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## **Bijlage 1. Opnametabellen permanente kwadraten 2017**

*Bijlage 1a. De betekenis van de gebruikte afkortingen in de rijen Vegetatietype en Structuurtype is hieronder vermeld.*

---

Afkorting	Vegetatietype
-----------	---------------

Dv	Duinvalleivegetaties
Zp	Zilte pioniervegetaties
Oa	Overstromingsgraslanden met Aardbeiklaver en Zilte zegge
Oo	Overige overstromingsgraslanden
Go	Overige graslanden
Rr	Ruige rietlanden
Kw	Kruipwilgstruwelen

---

Afkorting	Structuurtype
-----------	---------------

A	Antropogeen (weg, gebouw)
Bd	Bos, dicht
Bo	Bos, open
Gh	Grasland hoog
Gl	Grasland, laag
Kg	Kale grond
LRsad	Landriet, structuurarm en dicht
LRsao	Landriet, structuurarm en open
LRsrd	Landriet, structuurrijk en dicht
LRsro	Landriet, structuurrijk en open
Ow	Open water
Or	Overige ruigten
P	Pionervegetaties
Shd	Struweel, hoog en dicht
Sho	Struweel, hoog en open
Sld	Struweel, laag en (matig) dicht
Slo	Struweel, laag en (zeer) open
Smd	Struweel, middelhoog en (matig) dicht
Smo	Struweel, middelhoog en (zeer) open
WRd	Waterriet, dicht
WRo	Waterriet, open

---

De bijbehorende tabellen zijn terug te vinden in:

*Bijlage 1b. Vegetatietabel pq's 2017 digitaal.xlsx*

Een digitale bijlage als xls bestand

## **Bijlage 2. Tabel veranderingen indicatoren 2007-2017**

Digitale bijlage als xls bestand

## **Bijlage 3. Veranderingen indicatoren voor structuurkenmerken in de pq's 2007-2017**

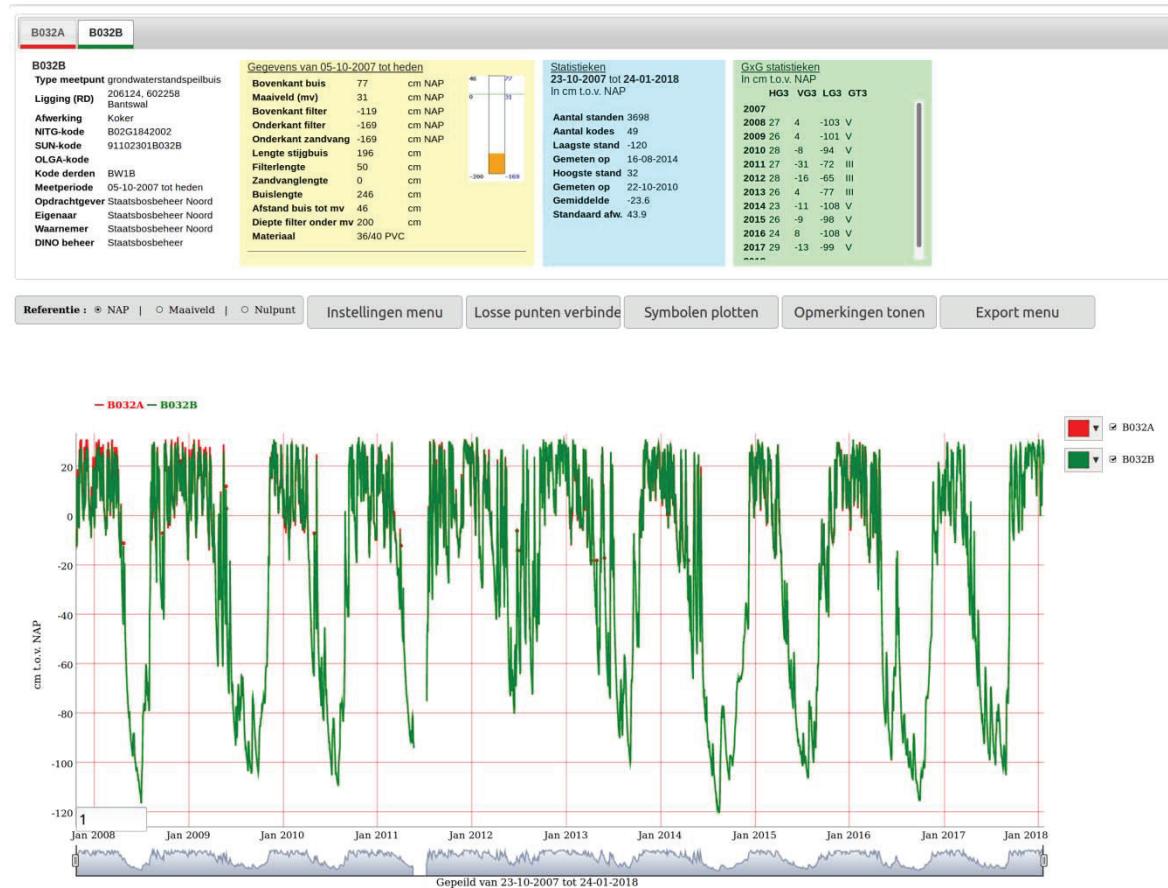
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## **Bijlage 4. Veranderingen indicatoren voor abiotische omstandigheden in de pq's 2007-2017**

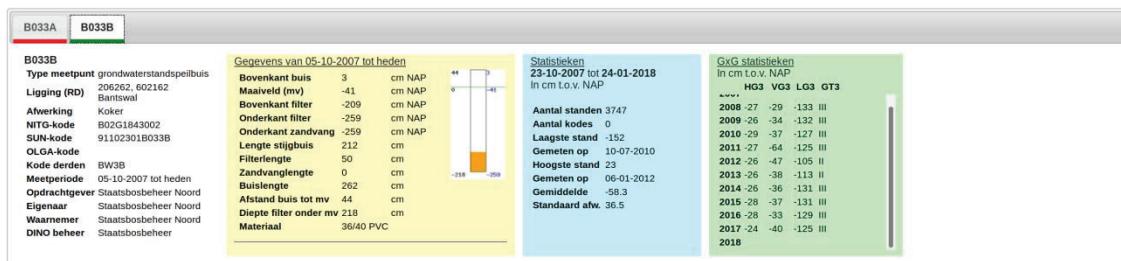
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## Bijlagen hoofdstuk 6

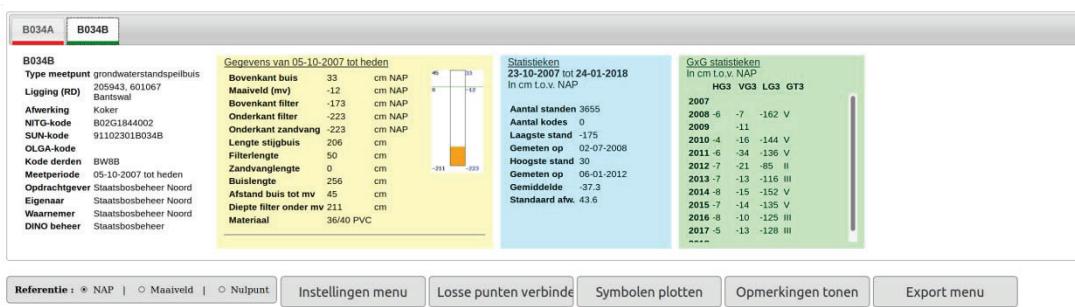
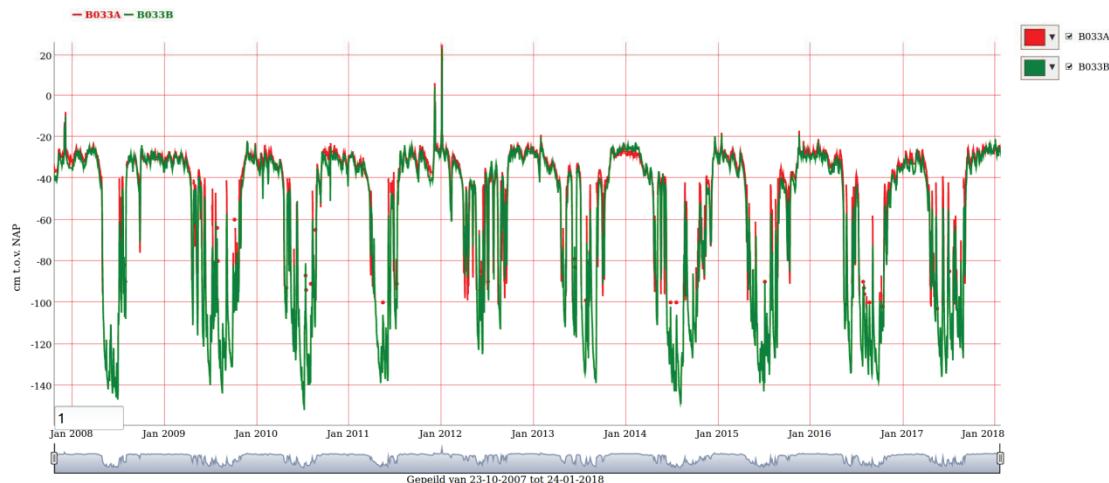
## Bijlage 5. Waterstanden tm 2017



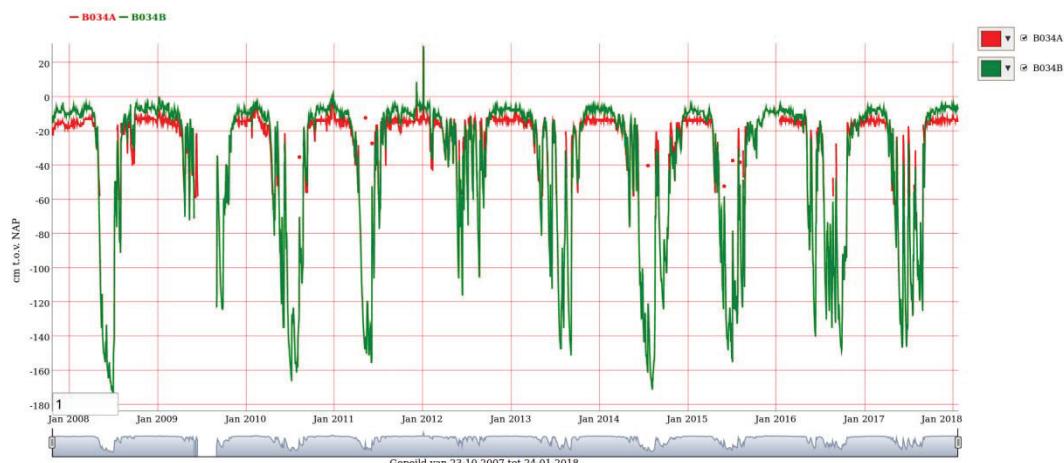
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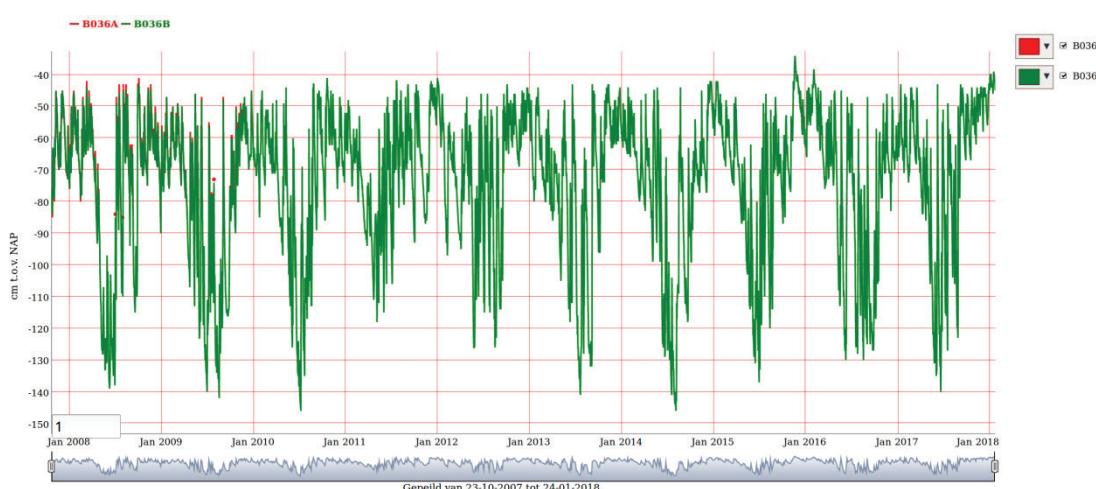
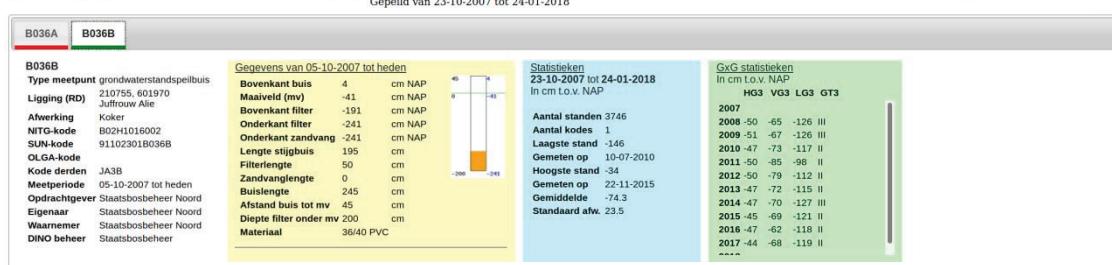
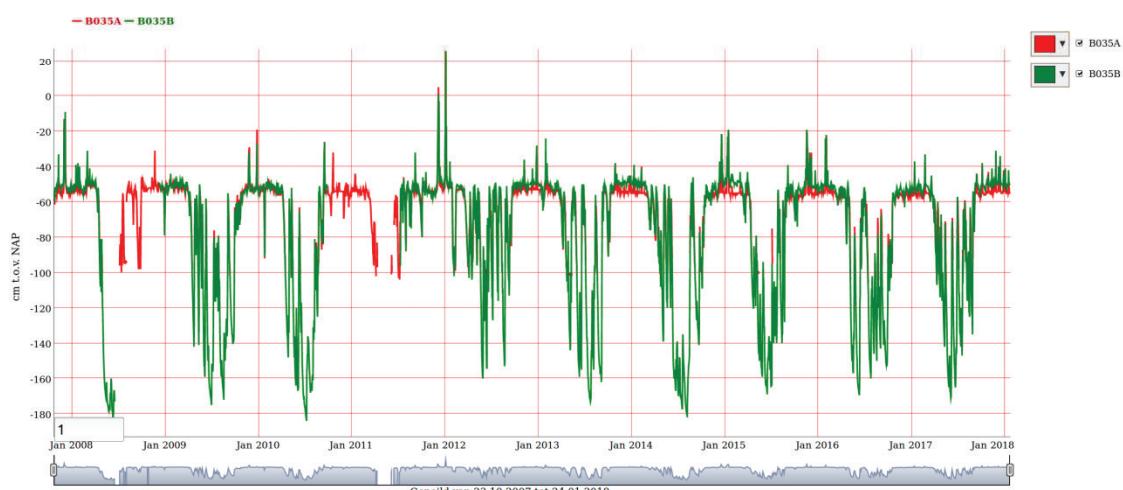
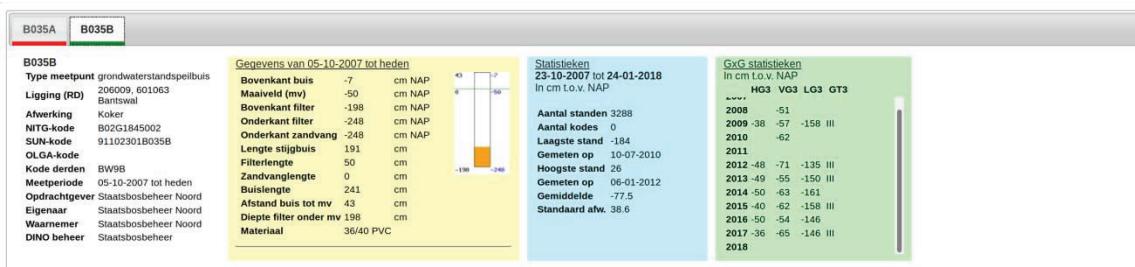


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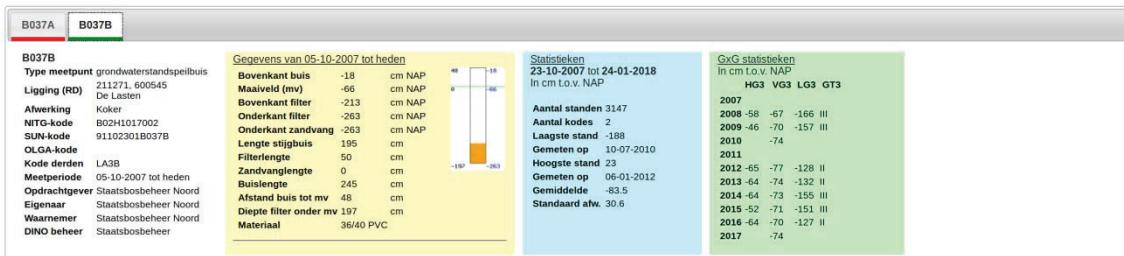


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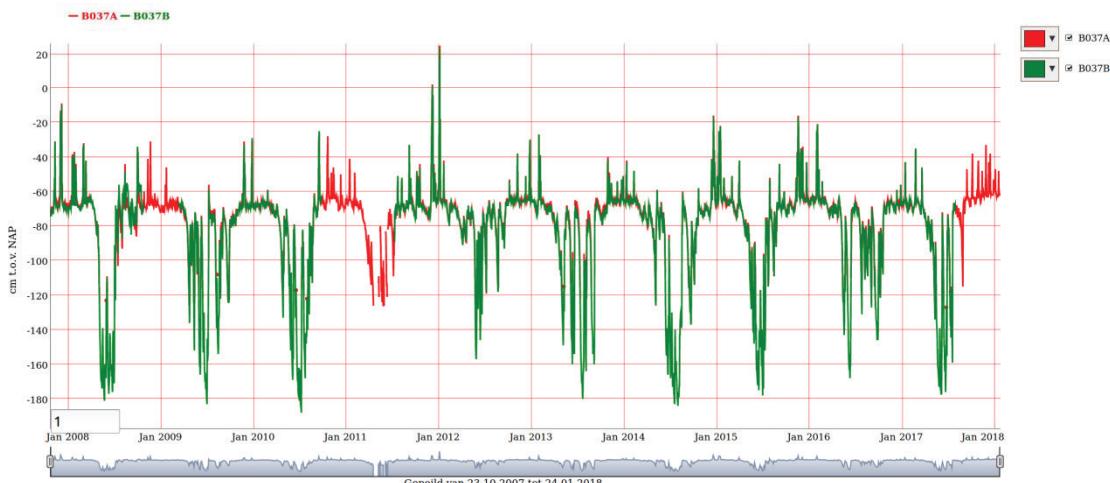


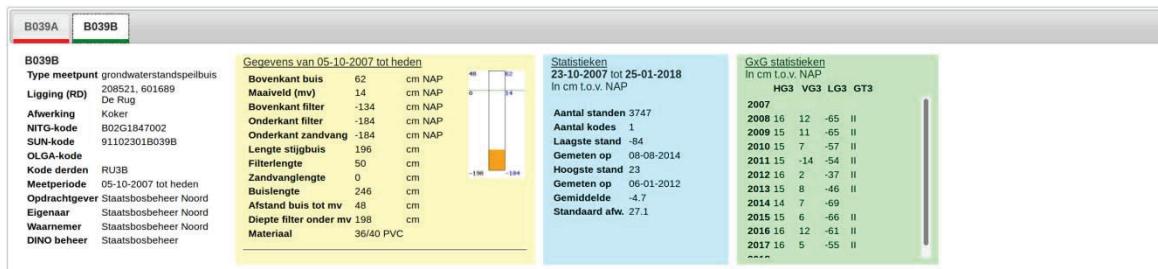


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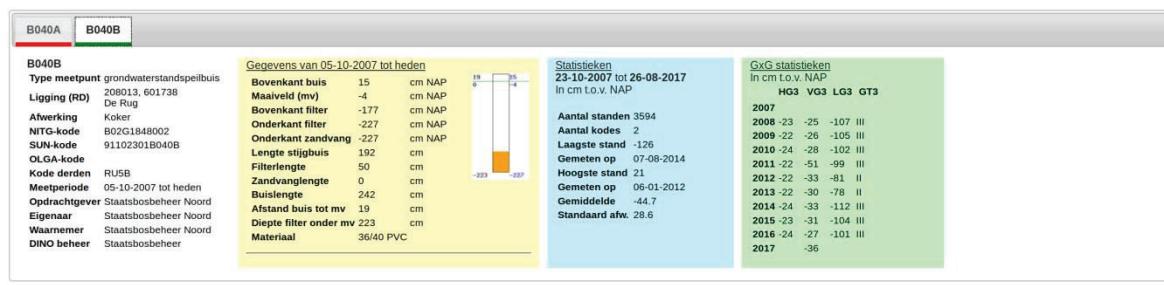
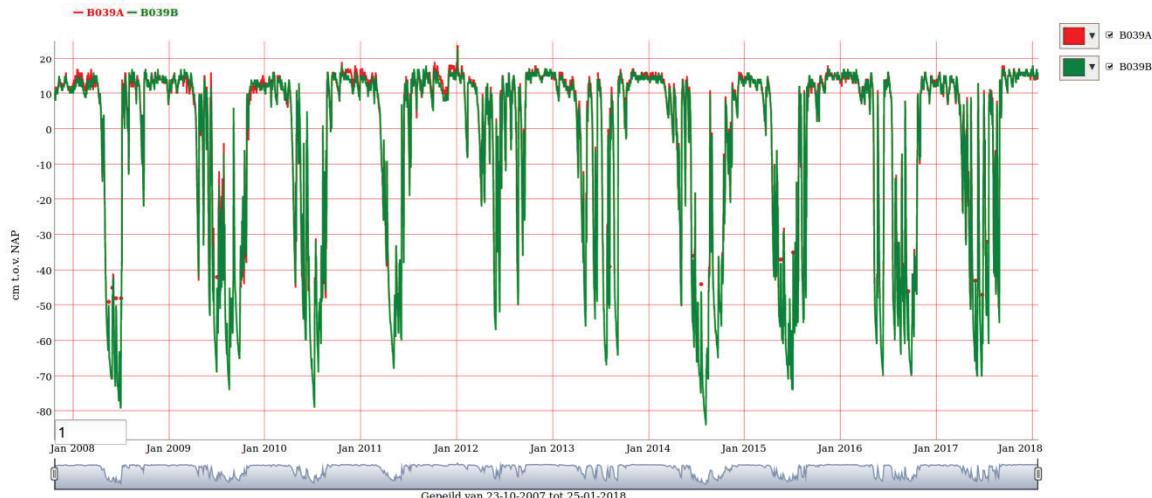


