (<i>Sylvia atricapilla</i>)	-		-	-	-	-	1	-
Willow warbler (<i>Phylloscopus trochilus</i>)	-		-	-	-	-	15	2
Wood warbler (<i>Phylloscopus sibilatrix</i>)	-		-	-	-	-	1	-
Icterine warbler (<i>Hippolais icterina</i>)	-		-	-	-	-	2	-
Wren (<i>Troglodytes troglodytes</i>)	-		-	-	1	-	4	1
Spotted Flycatcher (<i>Muscicapa striata</i>)	-		-	-	-	-	2	-
Pied Flycatcher (<i>Muscicapa hypoleuca</i>)	-		-	-	1	-	100	50
Wood-lark (<i>Lullula arborea</i>)	-		6	-	-	-	-	-
Skylark (<i>Alauda avensis</i>)	20		20	-	5	-	25	50
Tree-pipit (<i>Anthus trivialis</i>)	-		-	-	-	-	3	-
Meadow pipit (<i>Anthus pratensis</i>)	80		38	-	100	1	20	+100

	Bosch- plaats	South- coast	North se coast			Ring polder etc.	Ring dunes
Rockpipit (<i>Anthus spinoletta</i>)	-	2	-	-	-	-	-
Blue-headed wagtail (<i>Motacilla flava</i>)	4	20	-	2	1	25	15
White wagtail (<i>Motacilla alba</i>)	5	6	2	15	-	32	6
Red backed Shrike (<i>Lanius collurio</i>)	-	-	-	-	-	3	1
Great tit. (<i>Parus major</i>)	-	-	-	15	-	6	1
Blue tit. (<i>Parus caeruleus</i>)	-	-	-	4	-	2	-
Coal tit. (<i>Parus ater</i>)	-	-	-	-	-	3	-
Goldcrest (<i>Rugulus regulus</i>)	-	-	-	-	-	1	-
Hooded crow (<i>Corvus cornix</i>)	-	1	-	7	-	2	-
Carrion crow (<i>Corvus corone</i>)	4	51	2	10	-	20	50
Jackdaw (<i>Coloeus monedula</i>)	-	-	-	3	-	-	-
Jay (<i>Garrulus glandarius</i>)	-	-	-	-	-	1	-
Starling (<i>Sturnus vulgaris</i>)	2000	120	-	300	-	300	4
Chaffinch (<i>Fringilla coelebs</i>)	-	-	-	1	-	3	-
Linnnet (<i>Carduelis cannabina</i>)	3	25	-	2	-	80	10
House-sparrow (<i>Passer domesticus</i>)	-	-	-	80	-	500+	-
Tree-sparrow (<i>Passer montanus</i>)	-	-	-	-	-	14	-
Common Crossbill (<i>Loxia curvirostra</i>)	-	-	-	+	-	6	-
Greenfinch (<i>Chloris chloris</i>)	-	-	-	-	-	20	-
Yellow Bunting (<i>Emberiza citrinella</i>)	-	-	-	1	-	6	-
Reed-bunting (<i>Emberiza schoeniclus</i>)	2	-	-	-	-	4	22
Red-headed bunting (<i>Emberiza brunneiceps</i>)	-	-	-	-	-	(1)	-
Snow-bunting (<i>Plectrophenax nivalis</i>)	1	3	-	-	-	-	-

W63. Terschelling

Report on the International Field Ornithological Camp
organized by the Netherlands ~~Nederlandse~~ ^{Natur-} ^{SBB} Ornithological Society
in Terschelling from Aug. 31st to Sept. 11th 1953.

Archief NB

Dossier: 1D + 5B

Some time ago at a meeting of the Netherlands Ornithological Society it was suggested by the members Miss Gré van der Baan and Mr. Theo Belterman that the Society should organize an international field ornithologists camp, to promote contact between the field ornithologists of West European countries. In the beginning of September of this year such a camp was held at the nature reserve the Bosplaat in Terschelling, in order to enable our guests from abroad to become acquainted with the abundance of birds of the Wadden area.

It was also the intention to study, if possible, the avifauna of Vlieland and Griend and compare numbers and species; and also to go a little further into the connection between birds of the tidal areas and the bottom animals on which they prey, such as molluscs, worms and crustaceans, which form the staple food of the tens of thousands of birds which spend part of their lives there.

The camp was attended by 7 participants from England, 2 from Ireland, 1 from Denmark, 2 from Germany and 15 from the Netherlands. (enclosure 2). Accommodation was in the biological station at Oosterend, owned by the "Stichting Wetenschappelijk Duinonderzoek" which, though a severe test on our adaptability, proved satisfactory in general.

