



FINDERS INFORMATION NETHERLANDS - 2020

SNS Fulmar Study Report:
Finders information_NL_7thbatch2020

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Abstract

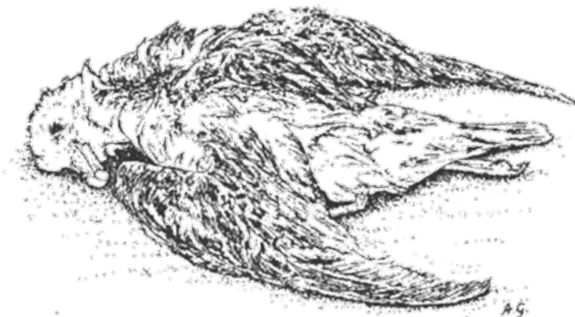
This document is an illustrated report for the surveyors in the monitoring program of plastics particles in stomachs of beached northern fulmars (*Fulmarus glacialis*). It contains short information and photos of stomach contents of individual birds. In 2020 only eighteen corpses could be recovered, three of which contained no stomach. Occasional years of lower sample sizes are not a problem for the monitoring program although larger samples will increase potential for statistical analyses.

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Beached fulmar
Drawing by Arnold Gronert

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Texel, 16 June 2021

Beste allen

Dit document beoogt de vrijwilligers te informeren over de verzamelde Noordse Stormvogels voor ons graadmeteronderzoek van plastic in de magen. Deze lange termijn monitoring wordt uitgevoerd op verzoek van nationale en internationale overheden om wetenschappelijke informatie te verschaffen over de huidige situatie en ontwikkeling van plastic zwerfvuil in de Noordzee. Deze update (nr 7) betreft de 18 Noordse stormvogels gevonden in Nederland in 2020.

Niet alle vogels hadden een maag, maar we blijven benadrukken, dat we veel liever zo nu en dan een vogel met incomplete of ontbrekende maag op de snijtafel hebben, dan dat er bruikbare stormvogels op het strand blijven liggen! Dus blijf s.v.p. ook oudere vieze kadavers verzamelen zolang je het enigzins mogelijk acht dat de maag nog aanwezig is. Laat een dode stormvogel alleen maar liggen als het echt zeker is dat maag e.d. ontbreekt.

We bedanken iedereen voor de steun aan dit onderzoek: niet alleen de mensen die de hier besproken stormvogels hebben verzameld, maar ook al diegenen die jaar in jaar uit voor ons op de uitkijk zijn en trouw met een plastic verzamelzak naar het strand gaan. De resultaten van al die inspanningen bepalen mede hoe het zwerfvuil-beleid van de Nederlandse en Europese overheden zich ontwikkelt.

Om het verzamelen van oude stinkende kadavers iets minder onaangenaam te maken, hebben we op 15 april 2021 een bericht op ons dossier www.wur.nl/plastics-stormvogels geplaatst met een filmpje met een handleiding hoe je vieze vogels toch met schone handen kunt verzamelen. Het filmpje staat ook op YouTube www.youtube.com/watch?v=7kzh8es7VGA

Met veel dank voor alle hulp,
Susanne Kühn, Jan Andries van Franeker, André Meijboom en Oliver Bittner

Dear all,

This document intends to inform our project-volunteers about the beached Northern Fulmars which they collected for the study of plastics in stomachs. This monitoring project is commissioned by national and international authorities in order to provide scientific information about current levels of, and trends in the abundance of plastic litter found in the North Sea. This update is the seventh for the Netherlands providing information on 18 fulmars found during 2020.

We occasionally receive birds without a stomach, but these are also dealt with in this report because we aim to provide a full overview. Please note that we strongly prefer to receive occasional 'empty' old and dirty birds to avoid that any fulmar with stomach would be left on the beach! When in doubt, just collect the bird, and don't be disappointed if the occasional one proves to have no stomach.

We thank all helpers, not only those who found a bird discussed in this report, but all the volunteers who year after year are on the lookout for fulmars suitable for our project. Your individual support represents an important contribution to marine litter policy decisions!