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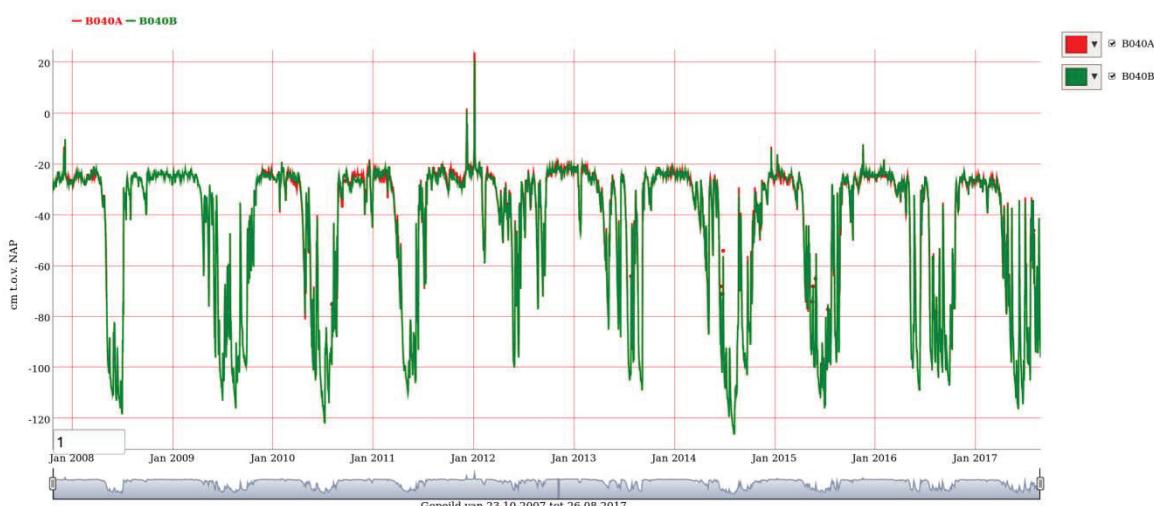




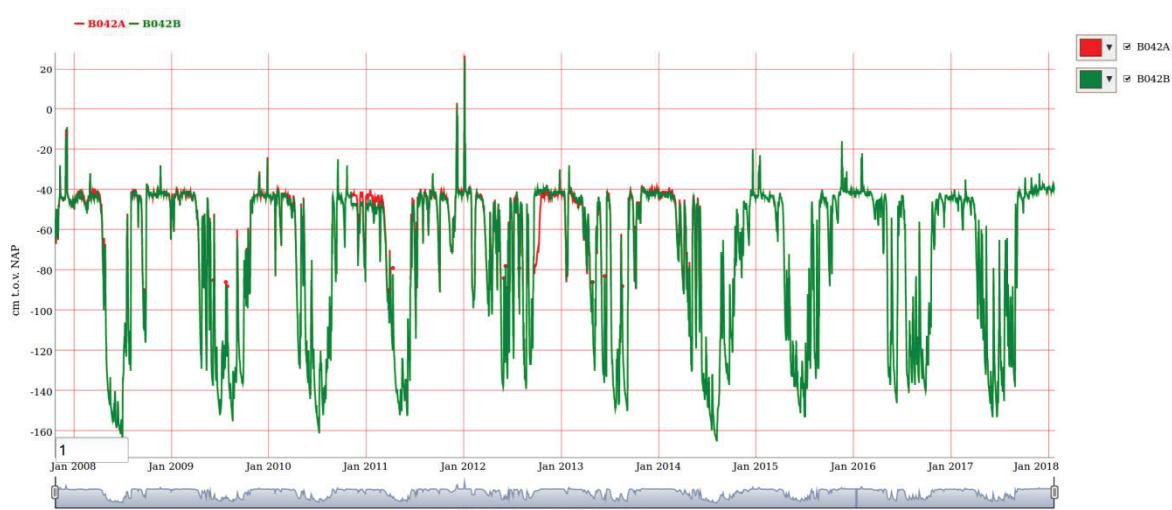
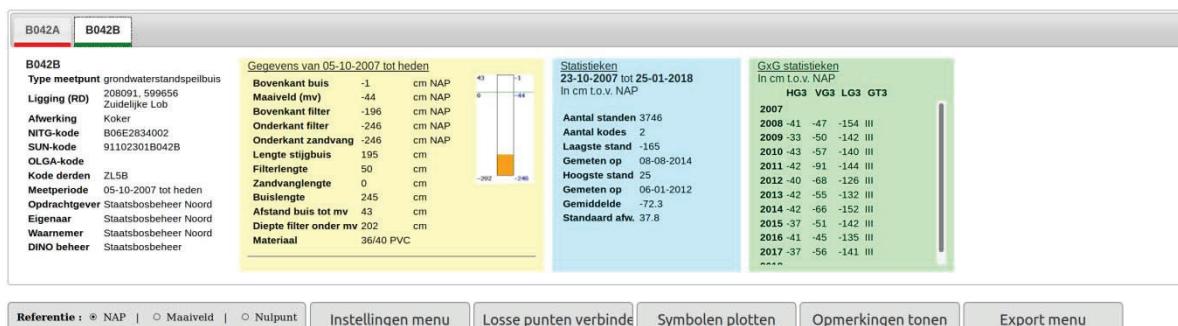
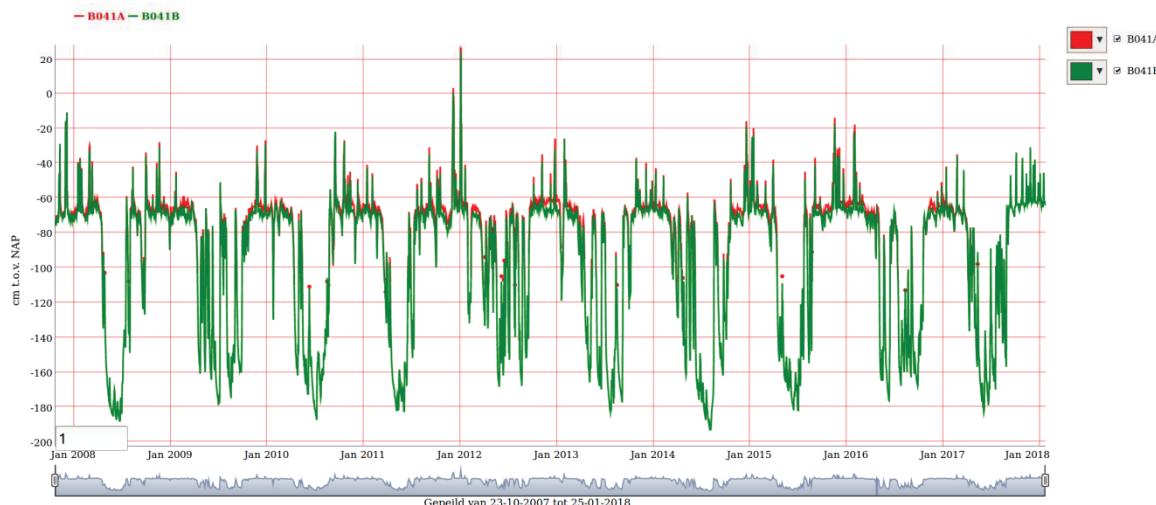
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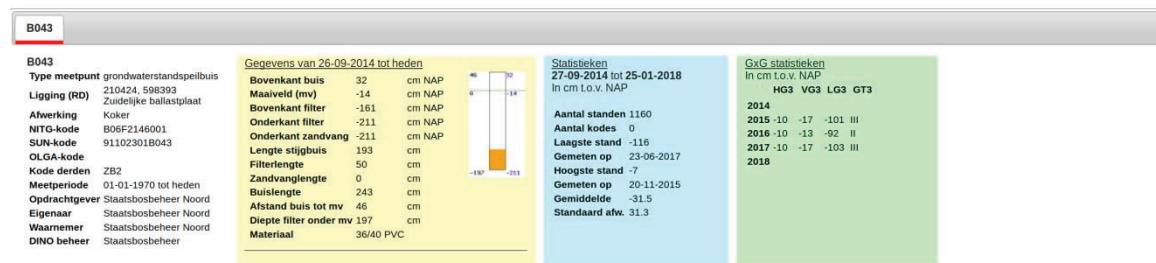


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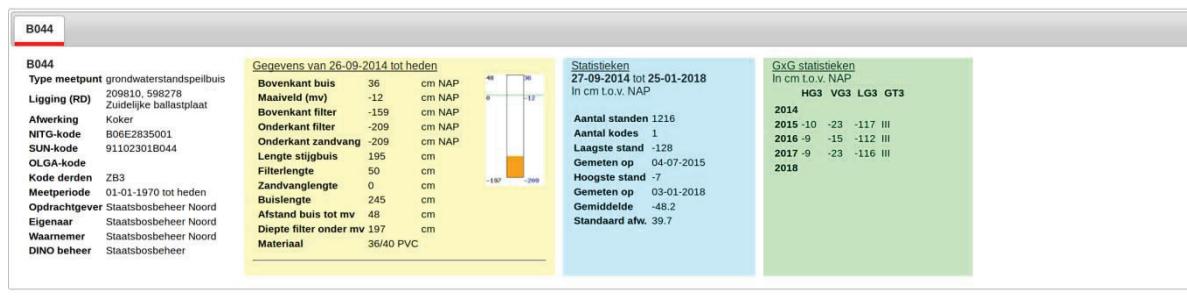
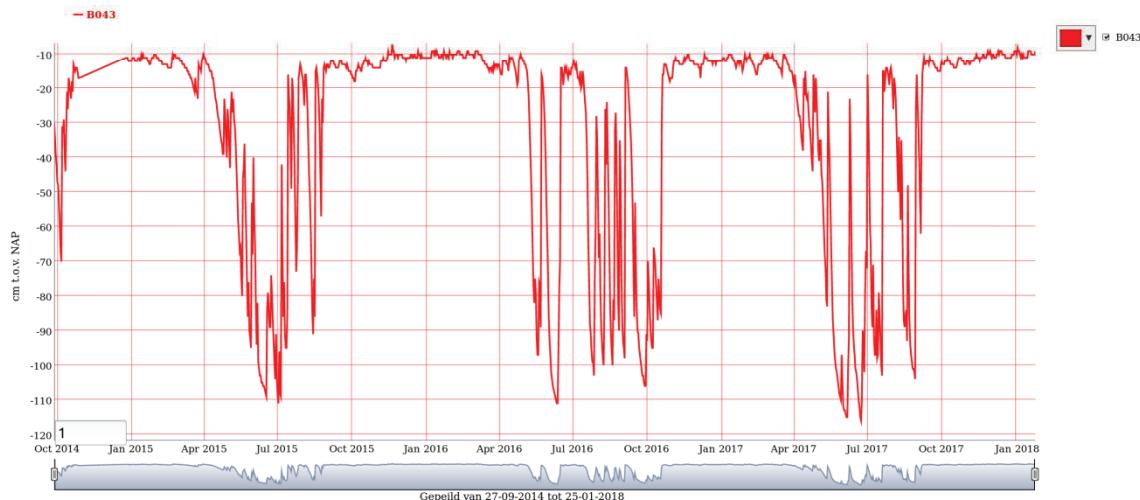


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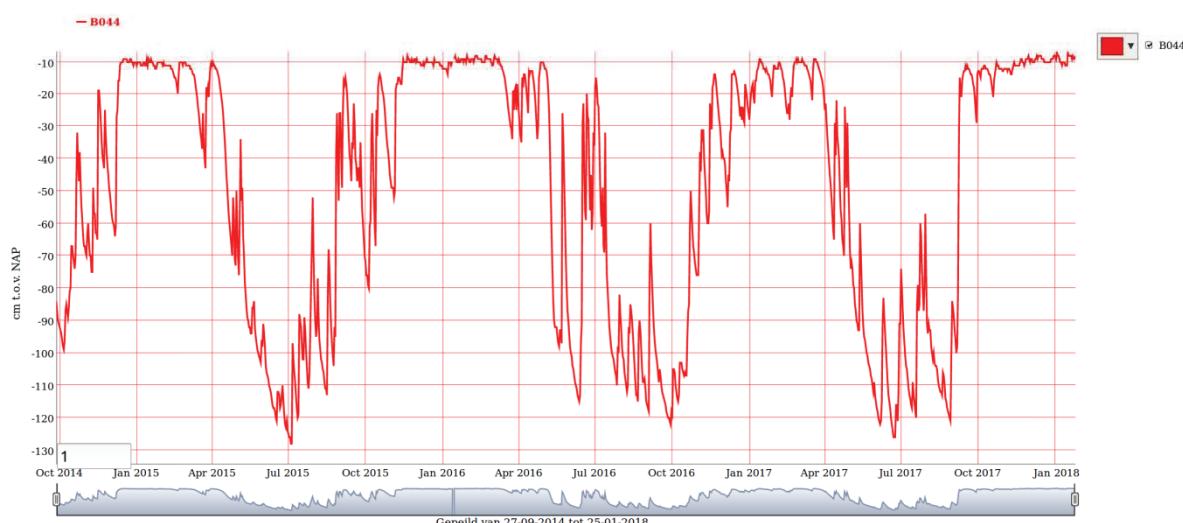




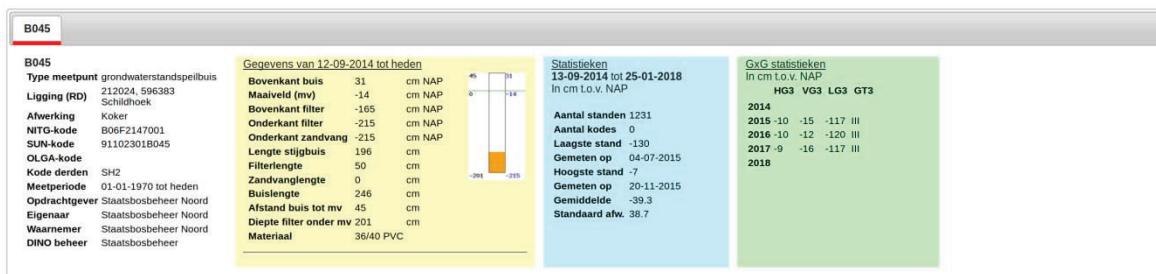
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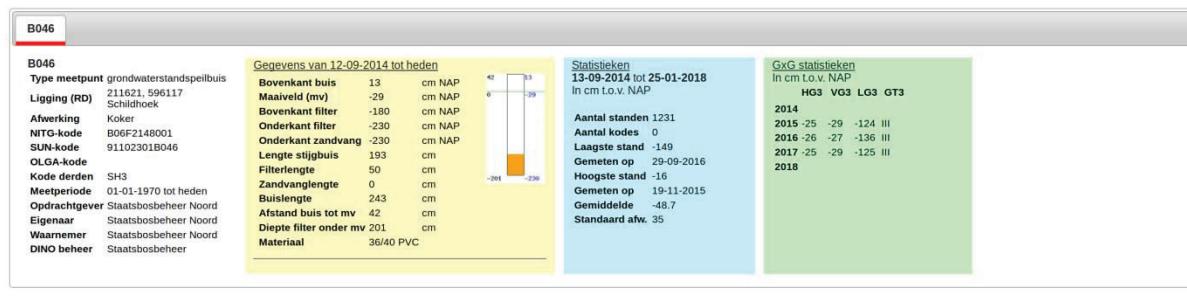
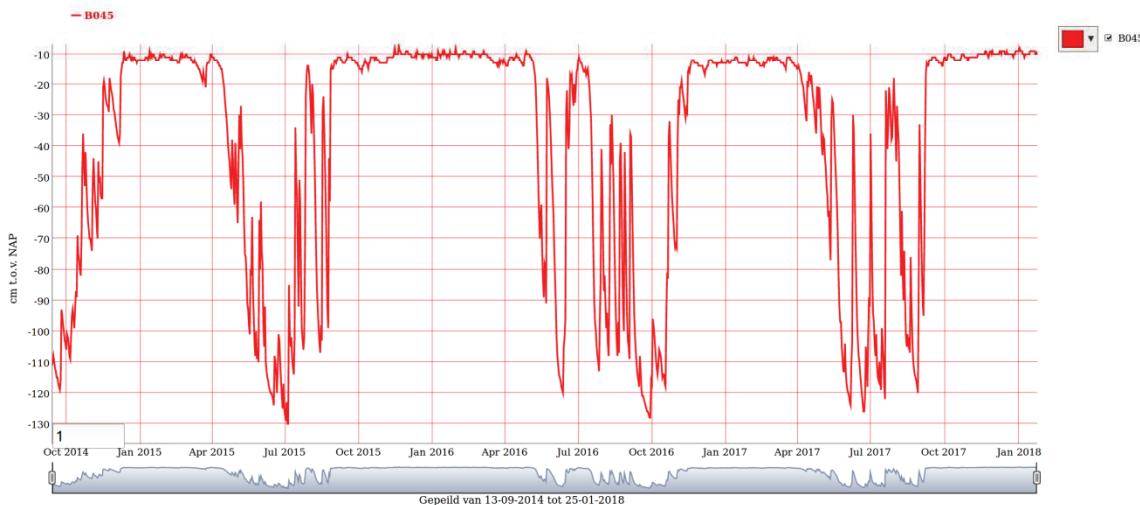
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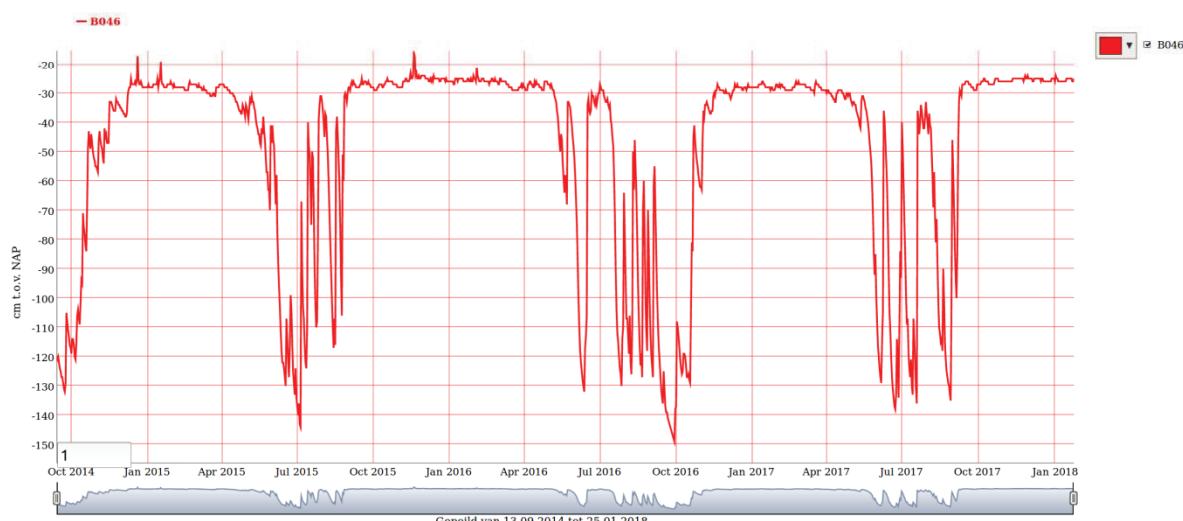
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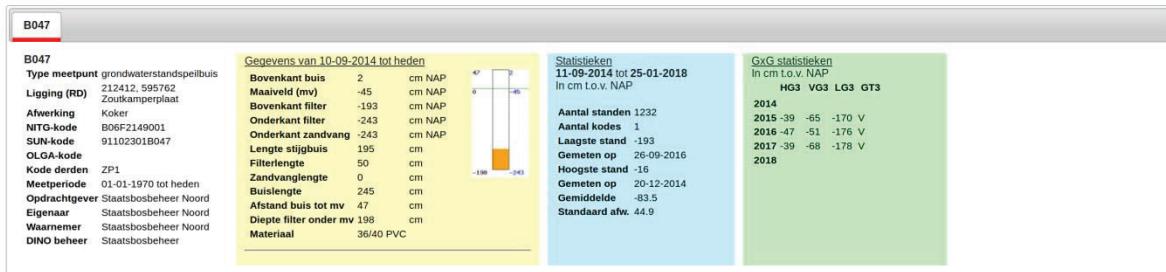


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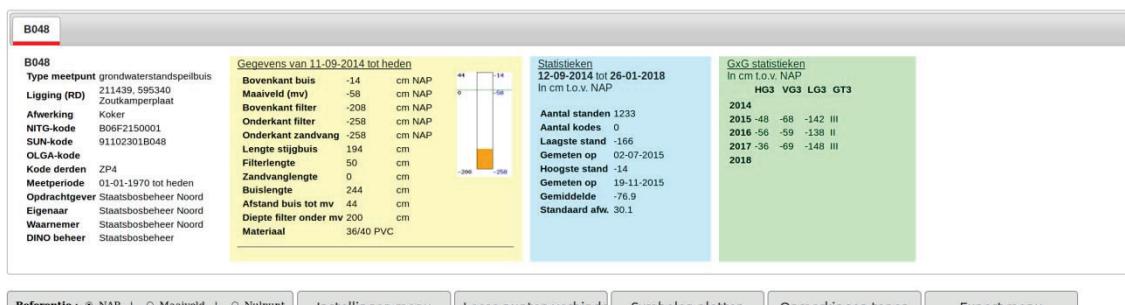