Every day excursions were made to various parts of Terschelling, especially the tidal flats and marshes of the nature reserve the Bosplaat and of the accretions the Sehaar, the Ans and the Keag at the South coast E. of Stryp were often visited. Many excursions were made to the Dellewal and the Noordsvaarder near West-Terschelling. The dunes and polders were regularly included in the census, and a few times the state-woods near Hoorn, Forumerum and West-Terschelling were also visited. The beach and coastal waters of the North Sea were mostly studied by watching from the top of the dunes, or cycling along the beach at low tide. Two duck decoys, one permanently and one momentarily not in use, were visited. Two excursions were made to Vlieland, one party went to Griend at low tide, the high tide trip had to be cancelled on account of a gale warning.

For the participants from abroad there were so many new birds to be seen that the ecological part of the programme receded more or less into the background. The talks, held by Mr. Herman Klomp, biologist at the ITBON (Inst. for Applied Research in Nature) at Oosterbeek, and by Mr. J. Kristensen, biologist at the Zoological Station at den Helder provided an excellent foundation for this study. Mr. Klomp's lecture dealt with the connection between the constitution of the tidal flats and the morphological properties of various species of birds. He discussed the ways of foraging as related to the length of the bill and also the foraging by sight (plovers) or by touch (redshanks etc., snipe, godwits). He explained the differences in the ways birds moved, differentiating between "running birds" such as lapwing, plovers and sanderling, and "walking birds" such as the gotwit. This difference depends on the position of the centre of gravity with respect to the supporting plane.

Mr. Kristensen explained that the Wadden sea, by its extreme conditions of temperature and salinity, is relatively poor in species for a sea, but rich in individuals. The relations between bottom fauna and bird population may be studied both by investigating the density of the Wadden fauna and by food investigation (stomach contents). Not much is known about the quantity and the nature of the food which the birds take, we have more data about the quantities present. Rough calculations, based on counts of trial plots, seem to indicate that 1 ha (2,47 acres) of tidal flats produces an average of 2000-5000 kg. of animal matter per year, in densities which vary with the constitution of the Wad between 100 - 40,000 individuals per m². It is estimated that birds consume between 3 and 30% of this animal matter, if we assume that an average bird needs about 150 g. of food a day.

Counts of the catches of fouraging birds give comparable results. The averages as calculated per minute were: Bar-tailed Godwit (*Limosa lapponica*) 22, Redshank (*Tringa totanus*) 23, Greenshank (*Tr. nebularia*) 25, Oystercatcher (*Haematopus ostralegus*) 9, all on muddy sand flat; Ringed Plover (*Charadrius hiaticula*) 10, on sandy flat; Turnstone (*Arenaria interpres*) 36 near tidemark; Little Ringed Plover (*Charadrius dubius*) 40 on sandy beach; Sanderling (*Crocethia alba*) 15, Whimbrel (*Numenius Phaeopus*) 12, on North Sea beach. If we take into account the nature of the food we may estimate the amount of food taken daily by a bird such as the Bar-tailed Godwit at 150 - 200 g. This bird fouraged about 14 hours a day, especially of course at low tide, and obtains about 0.2 g. per minute. As calculated for conditions occurring at the Bosplaat this food is obtained daily in an area of 0.5 - 1 ha. The results of this investigation are of course only tentative, but it appears that by close examination of pecking birds valuable data may be obtained for food biology.

Bird watching was so intensive during these first 10 days of September that hardly any species will have escaped observation. The island was literally combed by excursions in all directions. On the last day the number of species observed amounted to 131. The excursion reports were made up every evening. The results are tabulated in the list of species (enclosure 1). For every area of observation the highest numbers of individuals seen on any day, are given. This list gives a complete picture of the combined results of many individual observations for different areas. The differences between the various habitats are clearly shown, but not the differences from day to day. These last differences enabled the participants to get an idea about migration, even if it concerned only a few species. This was obvious in the Grey Lag Goose (*Anser anser*), of which 10 were present on Sept. 1st, 58 on Sept. 6th and about 100 on Sept. 7th. This is in accordance with observations made in other years. The migration of surface-feeding ducks was in progress, in this case, however, the differences in numbers were less obvious. Practically all species to be expected in early September were observed. It was proved again that the nature reserve the Bosplaat is of great importance to the migrating ducks. The migration of Common and Velvet

Scooter (*Oidemia nigra & fusca*) was in full swing along the coast of the North Sea. Counts proved that every day about 10,000 Common Scoters passed by, a few times flocks, fouraging behind the surf, were estimated at 15,000 individuals.

Interesting observations of birds of prey were made. During the first days of the camp the Montagu's Harrier (*Circus pygargus*) was regularly observed in quite a few numbers, more than once 4 bird were seen at the same time, sometimes together with Marsh-Harrier (*Circus aeruginosus*) or Hen-Harrier (*Circus cyaneus*) which were also seen regularly after the Montagus had left.