In order to promote the collection of old and smelly corpses, on 15 April 2021 we have placed a message on our dossier www.wur.eu/plastics-fulmars that contains a short video on how to collect a dirty bird with clean hands. The short video is also available on YouTube www.youtube.com/watch?v=QvzadnYkapM

We are extremely thankful for your help,
Suse Kühn, Jan van Franeker, André Meijboom and Oliver Bittner

Dit rapport bevat voor iedere onderzochte vogel een pagina met detailinformatie en foto's van de maaginhoud. Dus er zijn ook pagina's voor de vogels zonder bruikbare maag of waar de maag geen plastic bevatte. Speciale pagina's kunnen zijn toegevoegd ter illustratie van andere opmerkelijke zaken. De meeste afkortingen op de individuele pagina's zijn min of meer vanzelfsprekend of ter plekke verklaard. Alleen de afkorting voor doodsoorzaak is niet altijd duidelijk voor wat er aan de hand was. Daartoe wordt in een supplement aan het eind van het document uitleg gegeven over gebruikte afkortingen.

This report provides a separate information page with stomach content photos for each individual bird. Pages are also included for birds lacking a stomach or having a stomach without any plastic. Incidental additional pages may be provided to illustrate other remarkable issues. Most abbreviations used to provide information are fairly self-evident or directly explained. However, the acronyms for cause of death are sometimes less straightforward and are explained in the supplementary pages at the end of this document.

Voor het melden van vondsten in Nederland, en het regelen van eventuele tijdelijke opslag of transport, neem contact op met:

[For reporting finds and to arrange temporary storage and transport, contact your regional coordinator.](#)
[If unknown, contact the Dutch coordinator to obtain contact details for your area:](#)

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Overview of plastics in stomachs of 18 fulmars found in the Netherlands during 2020



NET-2020-002 had been in rehabilitation for 8 days

Nr: NET-2020-001

JAFCODE	NET-2020-001
Country	Netherlands
Location	Texel Paal 19.3
Date	04-May-20
Finder	Yerko Hankmann
Sex (Male, Female or UNKnown)	F
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	JU
Colourphase (LL, L, D, DD or UNKnown)	LL
Condition score (0=fully emaciated to 9=excellent condition)	1
Likely cause of death (STA=starvation for unknown reason)	PLU
Notes from dissection	damaged upper bill
nr of industrial plastic pellets	0
nr of consumer debris plastic particles	9
Total mass of plastic in stomach (g)	0.2033

Contents were dominated by large bundle of partially disintegrated clingfoil (keukenfolie)
 The poor plumage condition is considered to have contributed to the death of this juvenile female (code PLU)



Nr: NET-2020-002

JAFCODE	NET-2020-002
Country	Netherlands
Location	IJmuiden
Date	12-Jun-20
Finder	Vogelhospitaal Haarlem
Sex (Male, Female or UNKnown)	M
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	JU
Colourphase (LL, L, D, DD or UNKnown)	LL
Condition score (0=fully emaciated to 9=excellent condition)	2
Likely cause of death (STA=starvation for emaciated with unknown reason)	STA (probably due to damaged bill)
Notes from dissection	bill damaged; no tip at all; 5Jul2020 in rehab - euthanized 12Jul2020
nr of industrial plastic pellets	2
nr of consumer debris plastic particles	24
Total mass of plastic in stomach (g)	1.2257



Nr: NET-2020-003

JAFCODE	NET-2020-003
Country	Netherlands
Location	Texel Paal 15
Date	09-Jun-20
Finder	Yerko Hankmann
Sex (Male, Female or UNKnown)	M
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	IM
Colourphase (LL, L, D, DD or UNKnown)	LL
Condition score (0=fully emaciated to 9=excellent condition)	1
Likely cause of death (STA=starvation for unknown reason)	STA
Notes from dissection	bare spot on left wing; breast muscle scavenged
nr of industrial plastic pellets	0
nr of consumer debris plastic particles	10
Total mass of plastic in stomach (g)	0.0448



Nr: NET-2020-004

JAFCODE	NET-2020-004
Country	Netherlands
Location	Texel Paal 14
Date	17-May-20
Finder	Tim Ortlijn
Sex (Male, Female or UNKnown)	M
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	AD
Colourphase (LL, L, D, DD or UNKnown)	LL
Condition score (0=fully emaciated to 9=excellent condition)	4
Likely cause of death (STA=starvation for unknown reason)	UNK
Notes from dissection	kidney granular; no further evidence for death cause
nr of industrial plastic pellets	1
nr of consumer debris plastic particles	41
Total mass of plastic in stomach (g)	0.1361



Nr: NET-2020-005

JAFCODE	NET-2020-005
Country	Netherlands
Location	Texel Paal 15.5
Date	11-Sep-20
Finder	Yerko Hankmann
Sex (Male, Female or UNKnown)	F
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	JU
Colourphase (LL, L, D, DD or UNKnown)	LL
Condition score (0=fully emaciated to 9=excellent condition)	2
Likely cause of death (STA=starvation for unknown reason)	STA
Notes from dissection	small yellow inflammation in mesentery
nr of industrial plastic pellets	44
nr of consumer debris plastic particles	229
Total mass of plastic in stomach (g)	4.2881

Note decaying remains of two different latex balloons, plus a rubbery tube.