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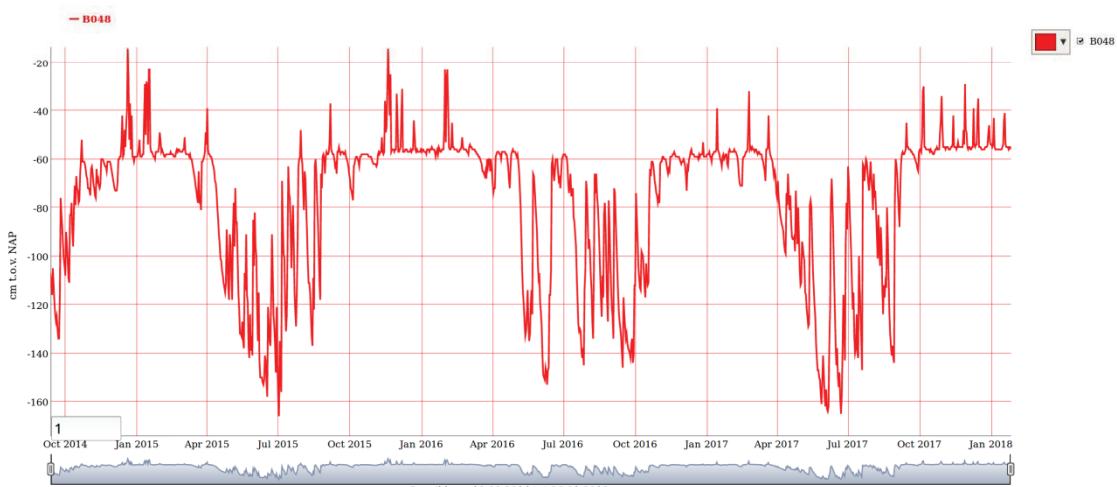




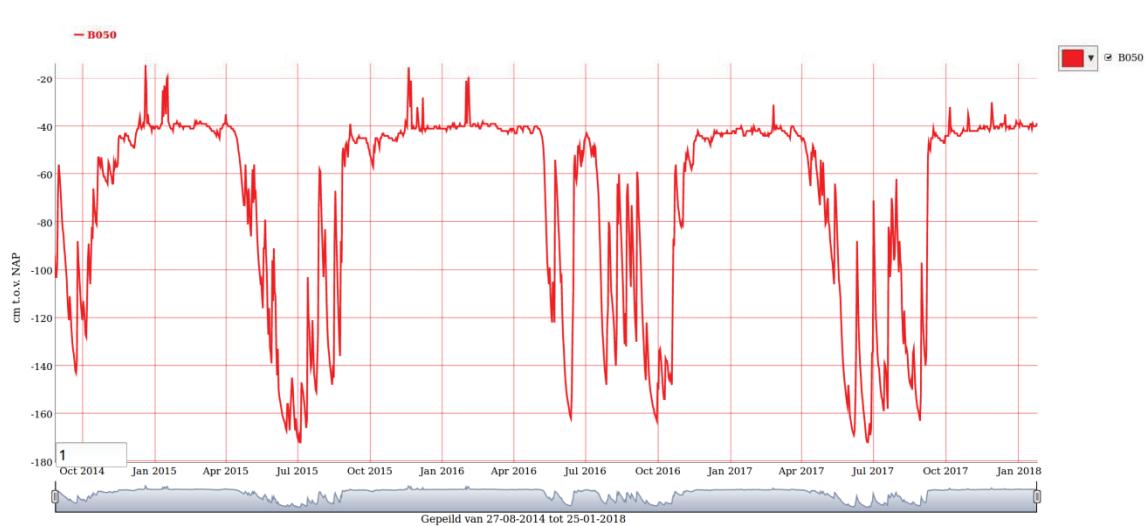
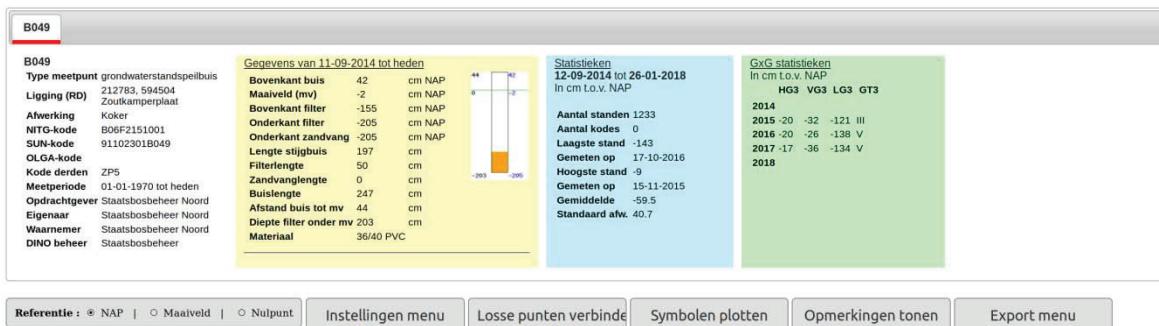
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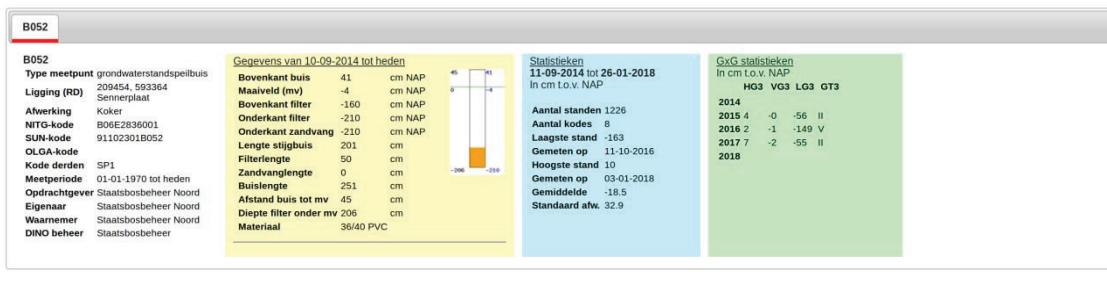
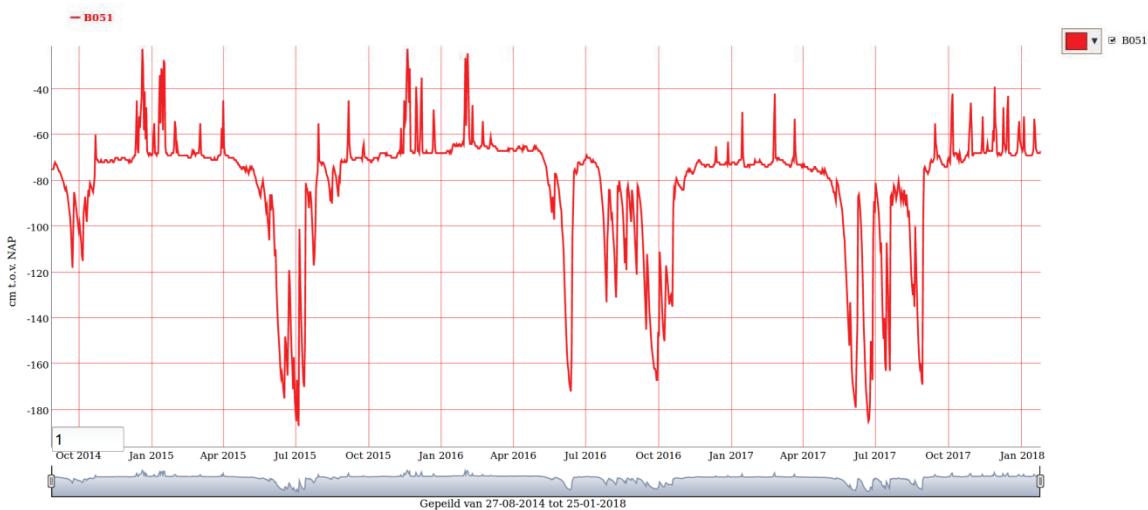
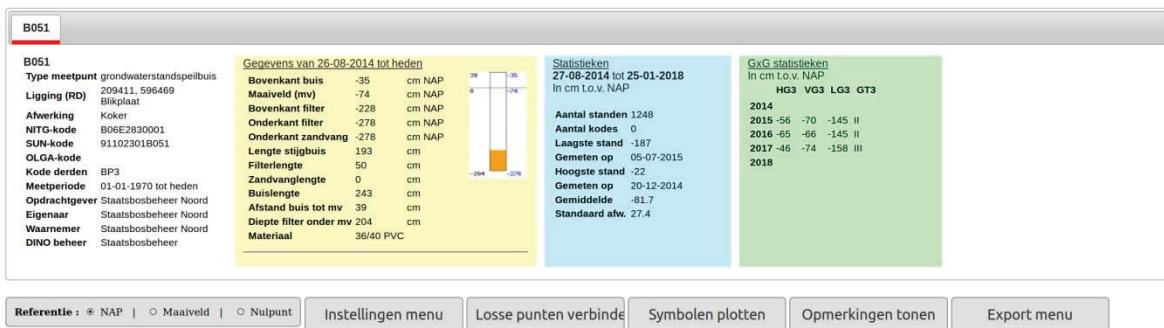


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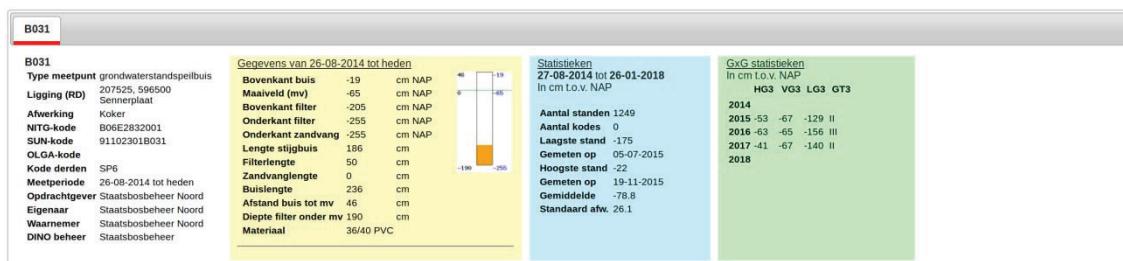


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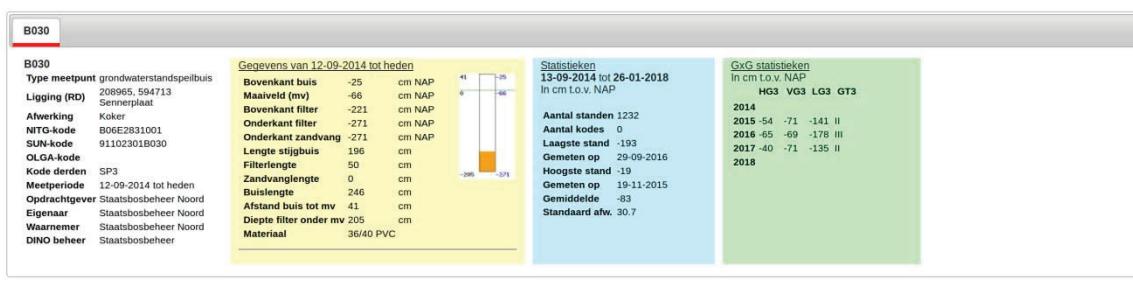




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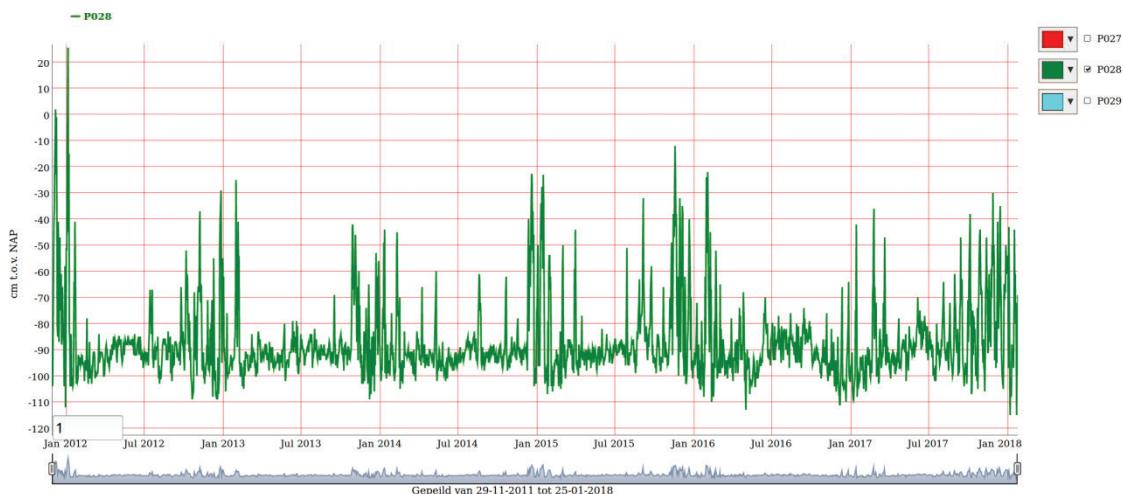
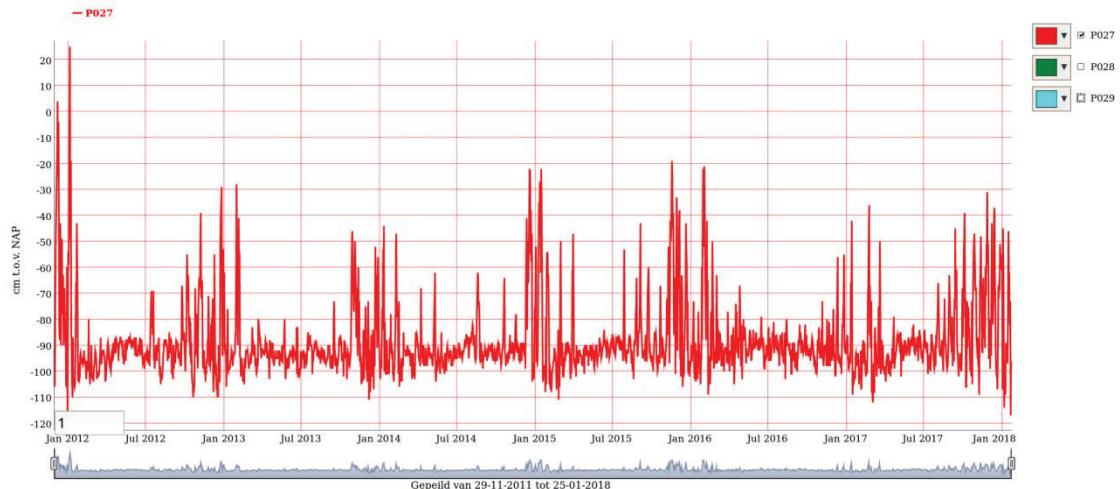


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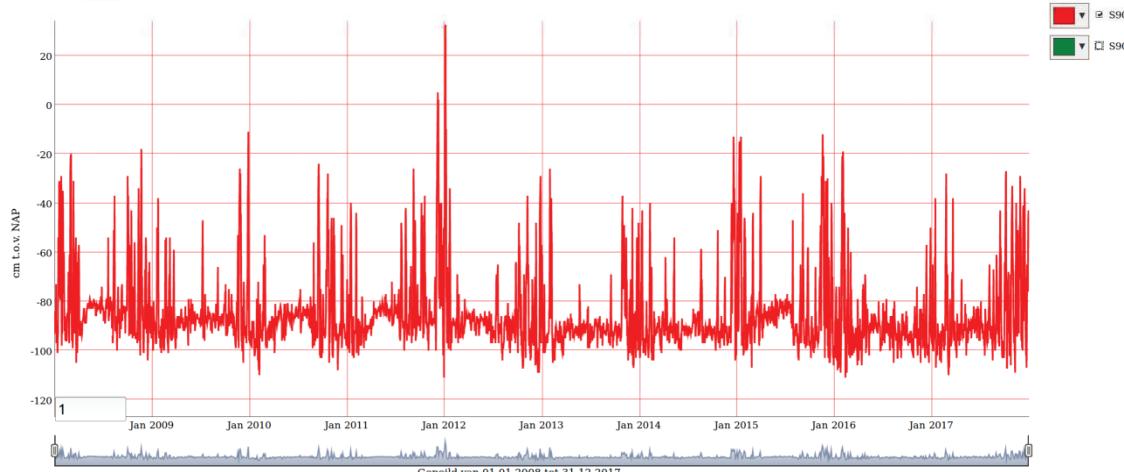
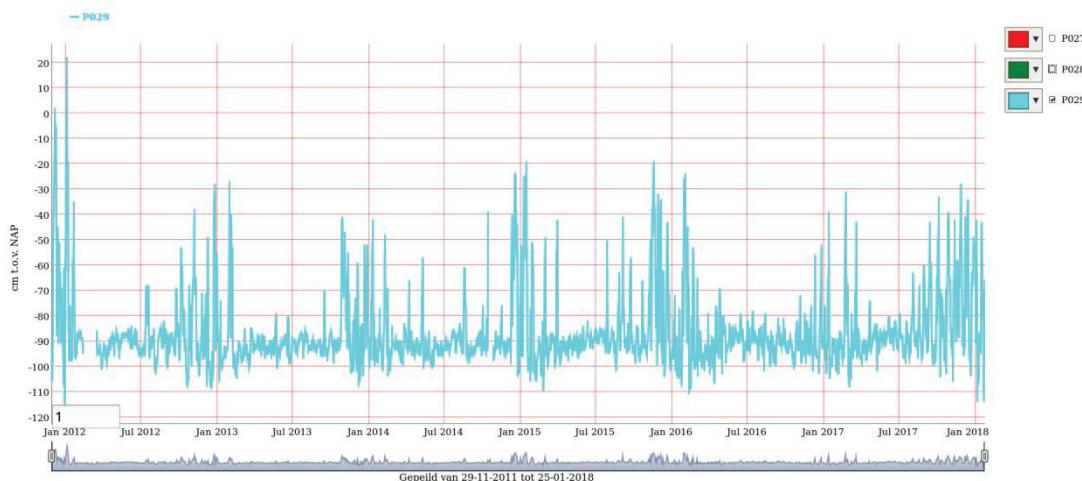


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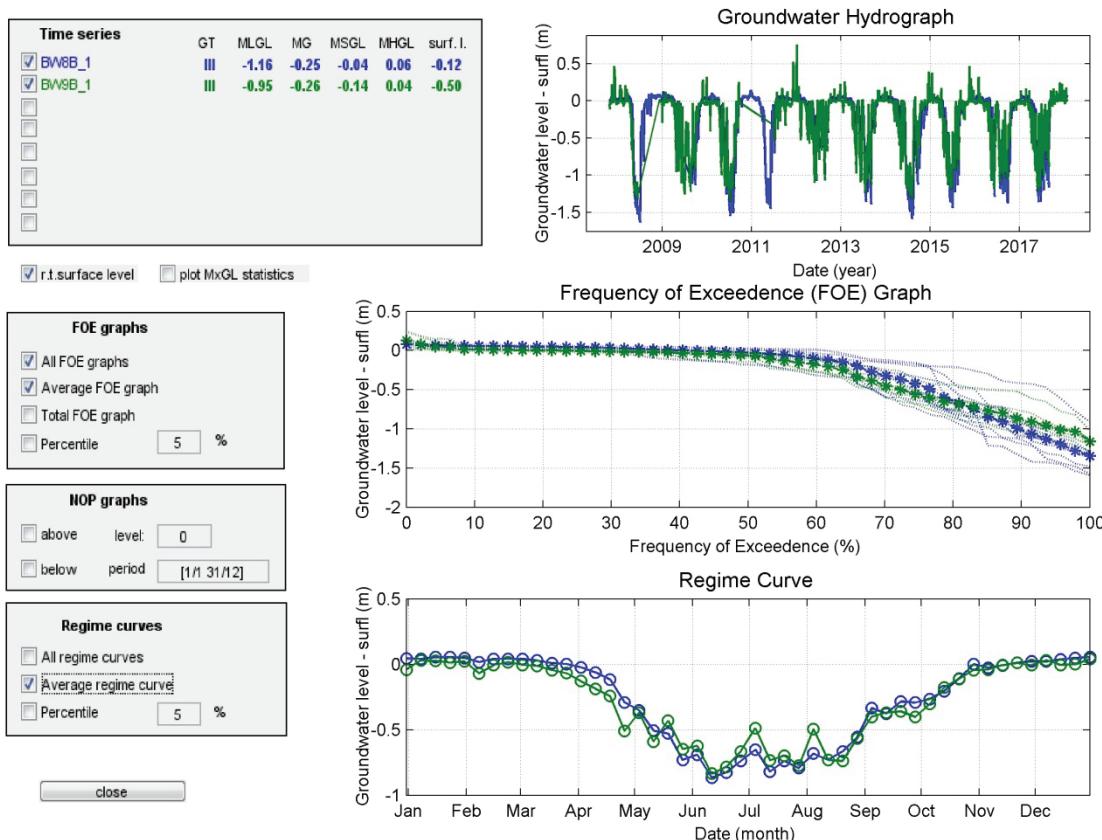
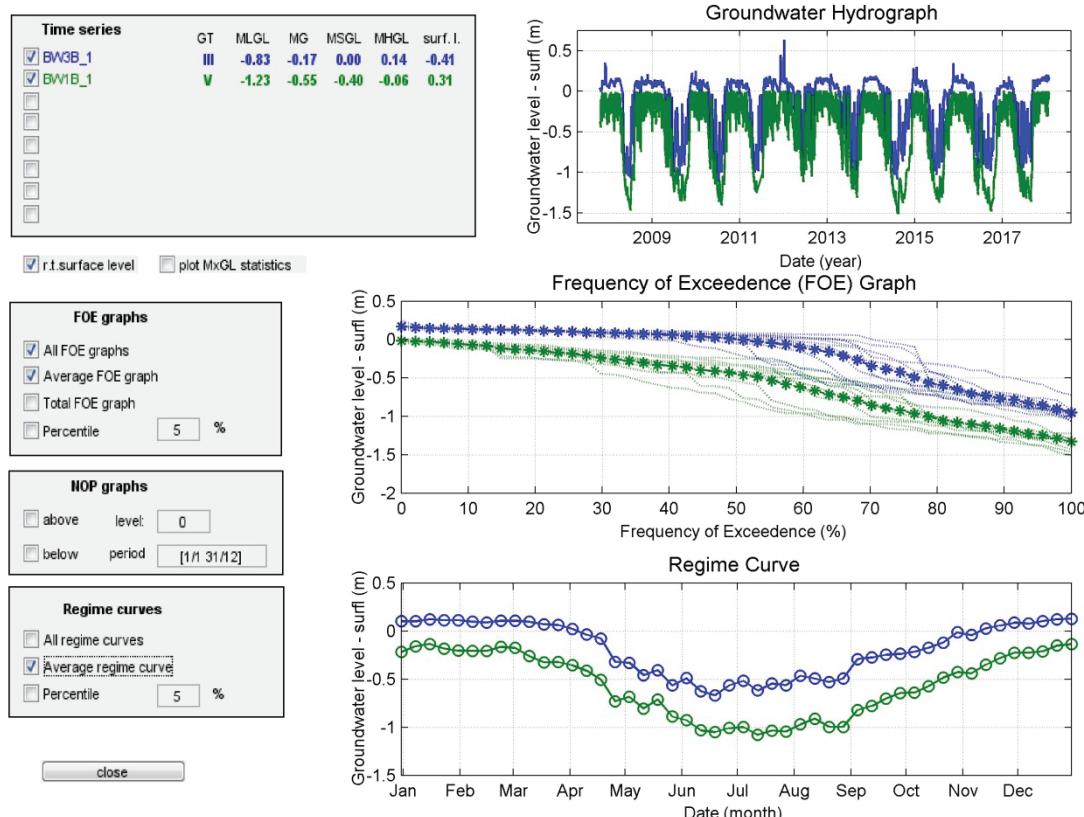