The tidal flats of the Bosplaat were populated by tens of thousands of waders. The largest flocks consisted of Oystercatchers (*Haematopus ostralegus*) about 20,000; Curlews (*Numenius arquata*) about 5000, and Dunlins (*Calidris alpina*) also about 5000. The plovers were less numerous. Ringed Plover (*Charadrius hiaticula*) and Kentish Plover (*Charadrius alexandrinus*) preferred the sandy flats of the Noordsvaarder to the muds of the Bosplaat. Both species were seen in flocks of about 300.

The snipe (*Capella gallinago*) was one of the few species of which direct migration was observed regularly; especially in the morning hours groups of up to 20 or 30 individuals were passing over, usually rather high. The migration of the Black-tailed Godwit (*Limosa limosa*) was practically over, only single birds were seen. The Bar-tailed Godwit (*Limosa lapponica*), however, was present in great numbers. Although the peak of the Tringa-migration was over all species which were to be expected were seen, the Redshank (*Tringa totanus*) and Greenshank (*Tringa nebularia*) even in flocks of about 300. It was obvious that they preferred the muddy flats. The Knots (*Calidris canutus*) were not as numerous as they usually are at this time of the year, but the Curlew-Sandpiper (*Calidris testacea*) and the Little Stint (*Calidris minuta*) were seen in relatively large flocks, especially in Vlieland, of 60 and 140 ind. respectively.

It was a great surprise to find migrating Ruffs (*Philomachus pugnax*) in Terschelling as well as in Vlieland, a flock of nearly 40 Spoonbills (*Platalea leucorodia*) on the Bosplaat, and of about 1,000 Avocets (*Recurvirostra avocetta*) and a Red-necked Phalarope (*Phalaropus lobatus*) on the Posthuiswad of Vlieland.

The gales brought a certain number of Skuas near-shore, so that many ornithologists have been able to get a good view from both the Great Skua (*Stercorarius skua*) and the Arctic Skua (*Stercorarius parasiticus*). They were also responsible for the two Storm-petrels (*Hydrobates pelagicus*) which were seen. As to the gulls and terns we will only mention the migrating British and Scandinavian Lesser Black-backed Gulls (*Larus fuscus Graelsii & L.f.Fuscus*) at the North sea beach, the Kittiwake (*Rissa tridactyla*) of the Wadden sea and the two Black Terns (*Chlidonias niger*).

The observations of the following species are of interest because the birds were on migration. We mention the Kingfisher (*Alcedo atthis*), The Swifts (*Apus apus*) on 7 and 8 September and the Mistle-trushes (*Turdus viscivorus*). The Wheatears

(Oenanthe oenanthe) and the Winchats (*Saxicola rubetra*) were for the greater part migrants. Their numbers were small during the first days when the weather was bad, but after a single calm day and night they were present all over the island, in hundreds in all, disappearing gradually as the good weather held. At the same time Redstart (*Phoenicurus phoenicurus*), Pied Flycatcher (*Muscicapa hypoleuca*) and Willow Warbler (*Phylloscopus trochilus*) also appeared in large numbers. Less numerous were the other passerines, of which we will only mention the Wood Warbler (*Phylloscopus sibilatrix*), the Tree Lark (*Lullula arborea*) and the Tree Pipit (*Anthus trivialis*) because they have never before been reported for Terschelling. The Icterine Warbler (*Hippolais icterina*) was still present with young at Midsland. The Crossbill (*Loxia curvirostra*) invasion of last summer has also reached Terschelling and Vlieland. A good view was obtained of some birds. The observations of Hooded Crows (*Corvus cornix*) both in Terschelling and Vlieland may well concern breeding birds as the Hoody is a regular breeding bird in the Frisian islands. The Red-headed Bunting (*Emberiza brunneiceps*) of the last day was in the company of Tree Sparrows. (*Passer montanus*). Just as with other observations of this species one has to bear in mind the possibility of an escape. The observation of Snow-Buntings (*Plectrophenax nivalis*) on Sept. 4th on the saltings near the Wierschuur (feeding in the tidemark) is earlier than known so far in literature.

Every evening the principal observations of the day were compared and discussed. They were often in close agreement with earlier observations in Terschelling. It was interesting to compare them with migration and breeding data from England, Scotland, Ireland, Denmark and Germany.

In this way the international ornithological camp has been able to offer many points of interest to all participants. Moreover many valuable data have come to our knowledge which enable us to compare the various tidal areas. It was again convincingly proved that both the tidal flats of the nature reserve the Bosplaats in Terschelling and of the nature reserve the Meeuwenduinen in Vlieland are of the utmost value to migrating birds, the more so as, owing to slight differences in condition they attract different groups of birds.

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