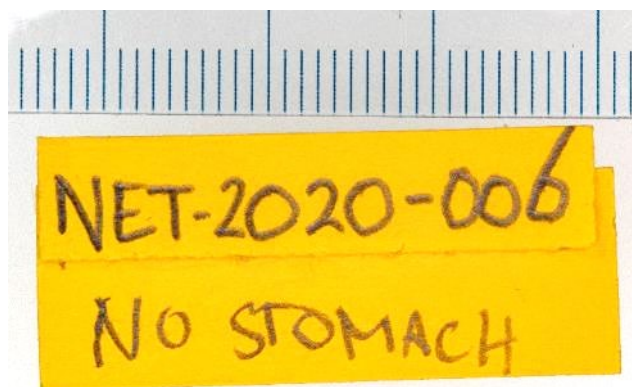
This number of 44 industrial pellets in a single stomach is unusual nowadays.



Nr: NET-2020-006

JAFCODE	NET-2020-006
Country	Netherlands
Location	Texel Paal 12
Date	24-May-20
Finder	Maria Roelofsen via Maarten Brugge
Sex (Male, Female or UNKnown)	UNK
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	UNK
Colourphase (LL, L, D, DD or UNKnown)	LL
Condition score (0=fully emaciated to 9=excellent condition)	
Likely cause of death (STA=starvation for unknown reason)	UNK
Notes from dissection	heavily scavenged with many maggots; No stomach left
nr of industrial plastic pellets	
nr of consumer debris plastic particles	
Total mass of plastic in stomach (g)	

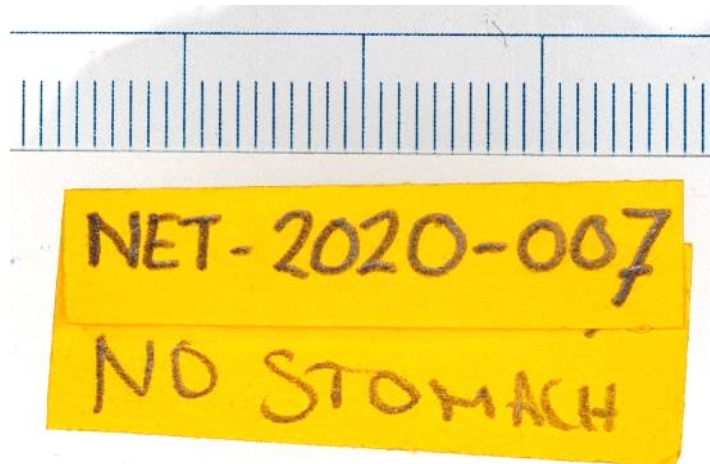
Scavenged, no stomach present



Nr: NET-2020-007

JAFCODE	NET-2020-007
Country	Netherlands
Location	Texel Paal 28
Date	15-Feb-20
Finder	Maarten Brugge
Sex (Male, Female or UNKnown)	UNK
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	UNK
Colourphase (LL, L, D, DD or UNKnown)	DD
Condition score (0=fully emaciated to 9=excellent condition)	1
Likely cause of death (STA=starvation for emaciated with unknown reason)	UNK
Notes from dissection	no gizzard; thus cannot be used for monitoring; remainder of proventriculus held 1 pellet
nr of industrial plastic pellets	
nr of consumer debris plastic particles	
Total mass of plastic in stomach (g)	

Scavenged, no stomach present



Nr: **NET-2020-008**

JAFCODE	NET-2020-008
Country	Netherlands
Location	Texel Paal 6.5
Date	15-Feb-20
Finder	Suse Kühn
Sex (Male, Female or UNKnown)	UNK
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	UNK
Colourphase (LL, L, D, DD or UNKnown)	??
Condition score (0=fully emaciated to 9=excellent condition)	2
Likely cause of death (STA=starvation for emaciated with unknown reason)	STA
Notes from dissection	left leg damaged; probably secondary. Upper bill missing; too decayed for organ sex etc.
nr of industrial plastic pellets	1
nr of consumer debris plastic particles	4
Total mass of plastic in stomach (g)	0.0935