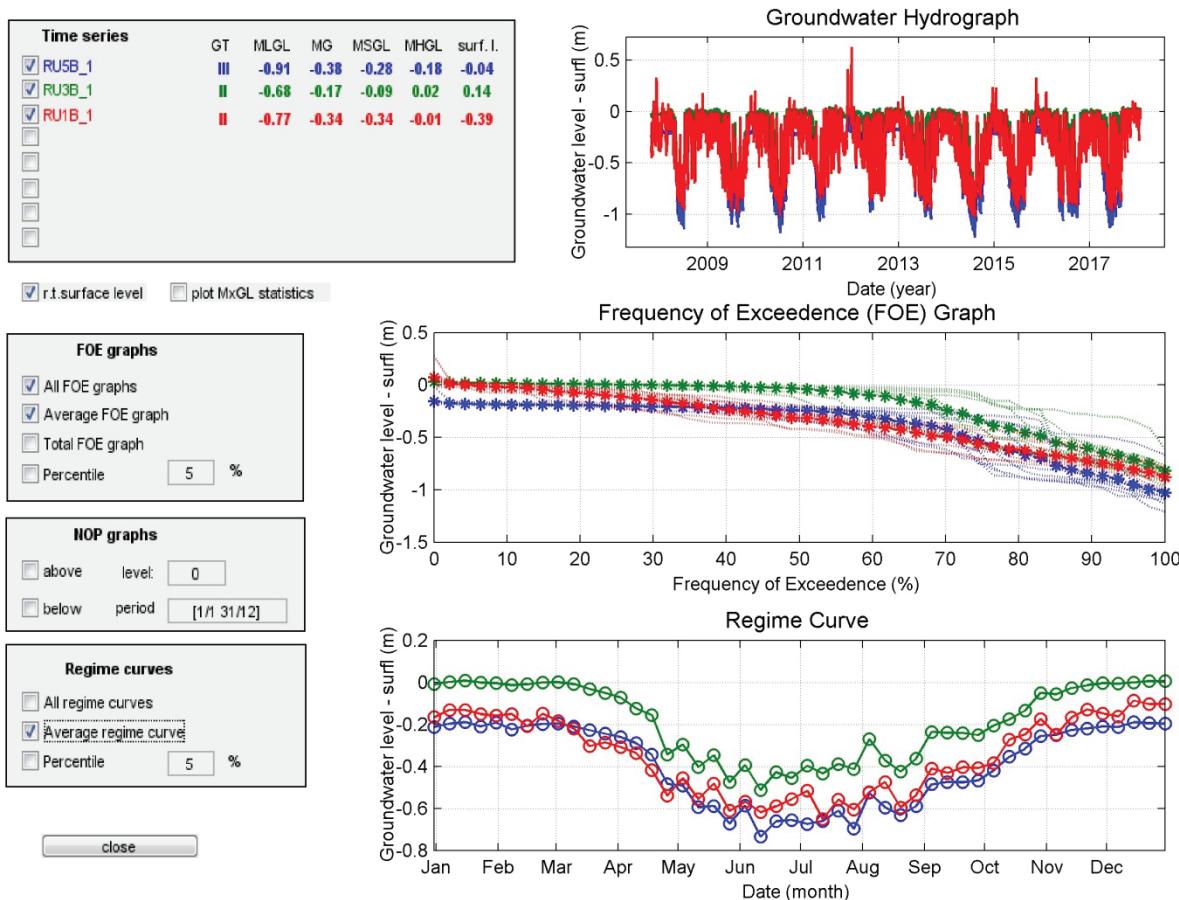
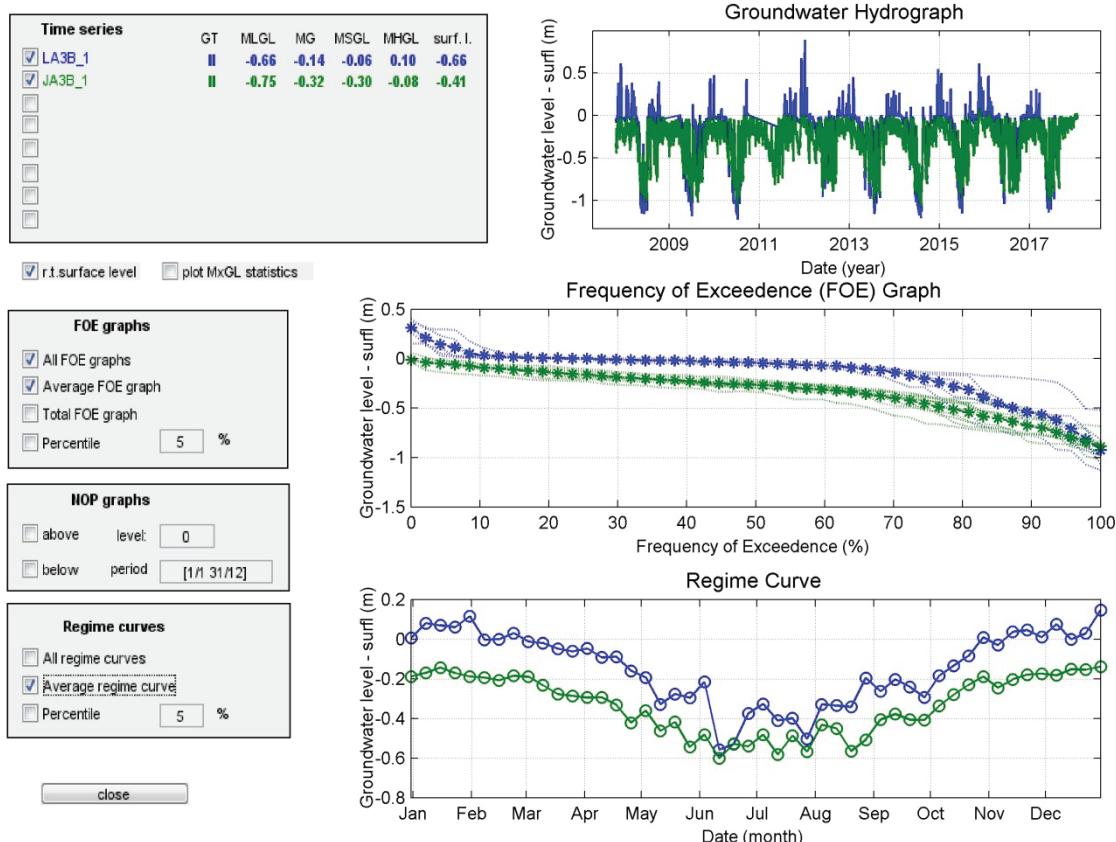
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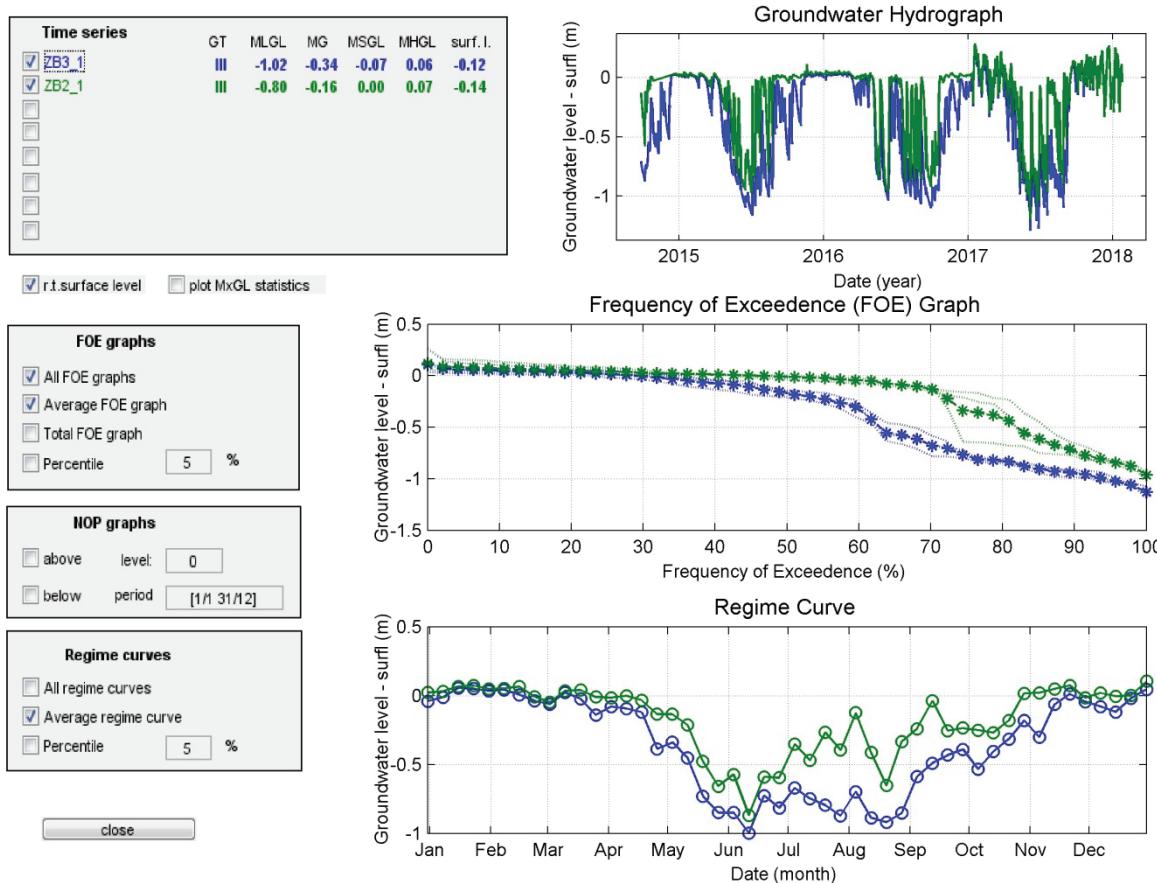
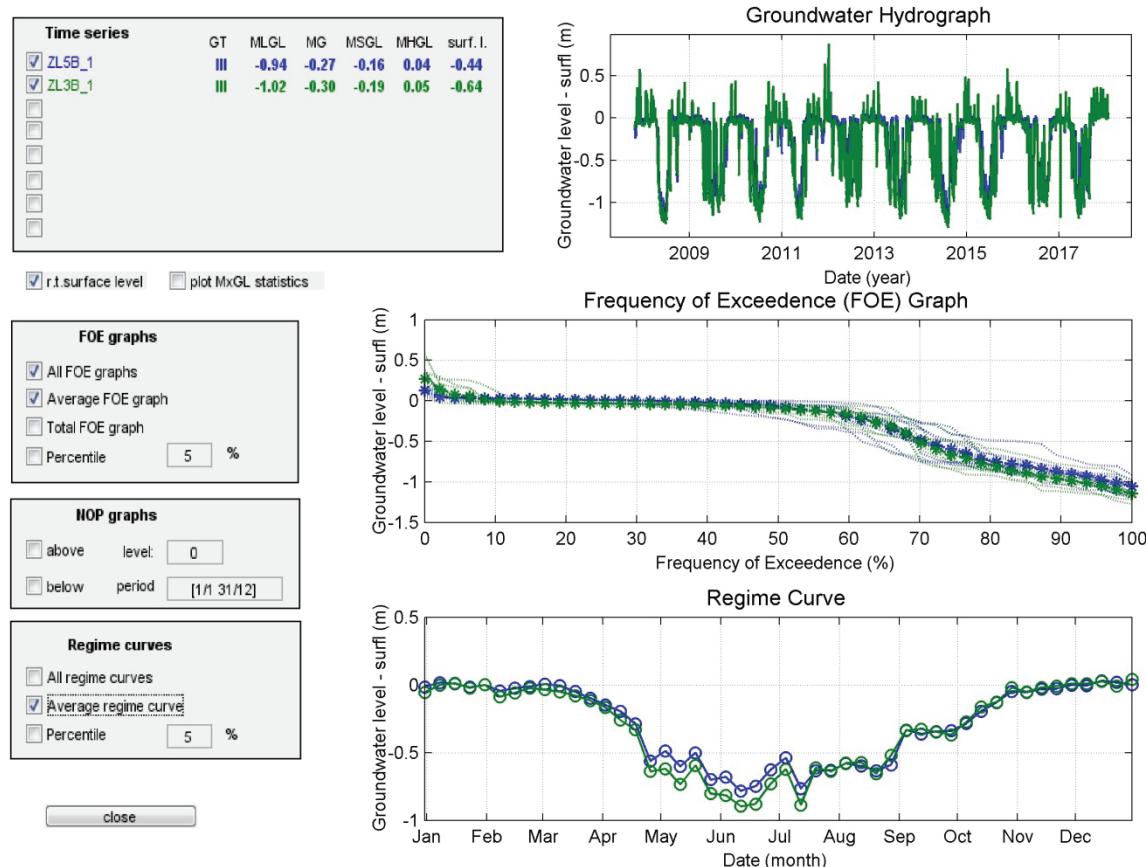


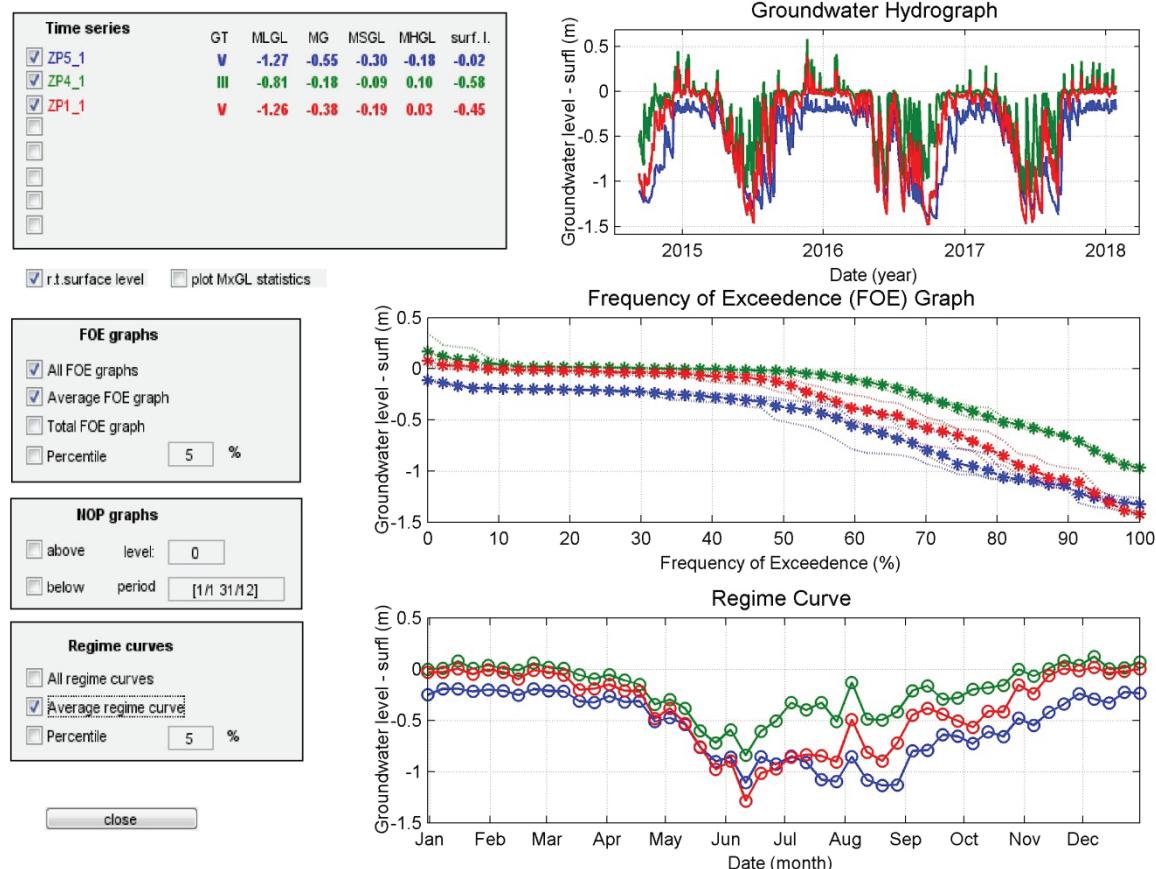
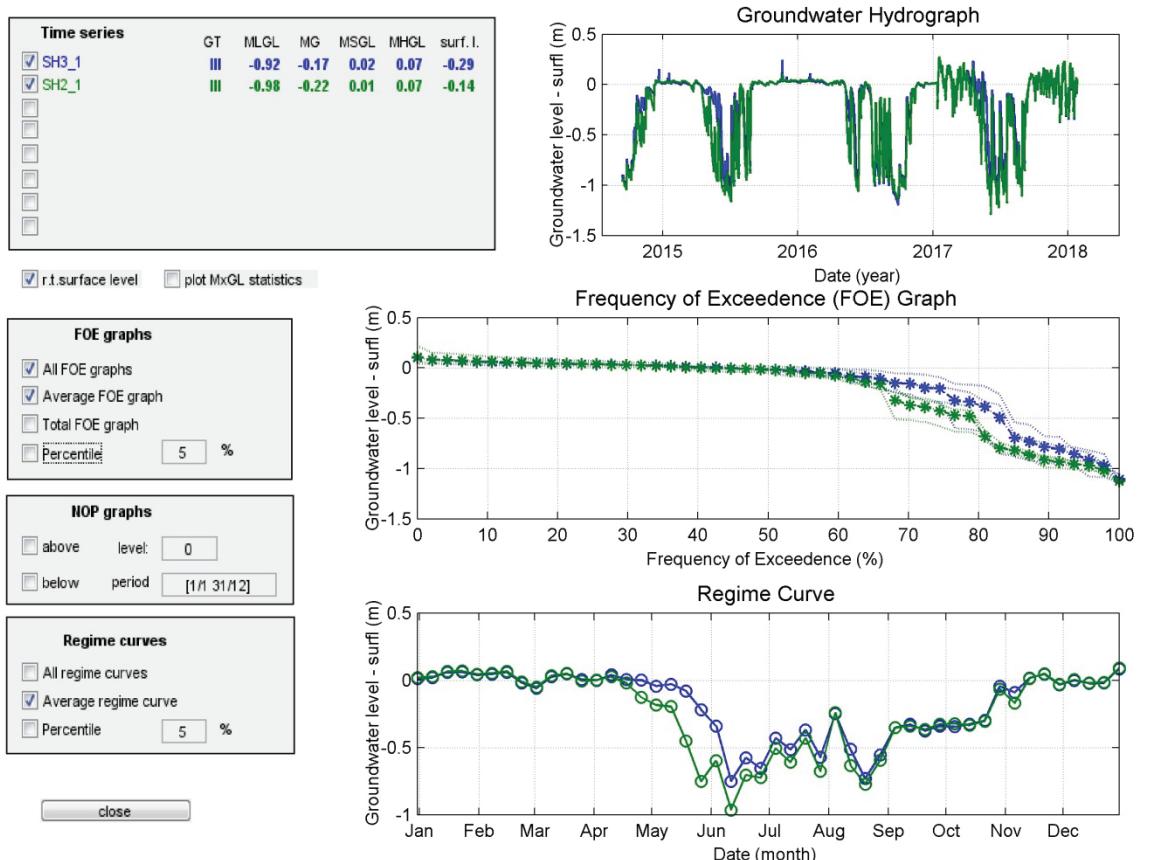