Nr: NET-2020-009

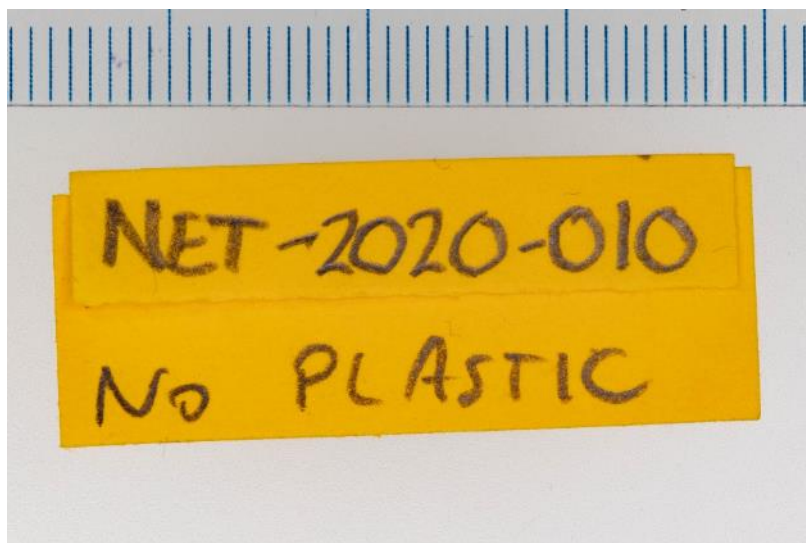
JAFCODE	NET-2020-009
Country	Netherlands
Location	Goeree Paal 10
Date	13-Jun-20
Finder	unknown
Sex (Male, Female or UNKnown)	F
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	JU
Colourphase (LL, L, D, DD or UNKnown)	LL
Condition score (0=fully emaciated to 9=excellent condition)	2
Likely cause of death (STA=starvation for emaciated with unknown reason)	STA
Notes from dissection	x
nr of industrial plastic pellets	2
nr of consumer debris plastic particles	7
Total mass of plastic in stomach (g)	0.0823



Nr: NET-2020-010

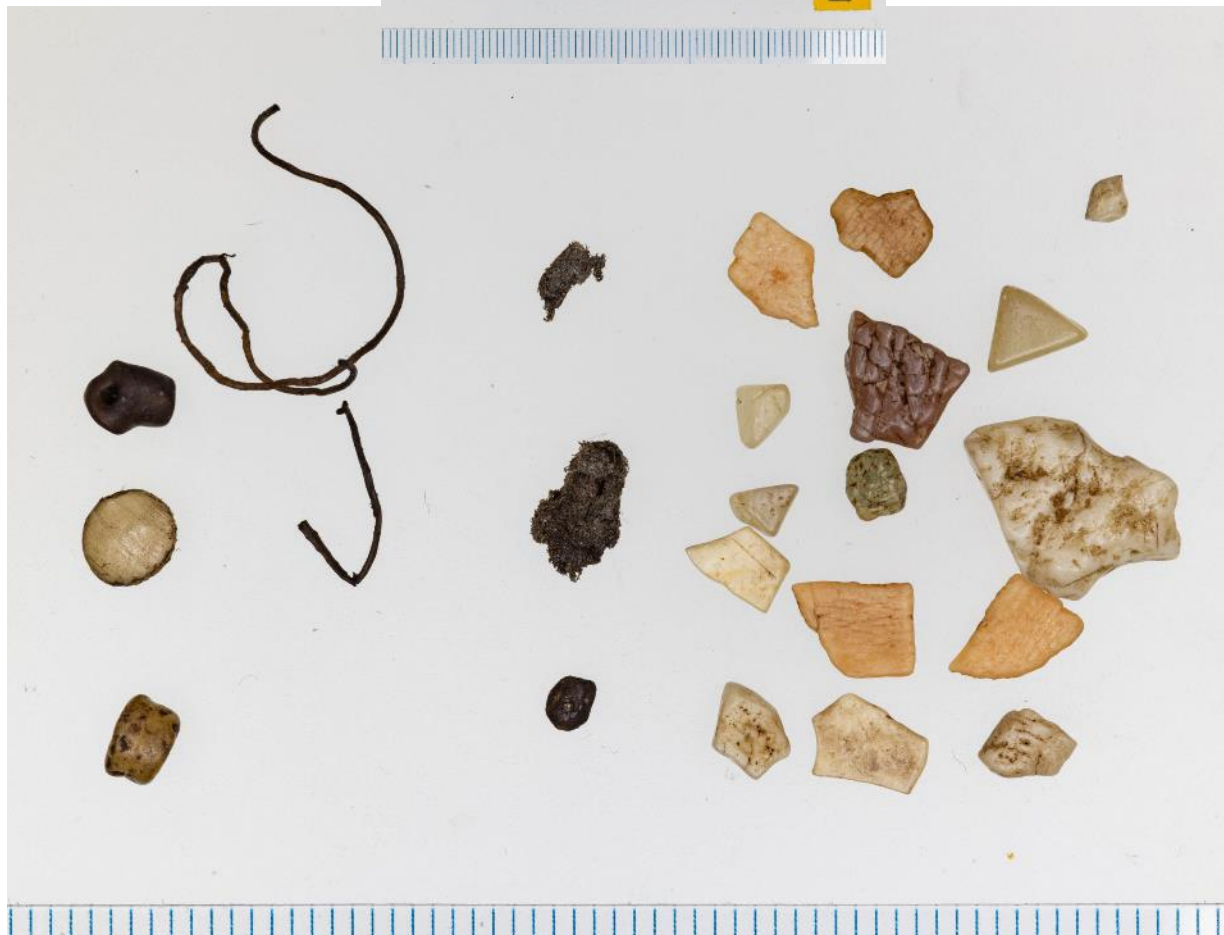
JAFCODE	NET-2020-010
Country	Netherlands
Location	Texel Paal 24 (Slufter)
Date	04-Feb-20
Finder	Maarten Brugge
Sex (Male, Female or UNKnown)	M
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	JU
Colourphase (LL, L, D, DD or UNKnown)	D
Condition score (0=fully emaciated to 9=excellent condition)	1
Likely cause of death (STA=starvation for emaciated with unknown reason)	STA
Notes from dissection	partly scavenged on left breast and liver; Gut distal very swollen largely wet contents.
nr of industrial plastic pellets	0
nr of consumer debris plastic particles	0
Total mass of plastic in stomach (g)	0

no plastics present in this stomach



Nr: NET-2020-011

JAFCODE	NET-2020-011
Country	Netherlands
Location	Schiermonnikoog; no detail
Date	28-Feb-20
Finder	Faunavisie Wildcare
Sex (Male, Female or UNKnown)	M
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	JU
Colourphase (LL, L, D, DD or UNKnown)	LL
Condition score (0=fully emaciated to 9=excellent condition)	2
Likely cause of death (STA=starvation for emaciated with unknown reason)	STA
Notes from dissection	tip of bill broken or malformed; Gut a bit bloody
nr of industrial plastic pellets	3
nr of consumer debris plastic particles	20
Total mass of plastic in stomach (g)	0.4455



Nr: NET-2020-012

JAFCODE	NET-2020-012
Country	Netherlands
Location	Bergen aan Zee
Date	21-May-20
Finder	Dook Vlugt
Sex (Male, Female or UNKnown)	F
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	JU
Colourphase (LL, L, D, DD or UNKnown)	LL
Condition score (0=fully emaciated to 9=excellent condition)	1
Likely cause of death (STA=starvation for emaciated with unknown reason)	STA
Notes from dissection	Finder requests info on his bird
nr of industrial plastic pellets	2
nr of consumer debris plastic particles	21
Total mass of plastic in stomach (g)	0.1313



Nr: NET-2020-013

JAFCODE	NET-2020-013
Country	Netherlands
Location	Texel Paal 23
Date	30-Jul-20
Finder	Stephan Kühn; Christine Fabricius; Suse Kühn
Sex (Male, Female or UNKnown)	UNK
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	Cannot be assessed
Colourphase (LL, L, D, DD or UNKnown)	UNK
Condition score (0=fully emaciated to 9=excellent condition)	1
Likely cause of death (STA=starvation for emaciated with unknown reason)	UNK
Notes from dissection	Mummified, but the stomach was still intact !
nr of industrial plastic pellets	2
nr of consumer debris plastic particles	18
Total mass of plastic in stomach (g)	0.0902





ILLUSTRATING THE IMPORTANCE OF COLLECTING 'OLD' CORPSES

Fulmar nr NET-2020-013 was found by Stephan Kühn, Christine Fabricius and Susanne Kühn on Texel in mid-summer as a smelly, decaying and partly mummified old corpse. Note the 'clean' skull and neck, and dried legs and wings. In spite of its looks, this bird contained a complete stomach that could be used in the monitoring program. Only leave fulmar corpses behind if you are fully certain there is no stomach left. If in doubt, just bring it for us to check.