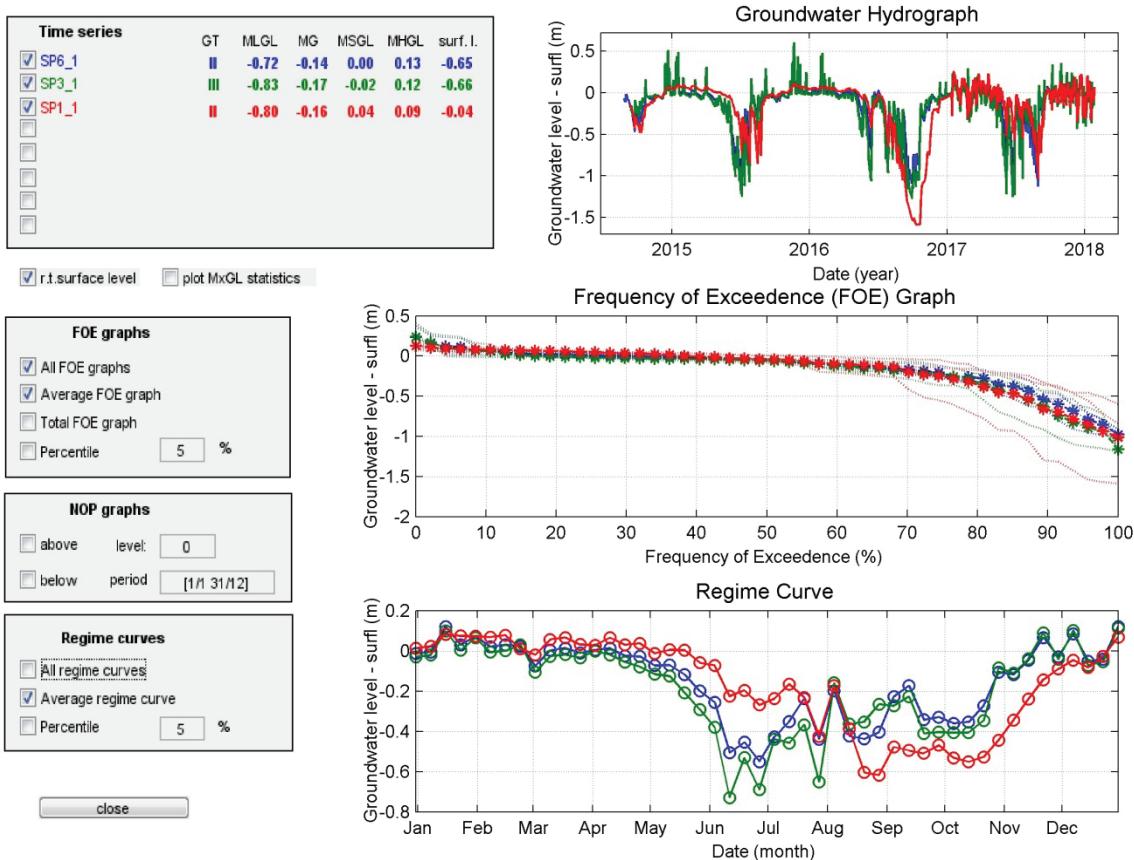
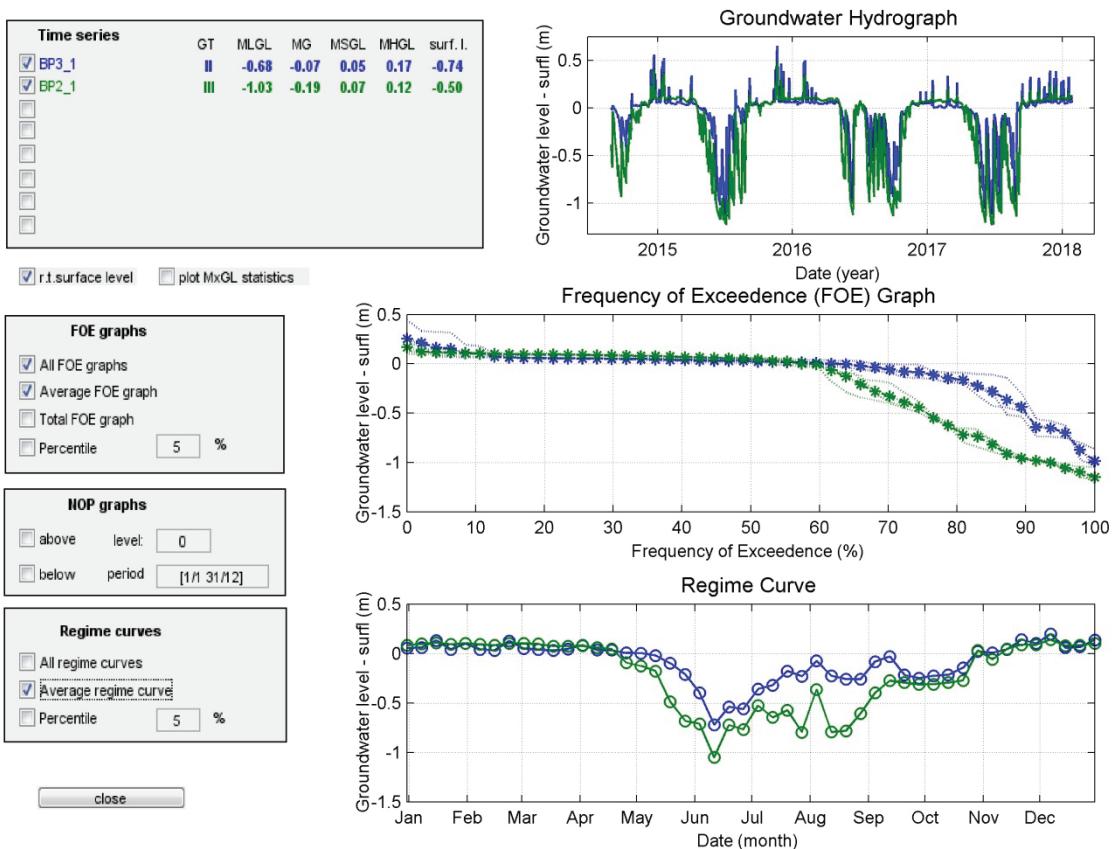
## Bijlage 6. GXG en duurlijnen



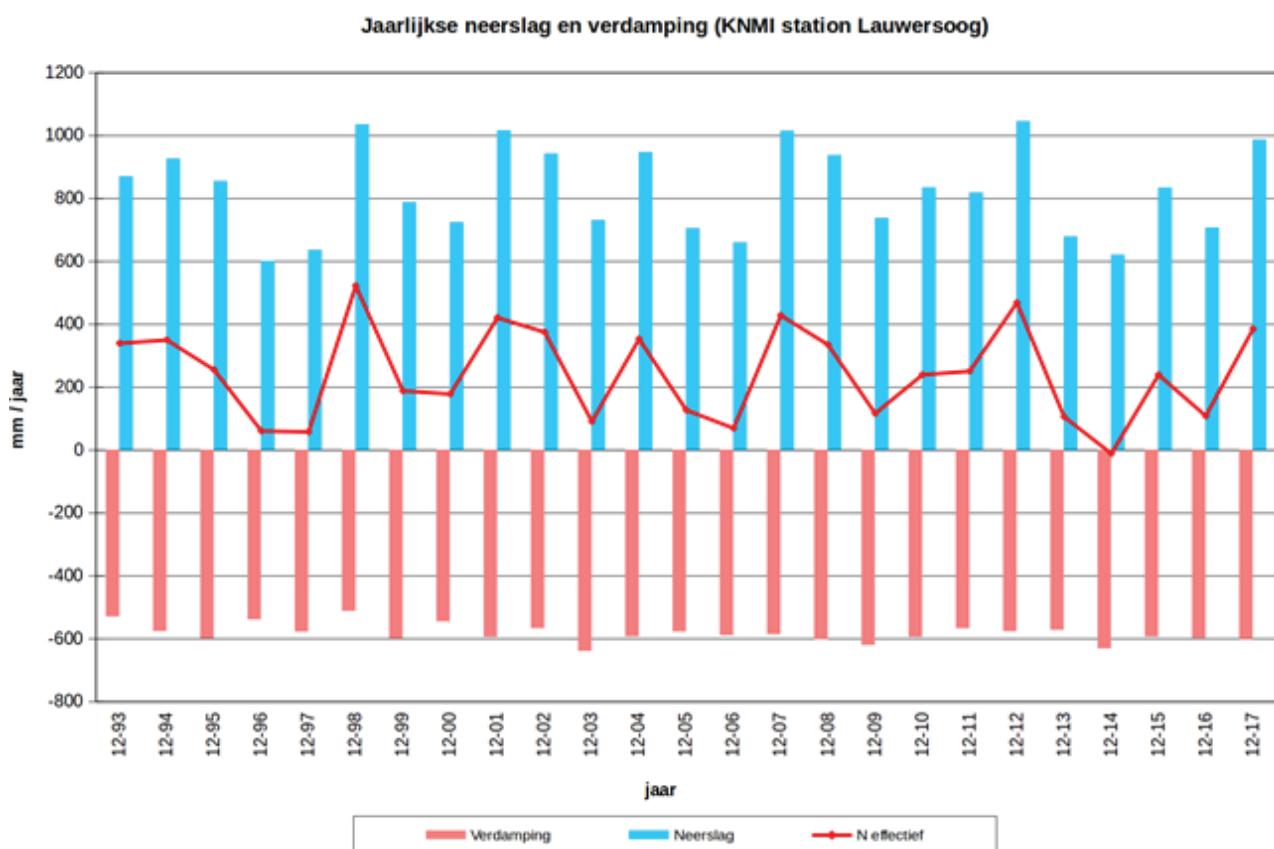








## Bijlage 7. Neerslag en verdamping



## Bijlage 8. Lijst meetsoort broedvogels

Categorieën van links naar rechts: Rode Lijst 2017 (van Kleunen et al. 2017), Rode Lijst 2005 (Hustings et al. 2004), Natura 2000 en zeldzame broedvogels/kolonievogels (Vergeer et al. 2016). De Rode Lijst van 2017 was in het voorjaar van 2017 nog niet in werking.

soort	RL '17	RL'05	N2000	Roof	Z/K	soort	RL '17	RL'05	N2000	Z/K
Dodaars			x			Watersnip	x	x	x	
Roodhalsfuut	x	x			x	Grutto	x	x	x	
Geoorde Fuut			x		x	Wulp	x			
Grote Aalscholver				x		Tureluur	x	x		
Aalscholver			x		x	Zwartkopmeeuw				
Roerdomp	x	x	x		x	Dwergmeeuw	x	x		x
Woudaap	x	x	x		x	Kokmeeuw				x
Kwak	x	x			x	Stormmeeuw				
Kleine Zilverreiger	x	x			x	Kleine Mantelmeeuw				
Grote Zilverreiger	x	x			x	Zilvermeeuw				
Blauwe Reiger				x		Grote Mantelmeeuw	x	x		x
Purperreiger		x	x		x	Visdief	x	x	x	x
Lepelaar			x		x	Noordse Stern	x	x		
Kolgans				x		Zwarte Stern	x	x	x	x
Grauwe Gans				x		Zomertortel	x	x		
Indische Gans				x		Koekoek	x	x		
Grote Canadese Gans				x		Kerkuil				
Brandgans				x		Ransuil	x	x		
Casarca				x		Velduil	x		x	x
Smient	x			x		IJsvogel			x	x
Wintertaling	x	x				Groene Specht			x	
Pijlstaart		x			x	Veldleeuwerik	x	x		
Zomertaling	x	x				Oeverzwaluw				
Slobeend	x	x				Graspieper	x	x		
Krooneend				x		Gele Kwikstaart	x	x		
Rosse Stekelstaart				x		Rouwkwikstaart				
Zeearend	x			x	x	Nachtegaal	x	x		
Bruine Kiekendief			x	x	x	Blauwborst			x	
Blauwe Kiekendief	x	x	x	x	x	Paapje	x	x	x	x
Grauwe Kiekendief	x	x	x	x	x	Roodborsttapuit				
Havik				x		Grote Lijster	x			
Sperwer				x		Tapuit	x	x	x	x
Buizerd				x		Graszanger	x			
Torenvalk	x			x		Snor	x	x	x	
Boomvalk	x	x		x		Grote Karekiet	x	x	x	x
Porseleinhoen	x	x	x		x	Spotvogel	x	x		
Klein Waterhoen				x		Grauwe Vliegenvanger	x	x		
Kleinst Waterhoen				x		Baardman				x
Kwartelkoning	x	x	x		x	Zwarte Mees	x			
Scholekster						Matkop	x	x		
Steltlkluut	x	x			x	Buidelmees	x			
Kluut			x		x	Wielewaal	x	x		
Kleine Plevier				x		Grauwe Klauwier	x	x	x	x
Bontbekplevier	x	x	x		x	Roek	x			x
Strandplevier	x	x	x		x	Raaf	x			x
Kievit				x		Kneu	x	x		
Bonte Strandloper			x			Grauwe Gors	x	x		x
Kemphaan	x	x	x		x					

## Bijlage 9. Berekening kwaliteit van een ‘random forest’.

De kwaliteit van een random forest wordt berekend met de gemiddelde afwijkingkwadraten volgens de formules:

$$1 - \frac{MSE_{OOB}}{\sigma_y^2}$$

en

$$MSE_{OOB} = n^{-1} \sum_{i=1}^n (y_i - \bar{y}_i^{OOB})^2$$

met  $MSE_{OOB}$ , het gemiddelde van de gekwadreerde afwijkingen, en

$\bar{y}_i^{OOB}$ , het gemiddelde van de *out-of-bag*-predicties voor de  $i$ -te waarneming (Liaw & Wiener 2002).

Het algoritme van de random forests schat het belang van een verklarende variabele door te bepalen hoe ver de voor-spellingsfouten toenemen als de OOB gegevens voor deze variable worden gepermitteerd, terwijl de andere variabe- len niet worden veranderd. De hiervoor nodige berekeningen worden boom voor boom uitgevoerd tijdens het groeien van de random forest (Liaw & Wiener 2002).

## Bijlage 10. Integraal gekarteerde meetsoorten

### Bijlage 10a. Het vasteland van het Lauwersmeergebied (excl. eilanden)

Vastgestelde soorten en aantal territoria van integraal gekarteerde meetsoorten. Tot 2008 maakten de eilanden geen deel uit van het vaste onderzoeksgebied (zie Kleefstra & de Boer 2015).

Soort	99	00	01	02	03	04	05	06	07	08	09	10	11	12	14	15	16	17
Indische Gans	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
Grauwé Gans	3	5	-	20	25	53	93	129	157	209	316	479	363	567	450	640	587	832
Kolgans	0	5	1	2	1	0	2	2	0	1	0	1	0	0	0	0	0	0
Canadese Gans	0	0	3	2	0	1	0	2	0	0	0	1	0	0	0	0	0	0
Brandgans	0	0	0	2	0	3	6	5	8	1	0	2	1	1	2	2	3	1
Casarca	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0
Krooneend	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smient	1	0	0	0	0	0	1	0	1	3	1	0	1	0	0	1	0	0
Slobeend	-	-	-	-	-	-	34	39	39	38	33	21	20	18	26	29	24	10
Pijlstaart	0	0	-	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
Zomertaling	11	18	-	30	16	14	21	20	19	19	18	15	8	11	14	12	8	10
Wintertaling	-	-	-	-	-	-	10	7	4	3	9	6	4	3	3	1	1	1
Rosse Stekelstaart	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Roerdomp	12	8	9	11	10	9	10	9	9	6	6	5	4	5	9	6	8	5
Woudaap	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Kwak	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Grote Zilverreiger	0	0	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0
Dodaars	40	17	-	23	23	29	33	39	36	46	19	11	4	3	4	1	2	2
Roodhalsfuut	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geoorde Fuut	3	7	0	1	1	0	0	0	0	1	0	0	0	0	0	1	2	2
Zeearend	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
Bruine Kiekendief	12	23	22	21	17	20	23	15	14	14	17	18	14	14	16	11	13	13
Blauwe Kiekendief	0	3	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Grauwé Kiekendief	4	7	4	3	3	6	4	2	0	0	0	0	1	1	0	0	0	0
Havik	4	5	-	8	9	7	6	6	7	4	5	4	5	7	3	4	7	7
Sperwer	3	2	-	1	2	4	2	4	4	4	3	3	1	3	1	2	2	0
Buizerd	9	9	-	10	10	11	14	12	11	17	13	14	16	16	13	14	9	10
Torenvalk	8	11	-	5	3	5	4	0	2	8	5	6	6	3	3	7	4	4
Boomvalk	0	1	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Porseleinhoen	9	14	14	17	14	6	10	4	7	8	5	5	3	7	1	2	2	2
Kwartelkoning	0	1	3	1	1	0	0	0	4	3	2	1	6	5	1	0	0	0
Scholekster	-	-	-	-	-	-	-	-	73	88	73	64	56	38	35	35	36	30
Steltkluut	2	9	9	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Kluut	47	154	43	83	63	128	44	62	45	67	65	41	77	46	27	42	44	69
Kleine Plevier	0	3	-	8	7	10	14	3	3	3	7	6	10	6	1	2	5	4
Bontbekplevier	1	0	8	9	1	1	2	0	5	1	1	1	0	2	1	2	2	3
Strandplevier	1	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Kievit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157	139	176	190
Bonte Strandloper	0	0	0	1	0	0	0	0	3	1	1	0	0	0	1	0	0	1
Kemphaan	2	6	8	2	6	2	0	1	2	0	0	2	0	0	2	0	1	0
Watersnip	0	3	-	1	0	0	1	2	2	1	0	2	2	0	1	0	0	1
Grutto	14	18	-	11	12	13	7	10	18	16	9	11	8	9	6	6	2	2
Tureluur	52	61	-	57	36	52	39	44	57	48	35	46	43	19	48	52	51	40
Kokmeeuw	122	201	39	1	3	0	2	0	0	0	0	0	0	7	8	5	0	0
Dwergmeeuw	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zwartkopmeeuw	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grote Mantelmeeuw	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
Visdief	37	28	6	4	8	4	5	3	2	2	0	0	0	0	0	1	0	0
Noordse Stern	7	4	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0
Zomertortel	-	-	-	-	-	-	19	14	15	7	6	4	3	2	0	0	0	0
Koekoek	-	-	-	-	-	-	30	22	19	25	18	17	22	20	24	22	16	18
Kerkuil	-	-	-	-	-	-	0	0	0	1	1	1	1	0	0	0	0	0
Ransuil	-	-	-	-	-	-	1	0	4	3	5	2	0	0	1	1	0	1
Velduil	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Ijsvogel	0	0	0	0	0	0	0	1	1	3	1	0	0	0	2	3	1	1

*Bijlage 10a. Vervolg*

Soort	99	00	01	02	03	04	05	06	07	08	09	10	11	12	14	15	16	17
Groene Specht	-	-	-	-	-	-	1	0	0	2	0	1	2	0	0	0	0	1
Wielewaal	-	-	-	-	-	-	26	27	30	23	13	21	18	24	24	19	19	25
Grauwe Klauwier	1	0	-	0	0	1	0	0	0	0	1	1	7	4	5	5	8	4
Roek	0	0	-	0	0	0	51	27	6	0	0	0	9	27	81	82	81	14
Raaf	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Buidelmees	10	6	1	3	1	2	0	4	1	2	5	1	2	1	0	1	1	0
Matkop	-	-	-	-	-	-	7	9	13	11	7	8	10	11	7	6	6	12
Baardman	91	127	-	123	123	101	83	91	121	146	149	116	67	83	134	127	107	131
Veldleeuwerik	-	-	-	-	-	-	91	80	97	115	96	86	81	83	114	101	91	111
Oeverzwaluw	111	1029	-	140	396	107	42	114	181	0	235	4	16	0	0	0	0	0
Snor	23	23	-	27	18	17	19	21	20	28	29	27	20	25	32	22	39	38
Spotvogel	-	-	-	-	-	-	2	6	10	9	8	15	17	14	21	15	25	23
Grote Karekiet	0	0	-	0	0	1	1	1	2	2	3	0	0	1	0	0	1	1
Grauwe Vliegenvang.	-	-	-	-	-	-	12	10	23	16	11	22	20	41	20	35	47	28
Nachtegaal	-	-	-	-	-	-	15	18	13	15	13	21	20	23	20	8	12	20
Blauwborst	88	-	122	120	128	168	137	165	180	174	233	248	182	214	213	190	187	
Paapje	10	17	-	8	8	12	7	4	7	7	1	3	2	1	0	1	2	0
Roodborsttapuit	25	18	-	28	20	28	22	15	20	20	16	20	36	28	39	43	44	46
Tapuit	0	3	-	1	1	5	0	1	0	0	0	0	0	0	0	0	0	0
Gele Kwikstaart	-	-	-	-	-	-	2	6	6	15	5	4	14	14	13	18	7	19
Rouwkwikstaart	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Graspieper	-	-	-	-	-	-	244	199	194	284	227	214	188	183	254	270	277	320
Kneu	-	-	-	-	-	-	59	43	59	52	55	76	96	90	72	85	77	93

*Bijlage 10b. De eilanden in het Lauwersmeergebied*

*Vastgestelde soorten en aantalen territoria van integraal gekarteerde meetsoorten. Sinds 2008 maken de eilanden deel uit van het vaste onderzoeksgebied. Aantallen van voor 2008 berusten op zichtwaarnemingen die vanaf de vaste wal gemaakt werden (zie Kleefstra & de Boer 2015).*

Soort	99	00	01	02	03	04	05	06	07	08	09	10	11	12	14	15	16	17
Grauwe Gans	-	-	-	-	-	-	-	-	-	16	20	30	38	72	16	38	36	43
Krooneend	-	-	1	-	-	-	1	1	-	0	0	0	0	1	0	0	0	0
Slobeend	-	-	-	-	-	-	-	-	-	0	0	1	0	0	3	0	1	2
Zomertaling	-	-	-	-	-	-	-	-	-	0	0	0	0	0	0	1	0	0
Grote Aalscholver	-	-	-	-	-	-	-	-	-	0	2	0	0	0	0	0	0	0
Aalscholver	-	-	-	-	-	-	-	-	15	37	58	77	64	64	87	61	81	82
Roerdomp	-	-	-	-	-	1	-	1	-	0	1	0	0	0	0	0	0	0
Kleine Zilverreiger	-	-	-	-	-	-	-	-	-	0	0	0	0	0	0	1	3	8
Grote Zilverreiger	-	-	-	-	-	-	-	-	-	1	0	1	0	0	0	0	0	0
Blauwe Reiger	-	41	-	47	5	5	34	44	30	25	30	27	31	24	14	18	16	8
Dodaars	-	-	-	-	-	1	-	-	-	4	5	0	0	0	1	0	0	1
Bruine Kiekendief	-	1	-	3	2	2	2	1	1	2	3	2	3	3	4	2	3	3
Havik	-	-	-	-	-	-	-	-	1	1	1	1	1	2	1	0	0	0
Buizerd	-	-	-	-	1	2	1	2	2	3	1	0	1	1	0	0	0	0
Porseleinhoen	-	-	-	-	-	-	-	-	-	0	0	0	0	1	0	0	0	0
Kluut	-	-	-	1	-	-	-	-	-	0	0	0	0	0	0	0	0	0
Koekoek	-	-	-	-	-	-	-	3	2	4	3	3	3	2	4	2	3	2
Buidelmees	-	-	-	-	-	-	-	-	-	1	2	1	0	0	0	0	0	0
Matkop	-	-	-	-	-	-	-	-	-	4	2	0	0	1	1	1	1	1
Baardman	-	-	-	3	1	2	-	2	-	28	19	13	9	11	6	15	12	10
Snor	-	-	-	-	1	-	-	1	-	4	5	2	1	4	2	1	2	3
Spotvogel	-	-	-	-	-	-	-	-	-	0	0	1	1	3	0	2	1	2
Grote Karekiet	-	-	-	-	-	-	-	-	-	1	1	1	0	1	0	0	0	0
Grauwe Vliegenvanger	-	-	-	-	-	-	-	-	-	0	0	0	0	1	0	0	0	0
Nachtegaal	-	-	-	-	-	-	-	-	-	1	1	2	1	5	0	3	3	3
Blauwborst	-	-	-	-	2	-	3	-	33	26	12	25	29	26	30	25	21	
Paapje	-	-	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	1
Roodborsttapuit	-	-	-	-	-	-	-	-	-	0	1	0	0	0	0	0	0	0
Graspieper	-	-	-	-	-	-	-	-	-	3	4	4	3	5	6	3	5	4
Kneu	-	-	-	-	-	-	-	-	-	5	4	2	1	1	4	5	1	2