Nr: NET-2020-014

JAFCODE	NET-2020-014
Country	Netherlands
Location	Vlieland Vliehors
Date	30-Sep-20
Finder	Carl Zuhorn
Sex (Male, Female or UNKnown)	M
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	IM
Colourphase (LL, L, D, DD or UNKnown)	LL
Condition score (0=fully emaciated to 9=excellent condition)	2
Likely cause of death (STA=starvation for emaciated with unknown reason)	STA
Notes from dissection	x
nr of industrial plastic pellets	0
nr of consumer debris plastic particles	1 (plus on the left a rubbish item: a paint chip)
Total mass of plastic in stomach (g)	0.0089



Nr: **NET-2020-015**

JAFCODE	NET-2020-015
Country	Netherlands
Location	Vlieland Noordzeestrand Dam B
Date	02-Mar-20
Finder	Carl Zuhorn
Sex (Male, Female or UNKnown)	F
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	2Y
Colourphase (LL, L, D, DD or UNKnown)	LL
Condition score (0=fully emaciated to 9=excellent condition)	1
Likely cause of death (STA=starvation for emaciated with unknown reason)	PLU
Notes from dissection	right hand feathers worn; P2-5 tips broken
nr of industrial plastic pellets	1
nr of consumer debris plastic particles	3
Total mass of plastic in stomach (g)	0.0932



Nr: NET-2020-016

JAFCODE	NET-2020-016
Country	Netherlands
Location	Vlieland Noordzeestrand
Date	15-Feb-20
Finder	Carl Zuhorn
Sex (Male, Female or UNKnown)	F
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	JU
Colourphase (LL, L, D, DD or UNKnown)	L
Condition score (0=fully emaciated to 9=excellent condition)	1
Likely cause of death (STA=starvation for emaciated with unknown reason)	STA
Notes from dissection	enlarged gall bladder and inflammation. MAYBE REHAB? as faeces on belly; slightly damaged bill and broken feather tips
nr of industrial plastic pellets	1
nr of consumer debris plastic particles	8
Total mass of plastic in stomach (g)	0.069



Nr: NET-2020-017

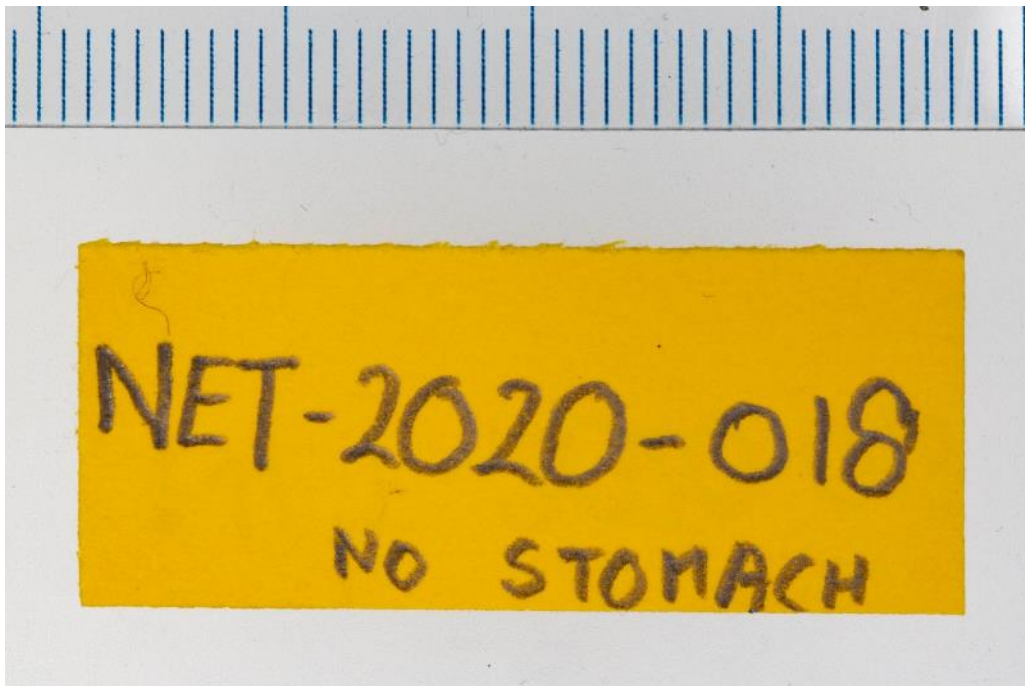
JAFCODE	NET-2020-017
Country	Netherlands
Location	Texel Paal 24.8
Date	13-Dec-20
Finder	Suse Kühn
Sex (Male, Female or UNKnown)	M
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	NONAD
Colourphase (LL, L, D, DD or UNKnown)	
Condition score (0=fully emaciated to 9=excellent condition)	1
Likely cause of death (STA=starvation for emaciated with unknown reason)	CAN
Notes from dissection	wing feathers missing; large cancer in gut area; kidneys enlarged
nr of industrial plastic pellets	0
nr of consumer debris plastic particles	4 (among which a large bundle of threads, plus a rubbish item: small piece of paper on the left)
Total mass of plastic in stomach (g)	0.1495



Nr: NET-2020-018

JAFCODE	NET-2020-018
Country	Netherlands
Location	Ameland Paal 17
Date	18-Oct-20
Finder	Johan Krol
Sex (Male, Female or UNKnown)	M
Age (JUvenile, 2 nd Year, IMmature, ADult, or UNK)	NONAD
Colourphase (LL, L, D, DD or UNKnown)	LL
Condition score (0=fully emaciated to 9=excellent condition)	
Likely cause of death (STA=starvation for emaciated with unknown reason)	UNK
Notes from dissection	heavily scavenged and decayed. only right testis left (6.5*3 grey). Big hole in proventriculus therefore stomach NOT TO BE USED
nr of industrial plastic pellets	
nr of consumer debris plastic particles	
Total mass of plastic in stomach (g)	

Scavenged, no stomach present



Supplement individual details (acronyms)

Supplement individuele details (afkortingen)

The ruler in photo's shows mm and cm scaling

De lineaal bij de fotos toont mm en cm schaal

CEM = cementcloaca - cementcloaca

A blockage in the final part of the intestine by a 'hard' egg-shaped ball formed by accumulation of layer upon layer of hardened faeces and ureum. At some stage this completely blocks defaecation, the parts of the intestine above this fill up with digested mud that can't be excreted.

Blokkering van de einddarm met een steenachtige meestal eivormig bal van laag op laag opgehoopte uitwerpselen met ureum. Op zeker moment blokkeert dit de volledige 'stoelgang' en de voorliggende darm zwelt op met darmmateriaal.

COL = collision – botsing

Collision is used when we observe signs of a mechanical death, e.g. broken bones, or internal heavy bruises. These may be caused by collisions with cables, wires, ship- or lighthouse lights, cliff accidents, and also roadkills. Collision may lead to instant death, but also to a slow starvation in birds being injured and alive, but unable to provide themselves with food.

Botsing als doodsoorzaak wordt gebruikt wanneer er tekenen zijn van een 'mechanische' doodsoorzaak, zoals gebroken botten of zware inwendige kneuzingen. Dit kan ontstaan door botsing met kabels, draden, verlichting op schepen of vuurtoren, ongelukken op de klif, maar bv ook verkeersslachtoffers. Botsingen kunnen de onmiddellijke doodsoorzaak zijn, maar kunnen ook leiden tot de hongerdood als een dier niet meer in staat is voldoende voedsel te verzamelen.

DRO = drowning – verdrinking

This is used when the birds appear healthy, and in good body condition, except for bloodfilled or soaked lungs. These things suggest that the bird may have drowned instantly in surface nets. This could also be on longline hooks but without visible damage from the longline (see below).

De term DRO wordt gebruikt als de vogel uitwendig en inwendig gezond oogt en in normale conditie is, maar waarbij bloed in longen of gesprongen aderen een aanwijzing zijn dat de vogel verdronken is. Dat kan in netten zijn, maar ook door lange-lijn-visserij maar zonder zichtbare schade van haken of lijnen (zie hieronder).