**Bijlage 11. Broedvogels in BMP-proefvlakken****Bantswal (65,0 ha) 1998-2017**

Soort	98	02	07	08	09	10	11	12	14	15	16	17	N/100 ha
Knobbelzwaan	1	0	0	0	0	0	0	0	0	0	0	0	0,0
Indische Gans	0	0	1	0	0	0	0	0	0	0	0	0	0,0
Grauwe Gans	0	0	2	2	2	4	8	3	9	7	0	4	6,2
Brandgans	0	1	0	0	0	0	0	0	0	0	1	1	1,5
Nijlgans	0	1	1	1	0	0	0	0	0	0	0	0	0,0
Bergeend	5	1	3	2	4	5	0	2	3	3	3	3	4,6
Tafeleend	1	0	0	0	0	0	0	0	0	0	0	0	0,0
Kuifeend	6	1	2	4	0	0	0	3	8	2	1	3	4,6
Krakeend	5	4	2	3	2	2	4	0	2	3	4	2	3,1
Slobeend	1	0	2	2	1	1	0	0	0	0	0	1	1,5
Wilde Eend	8	5	7	7	0	5	5	6	6	5	4	3	4,6
Soepeend	2	0	1	0	0	1	0	0	0	0	0	0	0,0
Zomertaling	0	1	1	0	0	0	0	0	0	1	0	0	0,0
Wintertaling	0	1	0	0	0	0	0	0	0	0	0	0	0,0
Fazant	0	1	0	0	0	0	0	0	0	1	0	0	0,0
Fuut	3	0	0	0	0	0	0	0	0	0	0	0	0,0
Torenvalk	0	0	0	1	1	1	1	1	0	0	0	0	0,0
Meerkoot	3	0	0	1	0	0	0	0	0	1	1	1	1,5
Scholekster	34	10	11	13	9	3	6	7	5	3	6	4	6,2
Kluut	4	1	0	1	0	0	0	1	0	0	0	0	0,0
Kleine Plevier	1	0	0	0	0	0	0	0	0	0	0	0	0,0
Bontbekplevier	2	0	1	0	0	0	0	0	0	0	0	0	0,0
Kievit	20	5	11	10	0	11	10	13	11	12	11	9	13,8
Bonte Strandloper	0	0	1	0	0	0	0	0	0	0	0	0	0,0
Kemphaan	0	0	1	0	0	0	0	0	0	0	0	0	0,0
Grutto	8	0	6	6	5	4	4	6	3	4	1	1	1,5
Tureluur	7	3	5	6	4	6	4	0	4	4	4	3	4,6
Visdief	2	0	0	0	0	0	0	0	0	1	0	0	0,0
Noordse Stern	1	0	1	1	0	0	0	0	0	0	0	0	0,0
Houtduif	0	0	0	0	0	0	0	0	0	0	1	1	1,5
Ekster	0	1	0	1	1	0	0	1	1	0	0	0	0,0
Zwarte Kraai	0	1	0	0	0	0	0	1	0	1	1	1	1,5
Veldleeuwerik	4	3	2	1	2	0	0	0	1	2	1	0	0,0
Fitis	1	0	0	0	0	0	0	1	0	0	1	0	0,0
Sprinkhaanzanger	1	0	0	0	0	0	0	0	0	0	0	0	0,0
Bosrietzanger	0	3	0	2	0	0	0	0	2	0	0	0	0,0
Kleine Karekiet	3	1	0	0	0	0	0	0	4	1	1	2	3,1
Rietzanger	2	2	5	4	0	0	0	3	5	2	2	4	6,2
Winterkoning	1	0	0	0	0	0	0	0	0	0	0	0	0,0
Roodborst	1	0	0	0	0	0	0	0	0	0	0	0	0,0
Blauwborst	0	1	0	0	0	0	0	0	0	0	0	0	0,0
Tapuit	1	0	0	0	0	0	0	0	0	0	0	0	0,0
Gele Kwikstaart	2	1	0	0	0	0	0	0	0	0	0	0	0,0
Witte Kwikstaart	4	1	0	0	0	0	0	0	0	0	0	0	0,0
Graspieper	18	13	16	12	12	9	10	8	7	8	10	4	6,2
Putter	0	1	0	0	0	0	0	0	0	0	0	0	0,0
Kneu	2	3	2	1	0	2	0	1	2	3	2	3	4,6
Rietgors	8	4	2	2	0	0	0	2	0	3	1	3	4,6
	162	70	86	83	43	54	52	59	73	67	56	53	

## Ezumakeeg-West (64,4 ha) 1999-2017

Soort	99	00	02	03	04	05	06	07	08	09	10	11	12	14	15	16	17N/100 ha	
Knobbelzwaan	2	1	2	1	2	2	2	2	1	1	1	1	1	1	1	0	1	1,6
Grauwe Gans	0	0	1	1	2	3	10	8	9	8	21	8	7	8	13	7	5	7,8
Kolgans	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0,0
Brandgans	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0,0
Nijlgans	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0,0
Bergeend	2	4	5	3	3	2	3	5	6	6	4	4	4	3	5	4	0	0,0
Tafeleend	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0,0
Kuifeend	1	3	5	7	1	0	1	3	1	4	3	0	0	4	5	1	1	1,6
Krakeend	1	4	7	5	0	0	2	6	9	8	5	6	2	4	4	4	2	3,1
Slobeend	1	6	7	15	8	7	7	6	6	6	5	4	4	2	4	4	0	0,0
Wilde Eend	3	3	8	8	4	4	4	8	6	4	5	5	3	3	4	3	2	3,1
Soepeend	0	0	0	0	1	0	0	2	1	1	0	1	1	0	0	0	0	0,0
Pijlstaart	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0,0
Zomertaling	2	5	10	2	1	1	4	3	4	6	4	0	2	3	1	0	1	1,6
Wintertaling	0	0	3	0	1	2	0	2	1	3	1	2	1	3	0	1	1	1,6
Kwartel	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Fazant	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0,0
Dodaars	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0,0
Fuut	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Torenvalk	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0,0
Porseleinhoen	0	2	5	3	0	1	1	0	1	0	0	0	0	0	0	0	0	0,0
Meerkoot	9	7	7	8	6	4	2	3	2	4	4	1	0	2	4	3	2	3,1
Scholekster	2	4	2	2	2	0	2	2	5	3	2	4	1	1	1	1	1	1,6
Kluut	0	2	21	2	1	5	13	5	16	27	3	0	1	2	16	3	3	4,7
Kleine Plevier	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0,0
Bontbekplevier	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0,0
Kievit	11	9	1	1	3	4	4	6	7	7	7	7	8	5	11	6	9	14,0
Kemphaan	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Watersnip	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0,0
Grutto	0	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0,0
Tureluur	3	5	6	2	4	2	3	3	4	3	3	4	2	5	6	3	3	4,7
Kokmeeuw	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0,0
Visdief	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Koekoek	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0,0
Zwarte Kraai	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0,0
Baardman	0	0	0	0	0	0	1	2	0	2	3	3	0	2	1	1	2	1,6
Veldleeuwerik	17	13	6	2	3	4	1	1	0	0	0	0	0	1	1	0	1	1,6
Fitis	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	3,1
Sprinkhaanzanger	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0,0
Bosrietzanger	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Kleine Karekiet	4	4	8	8	6	6	6	11	6	7	11	7	11	9	4	4	3	4,7
Rietzanger	0	4	17	14	9	7	10	8	9	13	13	11	14	10	9	5	9	14,0
Blauwborst	1	0	3	4	9	6	3	3	2	5	5	7	2	5	6	4	4	6,2
Gele Kwikstaart	2	5	3	1	1	0	0	0	0	0	0	0	2	0	1	1	0	0,0
Witte Kwikstaart	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Graspieper	19	7	12	11	9	9	8	8	6	6	4	2	3	5	4	4	5	7,8
Kneu	0	0	0	0	1	1	0	0	1	1	2	2	1	0	1	1	2	3,1
Rietgors	7	5	6	8	8	5	7	8	9	6	8	5	4	7	4	3	5	7,8
totaal	90	104	148	114	86	78	97	107	116	136	117	83	76	88	109	67	63	

## Ezumakeeg-Oost (69,9 ha) 1999-2017

Soort	99	00	02	03	04	05	06	07	08	09	10	11	12	14	15	16	17N/100 ha	
Knobbelzwaan	0	0	0	0	0	0	0	1	1	1	0	0	0	1	1	0	2	2,9
Grauwe Gans	3	5	8	3	10	10	15	17	21	23	32	17	41	46	43	50	76	108,7
Brandgans	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0,0
Nijlgans	0	0	0	0	0	0	0	2	1	1	1	0	0	2	0	1	0	0,0
Casarca	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0,0
Bergeend	1	4	2	1	2	0	2	4	1	4	2	3	2	6	4	4	5	7,2
Tafeleend	0	1	1	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0,0
Kuifeend	2	4	3	3	6	2	4	5	7	5	3	6	5	4	0	4	3	4,3
Krakeend	2	2	3	3	2	3	5	3	4	4	5	4	4	6	6	4	3	4,3
Slobeend	0	0	2	1	0	0	2	3	2	3	0	2	2	1	8	3	0	0,0
Wilde Eend	6	4	9	11	6	5	8	6	4	3	4	3	3	4	3	5	7	10,0
Soepeend	1	1	0	0	2	0	1	1	1	1	0	1	1	0	0	0	0	0,0
Zomertaling	2	1	3	1	0	1	1	1	2	3	1	0	3	2	0	2	1	1,4
Wintertaling	0	1	3	0	0	3	0	1	1	2	3	0	0	0	0	0	0	0,0
Kwartel	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Fazant	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0,0
Roerdomp	3	2	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1,4
Gr. Zilverreiger	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0,0
Dodaars	4	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0,0
Fuut	1	1	1	2	1	1	1	1	2	2	1	0	0	0	0	1	0	0,0
Bruine Kiekendief	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1,4
Waterral	15	12	10	8	3	0	0	2	3	2	0	0	2	3	2	3	2	2,9
Porseleinhoen	0	5	3	2	2	0	0	1	1	1	0	0	1	0	0	1	0	0,0
Waterhoen	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Meerkoot	17	11	6	10	11	10	13	17	10	9	13	7	6	8	8	9	6	8,6
Scholekster	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1	0	0	0,0
Steltkluit	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Kluut	0	1	0	0	0	0	0	0	1	0	1	0	0	1	1	1	0	0,0
Kleine Plevier	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1,4
Kievit	0	3	3	4	2	4	3	3	3	3	3	2	1	5	4	5	4	5,7
Grutto	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0,0
Tureluur	1	2	2	1	2	0	2	2	2	1	1	1	0	1	2	2	1	1,4
Koekoek	1	0	0	0	0	0	1	0	0	1	1	1	0	1	2	1	0	0,0
Baardman	4	8	6	10	11	4	13	16	13	13	15	10	9	10	6	10	12	17,2
Veldleeuwerik	3	2	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0,0
Fitis	0	0	0	0	0	0	0	0	0	2	2	8	6	5	11	11	12	17,2
Sprinkhaanzanger	5	2	0	0	0	0	0	1	1	1	1	3	2	1	1	1	1	1,4
Snor	3	3	4	3	0	0	1	0	1	0	2	1	0	1	1	2	2	2,9
Bosrietzanger	2	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0,0
Kleine Karekiet	56	41	36	37	25	16	26	26	12	24	35	55	24	39	30	37	22	31,5
Rietzanger	28	30	33	25	16	11	19	22	26	24	29	45	30	35	25	31	32	45,8
Blauwborst	1	2	3	2	0	1	1	2	2	2	8	12	3	6	6	9	5	7,2
Gele Kwikstaart	3	3	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0,0
Witte Kwikstaart	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Graspieper	12	7	7	2	5	1	2	4	5	3	4	2	1	3	3	5	3	4,3
Kneu	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Rietgors	27	23	28	24	20	14	15	16	29	17	17	32	26	40	29	31	27	38,6
totaal	208	184	182	158	129	90	137	159	159	160	189	222	177	237	200	238	229	

## Pompsterplaat (58,3 ha) 1999-2017

Soort	99	00	02	03	04	05	06	07	08	09	10	11	12	14	15	16	17N/100ha	
Knobbelzwaan	1	1	2	0	1	1	1	1	2	2	2	1	1	1	1	1	1,7	
Grauwe Gans	0	0	8	12	14	12	19	18	28	35	57	50	67	47	61	77	99 169,8	
Gr. Canadese Gans	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0,0	
Nijlgans	0	0	0	1	0	0	1	0	1	2	0	0	0	0	0	0	0,0	
Bergeend	2	2	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0,0	
Tafeleend	0	1	3	2	1	2	1	2	0	0	0	1	1	1	0	0	0,0	
Kuifeend	7	4	5	6	7	11	8	6	5	4	5	3	3	2	0	3	5,1	
Krakeend	3	3	6	1	2	2	3	4	5	5	2	2	3	3	2	8	3 5,1	
Slobeend	0	0	0	0	0	0	2	1	0	1	0	0	0	0	0	0	0,0	
Wilde Eend	11	5	18	13	6	8	7	7	5	6	7	3	7	3	10	6	6 10,3	
Soepeend	0	0	1	0	1	0	0	0	2	2	0	0	1	0	1	2	0	0,0
Zomertaling	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0	
Wintertaling	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0,0	
Fazant	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1 1,7	
Roerdomp	5	3	4	3	2	2	0	0	2	1	1	0	0	0	1	0	0,0	
Woudaap	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0,0	
Kwak	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0,0	
Grote Zilverreiger	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0,0	
Dodaars	32	15	19	18	15	13	15	13	13	7	0	0	0	0	0	0	0,0	
Fuut	2	2	1	1	1	1	2	2	1	1	1	1	0	0	0	1	1 1,7	
Bruine Kiekendief	2	1	3	2	1	1	0	0	0	1	0	0	0	2	0	0	1 1 1,7	
Havik	1	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0,0	
Torenvalk	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0	
Waterral	42	21	21	13	10	8	10	6	7	5	5	3	4	5	5	4	8,6	
Porseleinhoen	0	2	2	2	0	1	0	0	0	1	1	1	1	1	0	0	0,0	
Waterhoen	0	1	9	11	6	6	6	5	5	3	0	1	1	0	2	2	0	0,0
Meerkoet	38	15	21	18	20	22	23	21	29	22	21	16	25	17	14	12	6 10,3	
Houtduif	0	0	0	1	0	0	1	2	0	4	2	0	2	0	1	0	1 1,7	
Zomertortel	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0	
Koekoek	4	2	3	2	2	3	1	2	2	2	1	2	2	2	1	0	1 1,7	
Wielewaal	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0	
Gaai	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0,0	
Zwarre Kraai	0	0	1	1	1	0	1	1	2	1	1	1	0	1	1	2	1 1,7	
Buidelmees	4	2	2	1	1	0	0	1	0	0	0	1	0	0	0	0	0,0	
Pimpelmees	3	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1 1,7	
Koolmees	1	0	1	0	1	0	1	1	1	2	1	0	1	1	1	1	1 1,7	
Matkop	1	0	0	0	0	0	2	2	0	1	0	0	0	0	0	1	1 1,7	
Baardman	32	23	41	29	25	21	19	19	15	23	13	7	17	15	11	11	12 20,6	
Staartmees	0	0	0	0	1	0	1	0	1	0	0	0	0	1	1	1	1 1,7	
Tjiftjaf	5	2	3	5	6	6	6	6	5	4	7	7	3	6	5	7	4 6,9	
Fitis	43	10	25	21	22	28	21	18	26	25	18	25	20	21	20	15	26 44,6	
Braamsluiper	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	0	1 1,7	
Grasmus	3	1	0	1	0	0	0	1	0	1	1	0	1	0	0	0	1 1,7	
Tuinfluiter	5	1	2	2	1	0	0	0	2	2	2	2	2	3	3	3	5,1	
Zwartkop	1	0	0	0	0	0	0	0	0	0	2	0	3	1	2	3	5,1	
Sprinkhaanzanger	6	2	2	2	2	3	2	1	2	1	1	0	1	0	1	2	1 1,7	
Snor	9	8	13	9	6	7	4	3	6	9	5	6	4	7	3	5	6 10,3	
Bosrietzanger	4	2	0	0	1	0	0	2	0	3	3	3	2	2	0	1	1 1,7	
Kleine Karekiet	120	25	116	64	61	55	55	50	54	58	51	45	51	33	37	41	37 63,5	
Rietzanger	30	23	55	41	30	31	38	30	41	34	39	64	38	36	33	35	23 39,5	
Boomkruiper	0	0	0	0	0	1	1	0	2	1	0	0	1	1	1	1	1 1,7	
Winterkoning	15	6	8	12	10	8	10	12	8	8	9	3	9	5	8	8	8 13,7	
Merel	1	1	1	1	1	0	2	1	1	2	1	1	0	0	1	2	1 1,7	
Zanglijster	2	2	1	3	1	0	0	0	0	1	1	1	0	0	2	1	1 1,7	
Grauwe Vliegenv.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 1,7	
Roodborst	0	0	0	0	0	1	1	0	1	1	1	1	0	0	1	0	1 1,7	
Nachtegaal	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0,0	
Blauwborst	12	6	8	6	7	6	8	7	7	7	12	7	9	6	5	9	5 8,6	
Heggenmus	0	0	2	0	0	1	1	2	2	2	1	2	0	0	0	1	1 1,7	
Boompieper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0 0,0	
Vink	0	0	0	1	1	1	2	0	3	2	2	2	1	2	1	1	1 1,7	
Putter	1	2	1	1	1	1	0	0	0	1	1	0	0	1	0	0	1 1,7	
Kneu	4	3	2	4	1	1	1	0	0	0	1	1	0	0	1	0	1 1,7	
Goudvink	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 1,7	
Rietgors	42	16	20	24	24	29	25	25	32	29	33	33	38	37	32	33	29 49,7	
totaal	503	218	437	336	296	293	305	275	319	323	310	299	317	268	273	302	303	

## Sennerplaat-Midden (70,0 ha) 2002-2017

Soort	2002	2007	2012	2014	2015	2016	2017	N/100 ha
Grauwe Gans	0	2	0	3	2	3	5	7,1
Kuifeend	1	1	2	5	4	2	0	0,0
Krakeend	5	0	1	3	2	3	3	4,3
Wilde Eend	8	1	0	3	4	3	1	1,4
Fazant	0	0	0	0	1	0	1	1,4
<b>Roerdomp</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,0</b>
Fuut	2	0	2	3	2	2	1	1,4
Bruine Kiekendief	2	2	2	2	2	2	3	4,3
Buizerd	0	2	1	0	0	0	0	0,0
Meerkoot	9	2	3	4	4	3	3	4,3
Houtduif	1	3	2	1	1	1	2	2,9
<b>Koekoek</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1,4</b>
Grote Bonte Specht	0	0	0	0	0	0	1	1,4
<b>Wielewaal</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,0</b>
Gaai	0	0	0	0	2	1	1	1,4
Zwarte Kraai	1	1	0	0	0	1	1	1,4
Pimpelmees	0	0	0	0	2	0	1	1,4
Koolmees	0	1	0	0	1	1	2	2,9
<b>Matkop</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,0</b>
Baardman	9	13	4	10	11	8	4	5,7
Staartmees	0	0	0	0	0	1	0	0,0
Tjiftjaf	3	5	7	7	6	11	13	18,6
Fitis	29	16	35	17	33	32	40	57,1
Braamsluiper	0	0	0	0	0	0	1	1,4
Grasmus	0	0	2	0	0	2	3	4,3
Tuinfluiter	4	2	4	4	3	5	4	5,7
Zwartkop	0	1	5	5	3	4	8	11,4
Sprinkhaanzanger	5	5	4	2	1	3	2	2,9
<b>Snor</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>5</b>	<b>7,1</b>
Bosrietzanger	0	3	0	3	0	0	0	0,0
Kleine Karekiet	55	23	21	32	21	24	21	30,0
Rietzanger	103	72	60	63	50	67	57	81,4
Winterkoning	1	3	0	4	5	8	5	7,1
Merel	0	0	0	0	1	2	2	2,9
Zanglijster	0	0	0	0	0	1	0	0,0
<b>Nachtegaal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0,0</b>
<b>Grauwe Vliegenvanger</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1,4</b>
Roodborst	0	1	0	1	0	0	3	4,3
Blauwborst	2	8	5	7	5	8	8	11,4
Gekraagde Roodstaart	0	0	0	0	0	1	0	0,0
Heggenmus	0	1	0	0	0	2	2	2,9
<b>Graspieper</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2,9</b>
Vink	0	0	3	2	2	3	4	5,7
<b>Kneu</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,0</b>
Goudvink	0	0	0	0	1	1	1	1,4
Rietgors	36	31	31	40	31	40	43	61,4
totaal	282	211	197	225	206	257	255	

**Blikplaat-West (109,1 ha) 2014-2017**

soort	2014	2015	2016	2017	N/100 ha
Grauwe Gans	0	2	0	8	7,3
Slobeend	1	0	0	0	0,0
Krakeend	2	0	1	0	0,0
Wilde Eend	9	0	1	0	0,0
Zomertaling	0	1	0	0	0,0
Fazant	0	1	1	0	0,0
Waterral	0	0	1	0	0,0
Meerkoet	1	1	0	0	0,0
Kievit	0	1	2	0	0,0
Houtduif	1	1	0	0	0,0
Koekoek	0	0	0	1	0,9
Grote Bonte Specht	0	1	1	0	0,0
Zwarte Kraai	1	1	1	1	0,9
Pimpelmees	0	0	2	0	0,0
Koolmees	3	1	1	1	0,9
Matkop	0	0	1	1	0,9
Baardman	1	1	0	0	0,0
Veldleeuwerik	1	0	1	1	0,9
Tjiftjaf	4	3	5	4	3,7
Fitis	27	30	28	38	34,8
Braamsluiper	0	0	1	1	0,9
Grasmus	1	6	4	5	4,6
Tuinfluter	4	3	4	2	1,8
Zwartkop	1	1	1	2	1,8
Sprinkhaanzanger	4	8	7	10	9,2
Snor	1	0	0	0	0,0
Spotvogel	0	1	0	0	0,0
Bosrietzanger	0	1	2	1	0,9
Kleine Karekiet	7	1	1	3	2,7
Rietzanger	60	58	55	67	61,4
Winterkoning	4	4	5	6	5,5
Merel	1	2	0	2	1,8
Zanglijster	1	1	0	1	0,9
Blauwborst	10	8	9	6	5,5
Gekraagde Roodstaart	0	0	0	1	0,9
Roodborsttapuit	0	0	1	1	0,9
Boompieper	3	5	5	3	2,7
Graspieper	14	18	19	26	23,8
Vink	5	4	4	1	0,9
Putter	0	1	0	0	0,0
Kneu	0	0	4	0	0,0
Rietgors	43	58	43	43	39,4
totaal	210	222	211	228	

**Kollumerwaard (61,2 ha) 2004-2017**

Soort	04	05	06	07	08	09	10	11	12	13	14	15	16	17	N/100 ha
Knobbelzwaan	2	1	2	2	1	1	1	1	1	1	2	2	1	1	1,6
Grauwe Gans	2	26	46	29	46	69	111	50	144	55	98	133	131	197	321,9
Soepgans	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0,0
Grote Canadese Gans	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0,0
Nijlgans	1	4	3	2	3	2	2	2	1	1	1	1	0	2	3,3
Bergeend	3	1	2	0	0	2	1	3	4	2	1	0	1	0	0,0
Tafeleend	1	1	1	2	2	1	6	1	3	1	2	0	0	0	0,0
Kuifeend	11	25	21	20	17	9	11	9	8	9	10	4	22	7	11,4
Krakeend	9	8	13	13	9	10	7	7	4	3	2	4	3	9	14,7
<b>Slobeend</b>	<b>4</b>	<b>6</b>	<b>7</b>	<b>11</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1,6</b>
Wilde Eend	11	9	12	10	11	16	9	7	9	15	9	12	17	4	6,5
Soepeend	1	1	2	0	4	2	1	1	0	3	0	0	1	0	0,0
Zomertaling	2	2	3	2	4	1	1	1	1	1	0	1	1	0	0,0
Wintertaling	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Rosse Stekelstaart	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Roerdomp	1	2	2	2	1	2	2	1	1	2	5	3	2	1	1,6
Grote Zilverreiger	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Dodaars	5	9	10	14	16	5	4	1	2	1	1	1	2	1	1,6
Fuut	2	3	3	3	4	2	3	1	2	3	3	5	5	5	8,2
Bruine Kiekendief	1	2	1	2	1	1	1	0	2	2	1	2	3	2	3,3
Waterral	3	9	6	14	16	2	3	3	10	7	15	12	12	5	8,2
<b>Porseleinhoen</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,0</b>
Waterhoen	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0,0
Meerkoot	18	14	26	15	22	8	18	13	15	12	11	19	19	22	35,9
Scholekster	1	2	2	0	0	1	0	0	0	0	0	0	0	0	0,0
Kluut	1	2	1	0	0	7	0	1	0	0	0	0	0	0	0,0
Kleine Plevier	5	10	2	2	1	4	1	4	2	0	0	0	0	1	1,6
Kievit	7	17	10	9	2	6	5	2	4	0	0	0	0	9	14,7
<b>Watersnip</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,0</b>
Tureluur	1	1	0	0	0	0	0	1	0	0	0	0	0	2	3,3
Koekoek	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Zwarte Kraai	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0,0
<b>Matkop</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0,0</b>
Baardman	0	3	3	11	8	14	16	5	10	11	20	20	26	21	34,3
<b>Veldleeuwerik</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1,6</b>	
Oeverzwaluw	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0
Tjiftjaf	0	0	0	0	0	0	0	0	1	2	0	1	4	2	3,3
Fitis	2	1	1	2	1	5	6	8	11	28	15	20	24	22	35,9
Braamsluiper	0	0	0	0	1	0	0	1	1	0	1	0	0	0	0,0
Grasmus	1	0	0	0	0	0	0	0	1	1	1	1	0	1	1,6
Tuinfluiter	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1,6
Sprinkhaanzanger	2	3	1	3	1	2	2	3	4	6	4	0	9	3	4,9
<b>Snor</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>7</b>	<b>5</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>12</b>	<b>9</b>	<b>14,7</b>
Bosrietzanger	2	2	0	1	1	0	1	4	2	1	3	3	0	1	1,6
Kleine Karekiet	22	40	62	87	69	55	82	75	86	79	111	84	82	76	124,2
Rietzanger	24	20	13	32	26	49	45	80	31	69	46	37	57	43	70,3
<b>Grote Karekiet</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0,0</b>								
Winterkoning	2	5	1	3	2	6	2	0	0	0	0	3	2	5	8,2
Blauwborst	3	12	10	10	7	12	9	14	12	17	8	0	4	5	8,2
<b>Gele Kwikstaart</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3,3</b>	
Witte Kwikstaart	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0,0
<b>Graspieper</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,0</b>
Vink	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0,0
Putter	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0,0
<b>Kneu</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,0</b>
Rietgors	16	23	26	27	30	20	27	30	27	41	34	35	42	27	44,1
totaal	187	280	301	333	319	324	385	339	415	383	411	413	486	488	

## Zoutkamperplaat-West (142,0 ha) 2000-2017

Soort	00	06	08	09	10	11	12	14	15	16	17	N/100 ha
Grauwe Gans	0	0	0	0	4	0	0	2	2	0	2	1,4
Nijlgans	1	1	2	0	1	2	1	0	0	0	1	0,7
Bergeend	2	0	1	0	0	0	1	0	0	0	0	0,0
Tafeleend	1	0	0	0	0	0	0	0	0	0	0	0,0
Kuifeend	9	0	1	0	0	0	0	1	0	0	0	0,0
Krakeend	10	2	1	3	0	4	1	1	0	2	1	0,7
Slobeend	1	0	0	0	0	0	0	0	0	0	0	0,0
Wilde Eend	10	2	3	0	0	1	0	1	0	1	2	1,4
Soepeend	0	3	0	0	0	0	0	0	0	0	0	0,0
Kwartel	0	1	0	1	0	1	0	0	0	0	0	0,0
Fazant	2	2	1	1	1	1	1	1	1	2	0	0,0
<b>Roerdomp</b>	1	0	0	0	0	0	0	0	0	0	0	0,0
Fuut	3	1	0	0	0	0	0	1	0	0	0	0,0
Bruine Kiekendief	3	0	0	0	0	0	0	0	0	0	0	0,0
Grauwe Kiekendief	3	0	0	0	0	0	0	0	0	0	0	0,0
Havik	1	1	0	0	0	1	1	0	1	1	1	0,7
Buizerd	0	1	0	1	1	1	1	1	1	1	0	0,0
Waterral	0	0	1	0	0	0	0	0	0	0	0	0,0
Meerkoot	9	4	4	2	1	5	2	1	1	0	3	2,1
Scholenster	1	2	1	0	1	0	2	1	0	0	1	0,7
Kievit	1	2	0	0	0	0	1	1	0	0	0	0,0
<b>Tureluur</b>	0	1	0	0	0	0	0	0	0	0	0	0,0
Holenduif	1	0	0	0	0	0	0	0	0	0	0	0,0
Houtduif	0	0	2	0	1	2	1	3	2	1	1	0,7
<b>Koekoek</b>	0	1	1	1	1	1	1	1	0	1	2	1,4
Grote Bonte Specht	1	1	2	1	2	2	2	2	2	2	3	2,1
<b>Wielewaal</b>	2	2	1	0	0	1	0	2	0	0	2	1,4
Gaai	1	0	0	0	0	1	1	2	1	2	1	0,7
Zwarte Kraai	0	0	0	0	0	0	0	0	0	1	0	0,0
Buidelmees	1	0	0	0	0	0	0	0	0	0	0	0,0
Pimpelmees	2	2	1	2	3	2	4	3	4	6	2	1,4
Koolmees	5	3	6	5	7	6	8	7	6	5	7	4,9
<b>Matkop</b>	0	3	2	0	2	1	1	1	1	0	2	1,4
Baardman	7	0	0	0	0	0	0	0	0	0	0	0,0
<b>Veldleeuwerik</b>	0	1	4	5	3	5	3	3	1	2	1	0,7
Staartmees	1	0	1	0	1	0	2	2	2	0	2	1,4
Tjiftjaf	6	3	10	9	11	10	15	16	25	21	21	14,8
<b>Fitis</b>	56	55	65	81	56	81	57	80	83	118	121	85,2
Braamsluiper	0	0	0	2	1	1	1	1	0	2	0	0,0
Grasmus	3	0	2	0	4	7	2	10	17	16	18	12,7
Tuinfluiter	3	4	5	5	4	7	1	9	7	11	6	4,2
Zwartkop	3	1	2	0	4	5	5	4	6	6	6	4,2
Sprinkhaanzanger	15	9	9	12	15	16	13	11	7	16	13	9,2
Snor	2	0	0	0	0	0	0	0	0	0	0	0,0
<b>Spotvogel</b>	0	0	0	0	1	1	0	0	0	1	0	0,0
Bosrietzanger	0	2	0	0	0	0	0	4	0	2	1	0,7
Kleine Karekiet	15	3	5	3	2	6	1	2	0	3	3	2,1
Rietzanger	255	75	83	84	77	102	35	75	60	75	86	60,6
Boomkruiper	0	3	3	0	1	2	3	4	4	7	4	2,8
Winterkoning	16	15	20	23	15	13	15	18	24	23	20	14,1
Spreeuw	0	0	1	0	0	0	0	0	0	0	0	0,0
Merel	5	3	7	2	6	4	6	6	6	4	5	3,5
Zanglijster	1	3	2	4	3	6	4	4	4	4	4	2,8
<b>Grauwe Vliegenvanger</b>	0	1	0	0	1	1	2	3	2	3	4	2,8
Roodborst	6	0	2	1	0	0	1	0	5	1	0	0,0
<b>Nachtegaal</b>	0	0	0	0	1	0	0	0	0	0	0	0,0
Blauwborst	20	7	11	14	18	11	8	15	18	13	18	12,7
Gekraagde Roodstaart	0	0	0	0	0	0	0	0	0	2	2	1,4
Roodborsttapuit	0	0	0	0	0	0	2	0	0	0	0	0,0
Heggenmus	2	2	1	1	5	0	1	0	0	0	0	0,0
<b>Gele Kwikstaart</b>	0	0	0	0	0	0	0	0	0	1	0	0,0
Boompieper	0	3	2	4	8	5	8	5	7	10	9	6,3
<b>Graspieper</b>	5	6	11	8	11	7	9	12	14	16	18	12,7
Vink	1	8	8	8	7	10	10	12	11	9	9	6,3
Putter	0	0	0	0	0	0	0	1	0	0	0	0,0
Kneu	0	1	0	2	0	1	3	0	0	1	0	0,0
Rietgors	42	30	21	17	37	26	15	38	35	37	32	22,5
<b>totaal</b>	535	270	305	302	317	359	251	367	360	429	434	

**Zoutkamperplaat-landaanwinning (47,5 ha) 2014-2017**

soort	2014	2015	2016	2017	N/100 ha
Grauwe Gans	0	0	1	5	10,5
Krakeend	1	0	0	0	0,0
Wilde Eend	1	1	0	0	0,0
Fazant	2	3	1	1	2,1
Buizerd	1	0	0	1	2,1
Houtduif	1	2	2	1	2,1
Koekoek	0	1	0	0	0,0
Grote Bonte Specht	0	1	1	2	4,2
<b>Grauwe Klauwier</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0,0</b>
Gaai	0	0	1	0	0,0
Zwarte Kraai	0	1	1	0	0,0
Pimpelmees	2	2	4	3	6,3
Koolmees	5	6	7	7	14,7
<b>Matkop</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,0</b>
Staartmees	0	1	0	1	2,1
Tjiftjaf	10	20	17	15	31,6
Fitis	35	28	46	33	69,5
Braamsluiper	1	0	2	2	4,2
Grasmus	11	16	11	19	40,0
Tuinfluter	7	9	5	7	14,7
Zwartkop	6	7	4	5	10,5
Sprinkhaanzanger	7	7	11	8	16,8
<b>Spotvogel</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0,0</b>
Bosrietzanger	6	3	3	3	6,3
Kleine Karekiet	3	3	4	5	10,5
Rietzanger	19	15	21	20	42,1
Boomkruiper	3	3	4	2	4,2
Winterkoning	9	15	9	10	21,1
Merel	4	5	4	3	6,3
Zanglijster	0	4	5	2	4,2
<b>Grauwe Vliegenvanger</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2,1</b>
Roodborst	0	1	1	0	0,0
Blauwborst	2	9	5	5	10,5
Roodborsttapuit	6	8	10	7	14,7
Heggenmus	0	1	1	2	4,2
Boompieper	9	9	11	8	16,8
<b>Graspieper</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>6,3</b>
Vink	6	9	5	5	10,5
Putter	2	0	1	0	0,0
<b>Kneu</b>	<b>5</b>	<b>6</b>	<b>8</b>	<b>9</b>	<b>18,9</b>
Goudvink	0	1	0	0	0,0
Rietgors	5	5	7	6	12,6
<b>totaal</b>	<b>178</b>	<b>207</b>	<b>218</b>	<b>196</b>	

## Schildhoek (172,6 ha) 1999-2017\*

Soort	99	05	08	09	10	11	12	14	15	16	17	N/100 ha
Grauwé Gans	0	2	1	6	10	10	3	21	13	16	14	8,1
Soepgans	1	0	0	0	0	0	0	0	0	0	0	0,0
Nijlgans	1	2	2	1	1	1	2	1	2	2	2	1,2
Bergeend	1	3	3	3	3	2	4	4	4	4	2	1,2
Kuifeend	5	4	5	1	4	7	1	2	1	1	0	0,0
Krakeend	13	11	12	15	22	11	17	17	14	9	12	7,0
Slobeend	5	1	0	0	1	0	1	5	1	0	1	0,6
Wilde Eend	13	11	8	6	5	9	11	10	16	14	8	4,6
Soepeend	1	0	1	0	0	0	1	0	1	0	0	0,0
Zomertaling	1	1	1	0	0	0	0	1	0	0	0	0,0
Wintertaling	1	0	0	0	0	0	0	0	0	0	0	0,0
Kwartel	0	0	0	0	0	0	0	0	0	0	1	0,6
Fazant	2	0	0	0	0	1	0	0	0	0	0	0,0
Roerdomp	1	0	0	0	0	0	0	0	0	0	0	0,0
Fuut	8	4	2	2	0	4	5	4	4	4	2	1,0,6
Bruine Kiekendief	0	1	1	1	1	1	0	1	0	0	0	0,0
Havik	1	0	0	0	0	0	0	0	0	0	0	0,0
Buizerd	0	1	1	0	1	1	1	1	1	1	0	0,0
Torenvalk	1	1	0	0	0	0	0	0	0	0	0	0,0
Waterral	1	0	0	1	1	0	0	0	0	0	0	0,0
Kwartelkoning	0	0	0	1	0	0	0	0	0	0	0	0,0
Meerkoot	14	11	5	5	10	9	9	8	5	10	6	3,5
Scholekster	13	6	3	4	4	4	3	3	3	2	3	1,7
Kluut	6	0	1	1	1	1	0	3	0	1	0	0,0
Kleine Plevier	0	0	0	0	1	0	0	0	0	0	0	0,0
Kievit	26	18	14	6	12	9	4	13	13	16	10	5,8
Kemphaan	1	0	0	0	0	0	0	0	0	0	0	0,0
Grutto	1	1	1	0	0	0	0	0	0	0	0	0,0
Tureluur	16	7	3	2	2	2	2	5	4	3	2	1,2
Houtduif	3	0	1	0	2	1	1	0	1	0	0	0,0
Koekoek	3	2	1	1	1	1	1	1	1	1	0	0,0
Grote Bonte Specht	1	1	1	0	0	0	1	0	1	0	0	0,0
Wielewaal	1	1	0	0	0	0	0	0	0	0	1	0,6
Zwarte Kraai	1	3	1	1	2	1	2	2	2	2	2	1,2
Pimpelmees	0	1	0	1	1	2	1	2	1	2	0	0,0
Koolmees	0	1	3	2	2	2	2	1	0	2	2	1,2
Matkop	0	0	0	0	1	0	0	0	0	0	1	0,6
Baardman	12	5	8	14	10	3	1	1	7	1	2	1,2
Veldleeuwerik	33	24	30	23	20	12	11	11	9	9	12	7,0
Staartmees	0	0	0	0	1	0	1	0	0	0	1	0,6
Tjiftjaf	3	3	3	3	5	2	8	5	6	7	7	4,1
Fitis	16	50	43	40	49	62	40	48	36	54	51	29,5
Braamsluiper	0	0	1	1	0	0	0	0	1	2	0	0,0
Grasmus	0	0	1	0	3	2	1	1	3	2	6	3,5
Tuinfluter	2	3	2	2	2	2	3	5	7	5	5	2,9
Zwartkop	1	1	3	1	5	3	3	4	3	3	5	2,9
Sprinkhaanzanger	21	10	9	6	15	12	9	6	9	9	10	5,8
Snor	1	2	1	2	1	2	0	1	1	1	4	2,3
Spotvogel	0	0	0	0	0	1	0	0	0	1	0	0,0
Bosrietzanger	6	6	0	0	7	9	3	4	5	8	5	2,9
Kleine Karekiet	82	51	48	44	58	57	38	29	32	32	39	22,6
Rietzanger	119	83	133	140	135	160	63	89	74	99	118	68,4
Winterkoning	4	14	16	18	8	6	5	6	9	6	11	6,4
Spreeuw	0	0	0	0	1	0	0	0	0	1	0	0,0
Merel	2	3	2	0	3	4	2	4	2	2	3	1,7
Zanglijster	2	1	2	1	2	0	1	1	1	1	1	0,6
Grauwé Vliegenvanger	0	1	0	0	0	1	0	0	0	1	0	0,0
Nachtegaal	0	0	0	0	0	0	1	0	0	0	0	0,0
Blauwborst	7	20	18	15	22	21	14	19	17	20	11	6,4
Roodborsttapuit	0	1	2	0	0	2	1	1	1	1	3	1,7
Heggenmus	0	0	0	2	1	0	0	1	1	0	0	0,0
Gele Kwikstaart	5	0	2	1	1	0	2	0	0	0	3	1,7
Witte Kwikstaart	2	0	0	1	0	0	0	0	0	0	0	0,0
Boompieper	0	1	0	0	2	1	1	1	0	2	1	0,6
Graspieper	26	23	16	17	16	11	19	25	21	25	25	14,5
Vink	2	2	2	3	1	2	2	3	2	4	2	1,2
Putter	0	0	0	0	0	0	0	0	1	1	1	0,6
Kneu	2	4	1	1	2	2	2	1	3	2	4	2,3
Rietgors	54	44	41	32	36	41	41	41	49	40	45	26,1
totaal	544	446	455	427	494	497	344	412	388	426	443	

\* zie voor aantalen vanaf 1978 Kleefstra &amp; de Boer (2015)

**Zuidelijke Ballastplaat-grazig (153,5 ha) 2003-2017**

Soort	2003	2008	2011	2014	2015	2016	2017	N/100 ha
Grauw Gans	0	0	1	6	15	12	6	3,9
Nijlgans	0	1	1	1	3	2	2	1,3
Bergeend	15	2	0	2	0	3	1	0,7
Kuifeend	0	1	1	1	2	1	1	0,7
Krakeend	7	16	6	15	11	19	17	11,1
Smient	0	1	0	0	0	0	0	0,0
Slobeend	2	1	1	2	1	2	1	0,7
Wilde Eend	19	8	2	18	8	15	21	13,7
Soepeend	0	1	1	0	0	0	1	0,7
Zomertaling	0	0	1	0	0	0	0	0,0
Kwartel	0	0	1	0	0	0	1	0,7
Fuut	1	1	0	1	0	1	1	0,7
Buizerd	0	1	1	1	1	0	1	0,7
Torenvalk	0	0	0	1	1	1	1	0,7
Meerkoot	9	4	1	0	2	1	3	2,0
Scholekster	15	11	9	5	6	6	5	3,3
Kluut	3	6	3	4	1	2	6	3,9
Bontbekplevier	0	1	0	1	1	1	1	0,7
Kievit	14	22	16	22	22	34	37	24,1
Kemphaan	1	0	0	0	0	0	0	0,0
Grutto	3	2	0	0	0	0	1	0,7
Tureluur	6	8	4	5	9	9	6	3,9
Houtduif	2	2	1	1	2	1	2	1,3
Koekoek	1	1	0	0	1	0	0	0,0
Wielewaal	0	0	0	0	0	0	1	0,7
Zwarte Kraai	1	3	1	3	2	2	2	1,3
Koolmees	0	1	1	1	2	1	0	0,0
Baardman	0	0	0	2	2	1	0	0,0
Veldleeuwerik	13	28	22	26	31	26	25	16,3
Staartmees	0	0	1	0	1	0	0	0,0
Tjiftjaf	5	1	3	3	5	3	7	4,6
Fitis	25	38	37	39	49	48	66	43,0
Braamsluiper	1	1	4	2	6	3	5	3,3
Grasmus	1	11	9	13	8	12	16	10,4
Tuinfluter	0	8	8	6	9	4	8	5,2
Zwartkop	0	1	4	4	5	4	4	2,6
Sprinkhaanzanger	0	1	1	0	0	0	0	0,0
Spotvogel	0	1	3	3	2	4	4	2,6
Bosrietzanger	4	3	0	0	3	0	0	0,0
Kleine Karekiet	10	11	14	6	12	6	6	3,9
Rietzanger	2	11	15	17	10	11	14	9,1
Winterkoning	2	6	1	3	6	6	5	3,3
Merel	1	2	2	4	6	4	5	3,3
Zanglijster	0	1	1	1	1	1	3	2,0
Roodborst	0	1	0	0	0	0	0	0,0
Nachtegaal	0	1	0	2	1	2	1	0,7
Blauwborst	2	0	3	3	4	4	4	2,6
Roodborsttapuit	0	0	0	0	0	0	1	0,7
Heggenmus	0	3	0	3	3	4	4	2,6
Gele Kwikstaart	0	1	1	1	1	1	1	0,7
Boompieper	0	1	0	0	1	0	0	0,0
Graspieper	32	50	32	33	34	29	39	25,4
Vink	0	2	2	4	6	4	4	2,6
Putter	0	0		0	0	1	0	0,0
Kneu	2	1	1	2	5	9	8	5,2
Rietgors	17	19	13	12	10	20	20	13,0
totaal	216	297	229	279	311	320	368	