LLV = long-line victim Lange-lijn slachtoffer

A specific case of drowning or entanglement. Evidence showing that the bird drowned from longline hooking or entanglement, where birds are drawn down with the hooked line. This may be indicated by hook damage, often in the bill, or in the arm wing, in combination with good body condition, but e.g. fresh blood in lungs and burst internal veins.

Dit is een speciaal geval van verdrinking en verstrikking en wordt gebruikt wanneer uit aanwezigheid van haak en lijn, of daarvoor typerende schade aan snavel of lijf duidelijk is dat de vogel is vastgeraakt aan een beaasde haak en mee onder water is getrokken.

GUT = various internal problems diverse inwendige problemen

This acronym is used for a range of problems observed during autopsy in the internal parts of the bird. This could be serious inflammations, e.g. in the oviduct of females, or serious kidney problems (granular obstructions); malformations, etc., or combinations of such problems. In the case of heavy cancers, the more specific acronym CAN Cancer is used. In general some details will be given under dissection notes.

Deze afkorting wordt gebruikt voor een hele reeks inwendig geobserveerde problemen die waarschijnlijke doodsoorzaak kunnen worden gezien. Dat kunnen zware ontstekingen zijn, bv in het vrouwelijk oviduct, nierfalen (korrelige structuur) misvormingen, etc. In het geval van grote kanker gezwellen wordt CAN Cancer als meer specifieke afkorting gebruikt. Veelal zal onder de dissectie notities wat meer toelichting worden gegeven.

PLU = plumage – veerkleed

In some cases, birds may have had problems in primary, tail or body feather moult, which has led to such poor plumage that difficulties in flying or water-proofing may be suspected causing excessive energy needs. In other cases, birds seem to suffer from problems with the down feathers, needed for insulation and additional water-proofing. Sometimes down is completely lacking, exposing bare skin immediately below the covers.

Soms hebben vogels ernstige problemen met de rui van vleugel, staart of lichaamsveren. Dit kan tot een dermate slechte toestand van het verenkleed leiden dat gebrekkig vliegvermogen of waterdichtheid van het verenpak hebben geleid tot extreem energieverbruik en de hongerdood. In andere gevallen kan de donslaag onder de dekveren slecht zijn of zelfs ontbreken.

OIL = oiling – Olie

Mineral oil in plumage is likely to have caused disrupted water-proofing of plumage or toxication.

Aardolie vervuiling van het verenkleed heeft waarschijnlijk de dood veroorzaakt, door lekkage van de veren of vergiftiging.

EXT = other external plumage fouling andere uitwendige vervuiling

Substances other than mineral oils, such as vegetable or animal oils, paraffins or complex chemical mixtures may affect birds in similar ways to mineral oil.

Andere substanties dan olie, bijv plantaardige of dierlijke olie, paraffine en chemische mengsels kunnen het verenkleed aantasten op een vergelijkbare manier als aardolie.

ING = ingestion – ingeslikte stoffen

Ingestion of materials is suspected to have caused the death of the bird, e.g. excessive amounts of paraffin or palmfat-like substances, but also extreme accumulation of plastics or other litter.

Het opeten van bepaalde substanties kan soms aangewezen worden als de meest waarschijnlijke doodsoorzaak. Het gaat dan om bijv. extreme hoeveelheden paraffine-achtige of palmolie-achtige stoffen, maar ook om bijv. extreme ophoping van plastics of ander zwerfvuil.

STA = starvation – Verhongering

The bird died slowly from starvation, but it is unknown what has caused this. It may have been prolonged food shortage, but individual problems that cannot be identified during simple autopsies may also play a role. For example one may think of some diseases, undetected injuries, invisible pollution, poisoning or whatever.

Deze term wordt gebruikt als de vogel totaal vermagerd is, zonder dat duidelijk is wat dat heeft veroorzaakt. Dat kunnen ernstige voedseltekorten zijn, maar ook niet direct zichtbare ziektes of verwondingen, vervuiling, vergiftiging e.d.

UNK = unknown – onbekend

Used if we really do not have any clue as to what has caused the death of the bird, which may be the case especially in very old or heavily scavenged corpses.

Dit wordt gebruikt als geen van de bovenstaande afkortingen bruikbaar is, bijvoorbeeld in het geval van extreem oude of totaal leeggevreten kadavers.