**Zuidelijke Lob (145,1 ha) 2014-2017**

soort	2014	2015	2016	2017N/100 ha
Grauw Gans	16	3	1	9
Krakeend	6	4	8	3
Slobeend	2	1	2	0
Wilde Eend	6	5	12	7
Zomertaling	0	0	0	1
Scholekster	4	6	5	4
Kluut	1	0	1	0
Bontbekplevier	0	0	1	1
Kievit	38	21	20	14
Bonte Strandloper	1	0	0	1
Kemphaan	1	0	1	0
Watersnip	0	0	0	1
Grutto	1	0	0	0
Tureluur	11	6	12	9
Grauw Kluwier	0	1	0	0
Zwarte Kraai	1	0	0	0
Koolmees	1	0	1	1
Veldleeuwerik	24	21	18	20
Tjiftjaf	1	3	0	2
Fitis	30	33	32	29
Braamsluiper	1	1	1	0
Grasmus	9	6	10	9
Tuinfluite	3	1	3	1
Zwartkop	1	2	0	1
Sprinkhaanzanger	0	1	1	0
Kleine Karekiet	0	1	0	1
Rietzanger	5	8	15	14
Winterkoning	0	1	1	1
Merel	1	0	0	1
Roodborst	0	0	0	1
Blauwborst	5	5	2	3
Roodborsttapuit	2	1	1	3
Heggenmus	1	0	0	0
Gele Kwikstaart	1	1	0	0
Boompieper	1	1	0	0
Graspieper	34	34	34	39
Kneu	0	1	3	2
Rietgors	8	8	10	15
totaal	216	176	195	193

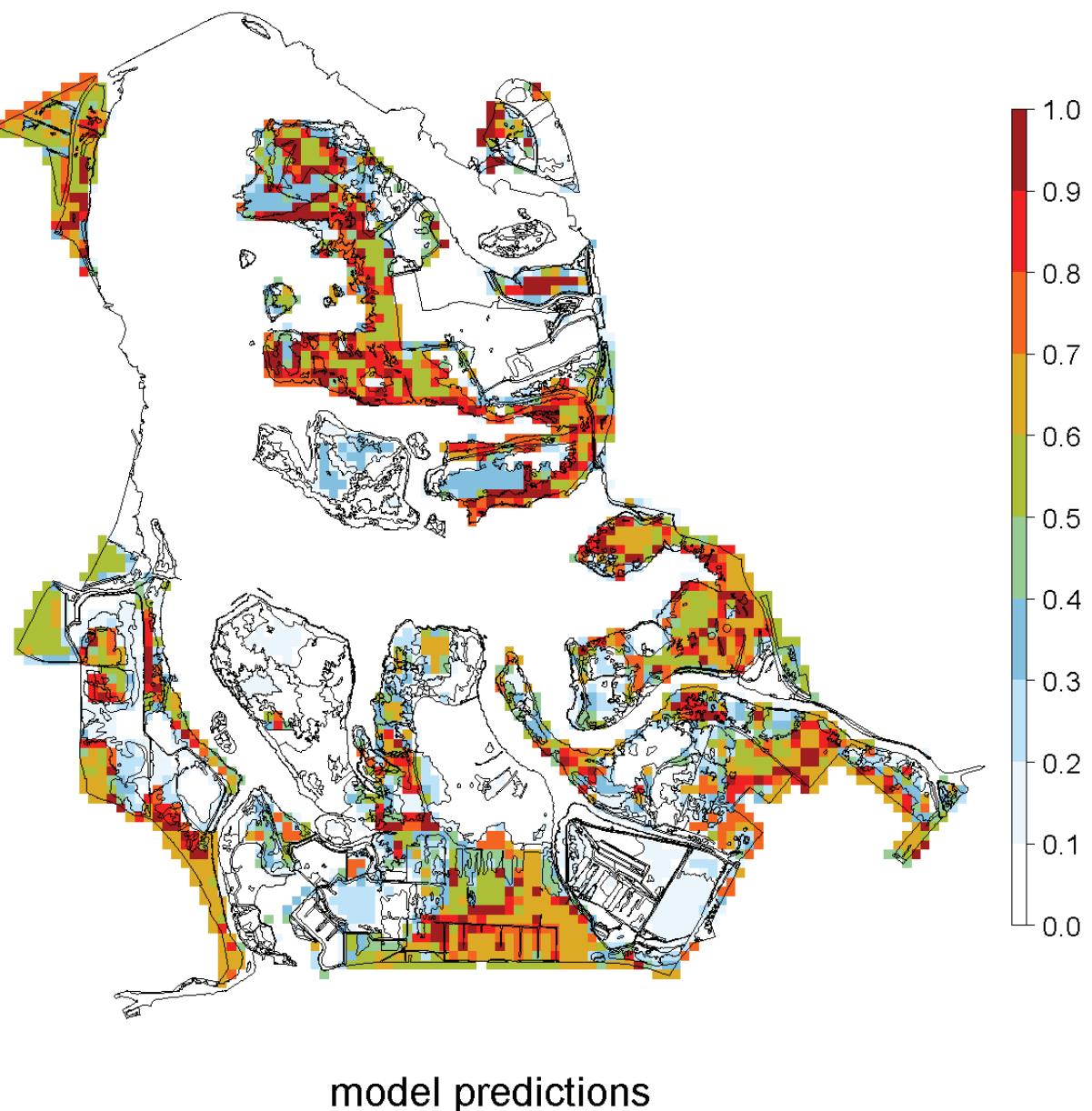
**De Rug (135,3 ha) 2014-2017**

soort	2014	2015	2016	2017N/100 ha
Grauw Gans	2	10	3	3
Nijlgans	0	0	1	0
Bergeend	1	1	2	0
Slobeend	1	0	0	0
Krakeend	6	13	5	7
Wilde Eend	12	20	17	15
Kwartel	0	0	0	2
Fazant	0	2	3	3
Fuut	1	0	0	0
Buizerd	1	1	1	1
Meerkoot	0	1	2	2
Scholekster	2	1	1	2
Kluut	1	0	0	1
Bontbekplevier	0	0	0	1
Kievit	7	6	8	9
Tureluur	1	1	1	1
Houtduif	3	2	2	0
Koekoek	1	0	0	0
Grote Bonte Specht	1	1	0	1
Zwarte Kraai	1	2	0	1
Pimpelmees	0	0	0	2
Koolmees	2	2	1	3
Matkop	0	0	0	1
Veldleeuwerik	17	12	12	12
Tjiftjaf	9	11	16	13
Fitis	85	85	107	107
Braamsluiper	2	7	3	2
Grasmus	20	24	35	45
Tuinfluite	7	7	9	8
Zwartkop	7	9	7	6
Sprinkhaanzanger	7	5	4	7
Spotvogel	1	1	3	4
Bosrietzanger	0	1	0	0
Kleine Karekiet	4	6	8	7
Rietzanger	48	32	39	45
Boomkruiper	1	2	0	1
Winterkoning	11	13	14	11
Merel	3	4	3	3
Zanglijster	2	3	3	3
Grauw Vliegenvanger	1	0	1	1
Nachtegaal	2	0	0	1
Roodborst	0	0	3	0
Blauwborst	8	6	12	9
Gekraagde Roodstaart	0	0	1	0
Roodborsttapuit	5	2	1	0
Heggenmus	2	1	3	6
Gele Kwikstaart	0	2	0	0
Graspieper	29	39	38	46
Vink	2	2	3	2
Putter	0	0	0	1
Kneu	3	4	4	4
Goudvink	0	0	1	0
Rietgors	26	23	21	28
totaal	345	364	398	427

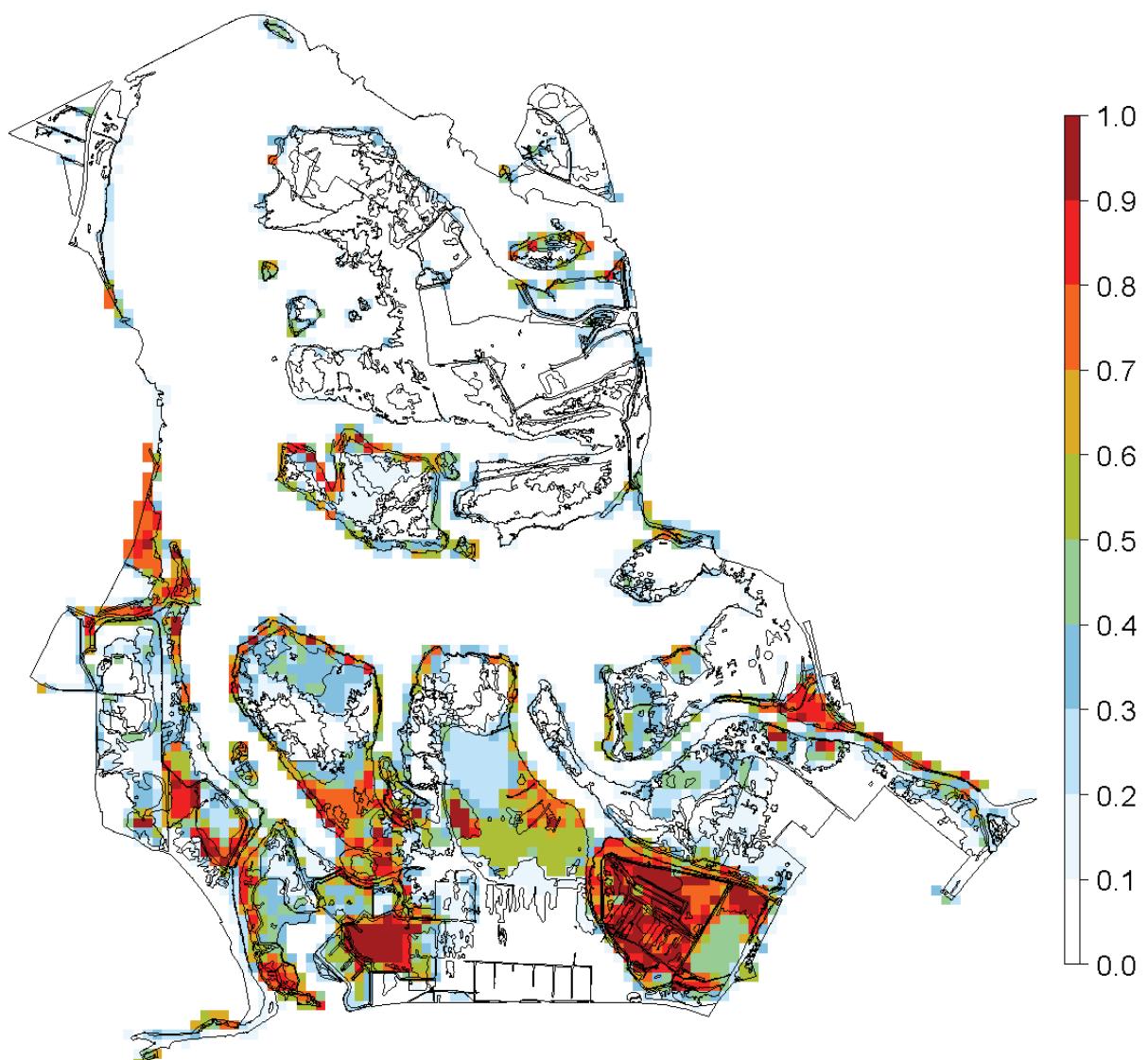
## Bijlage 12. Regressiemodellen broedvogels

Voor elke soort, beschreven in § 7.5, is een door *random forest* gemodelleerde kaart gemaakt die de ligging van geschikt habitat laat zien op basis van de associatie van waarnemingen met vegetatiestructuurtypen (Kleefstra *et al.* 2016), een grafiek met het relatieve belang van de verklarende variabelen en een *partial dependence plot* voor de belangrijkste verklarende variabelen.

### Kievit

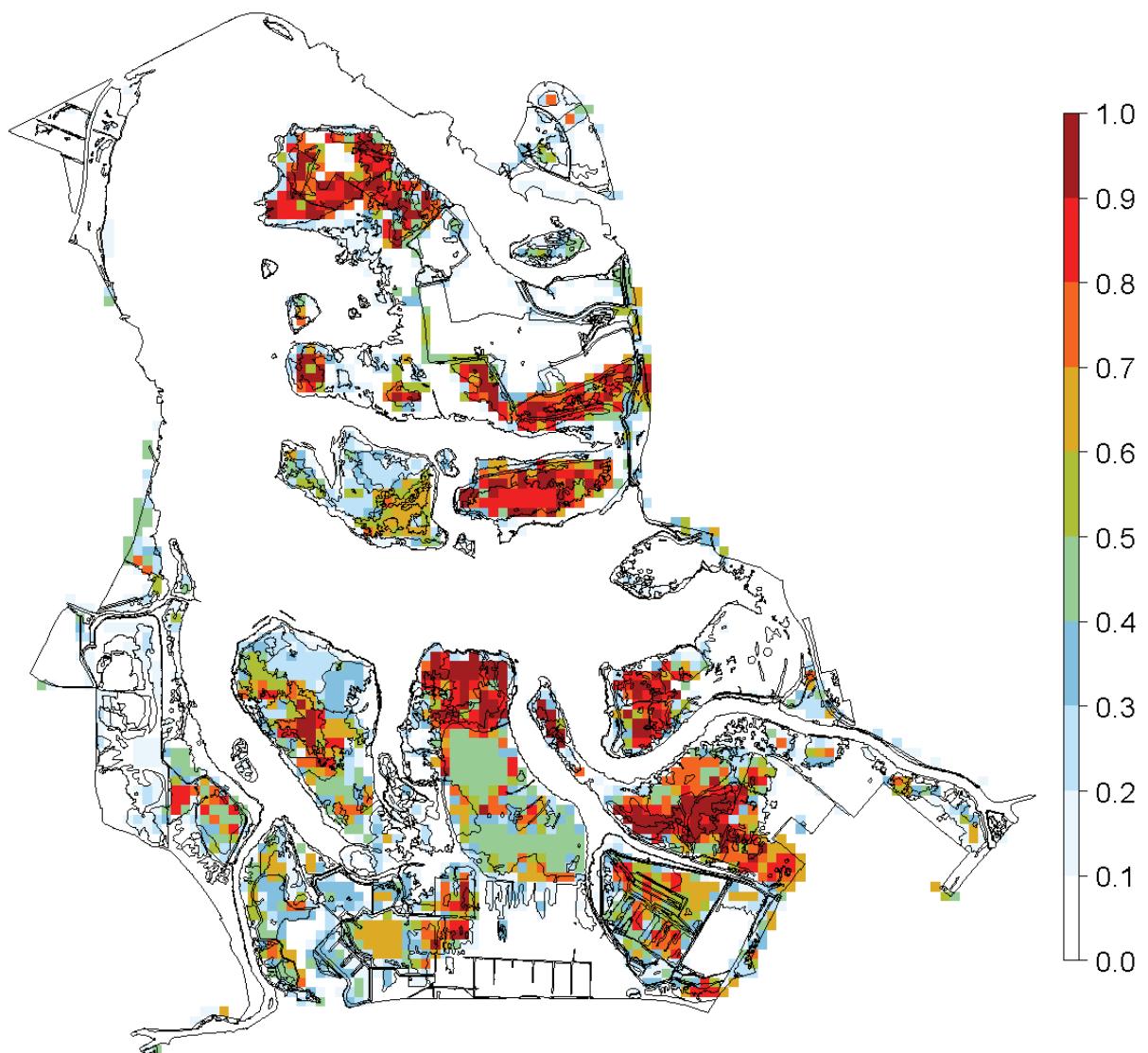


Baardman



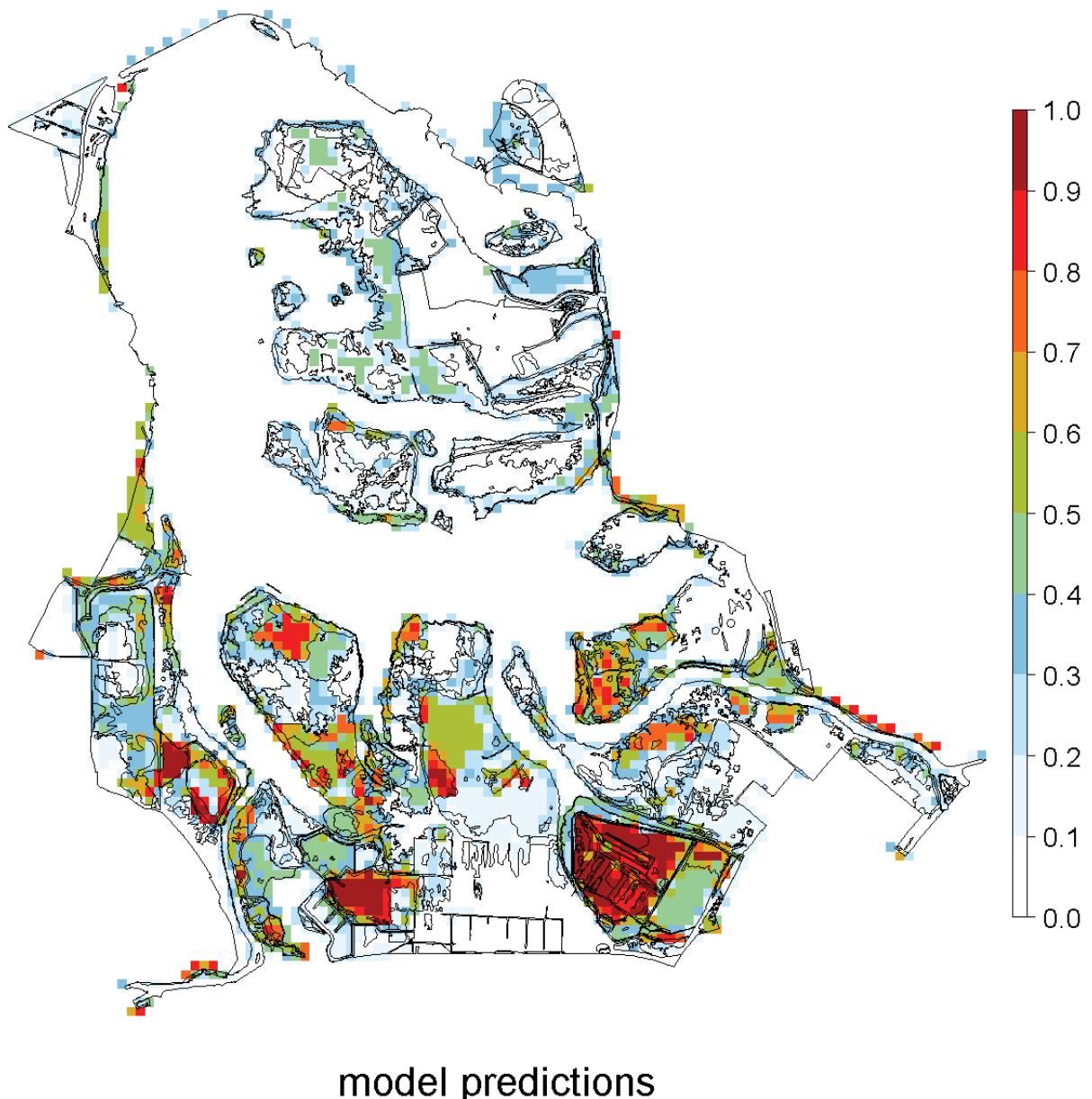
model predictions

Fitis

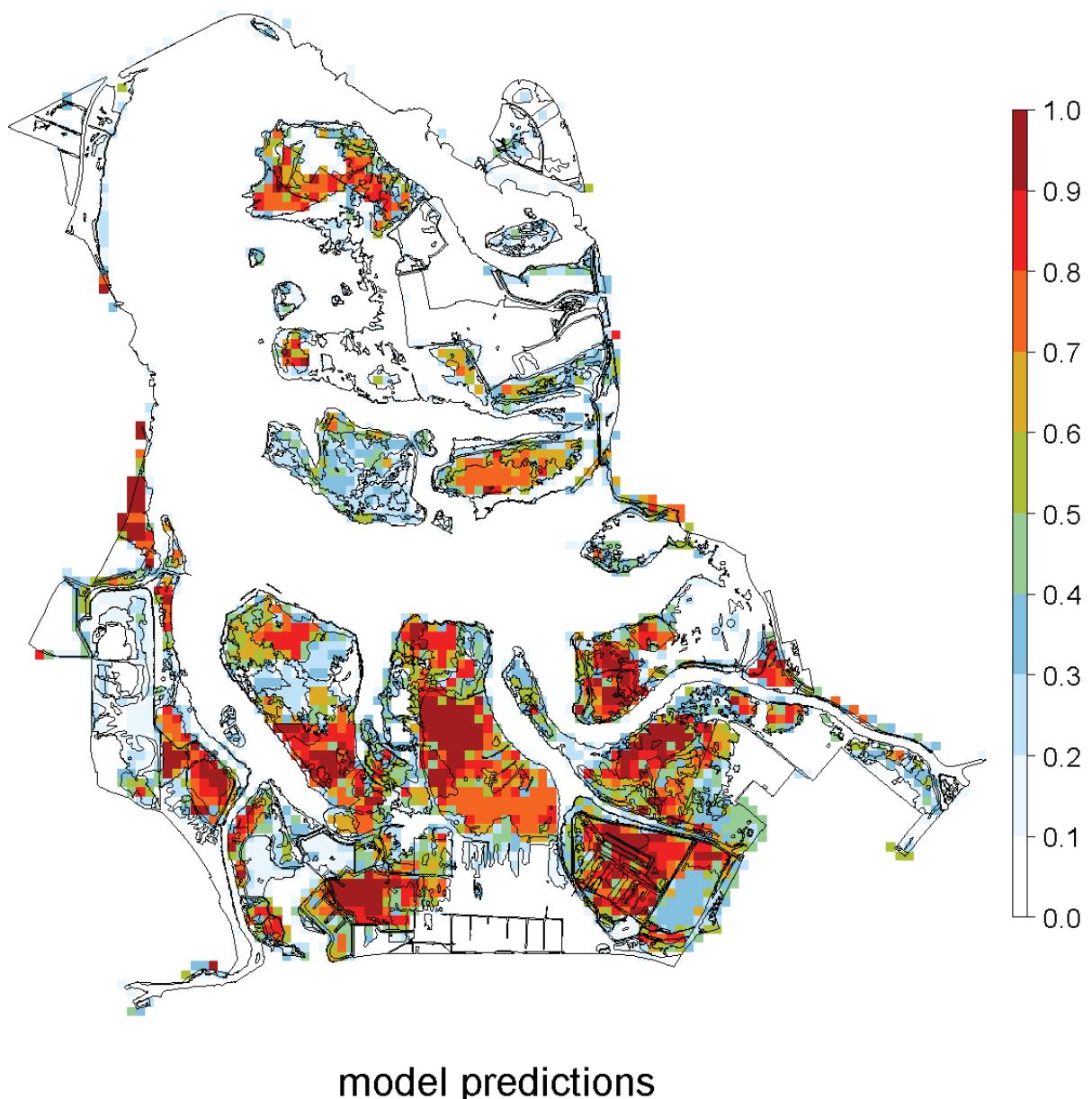


model predictions

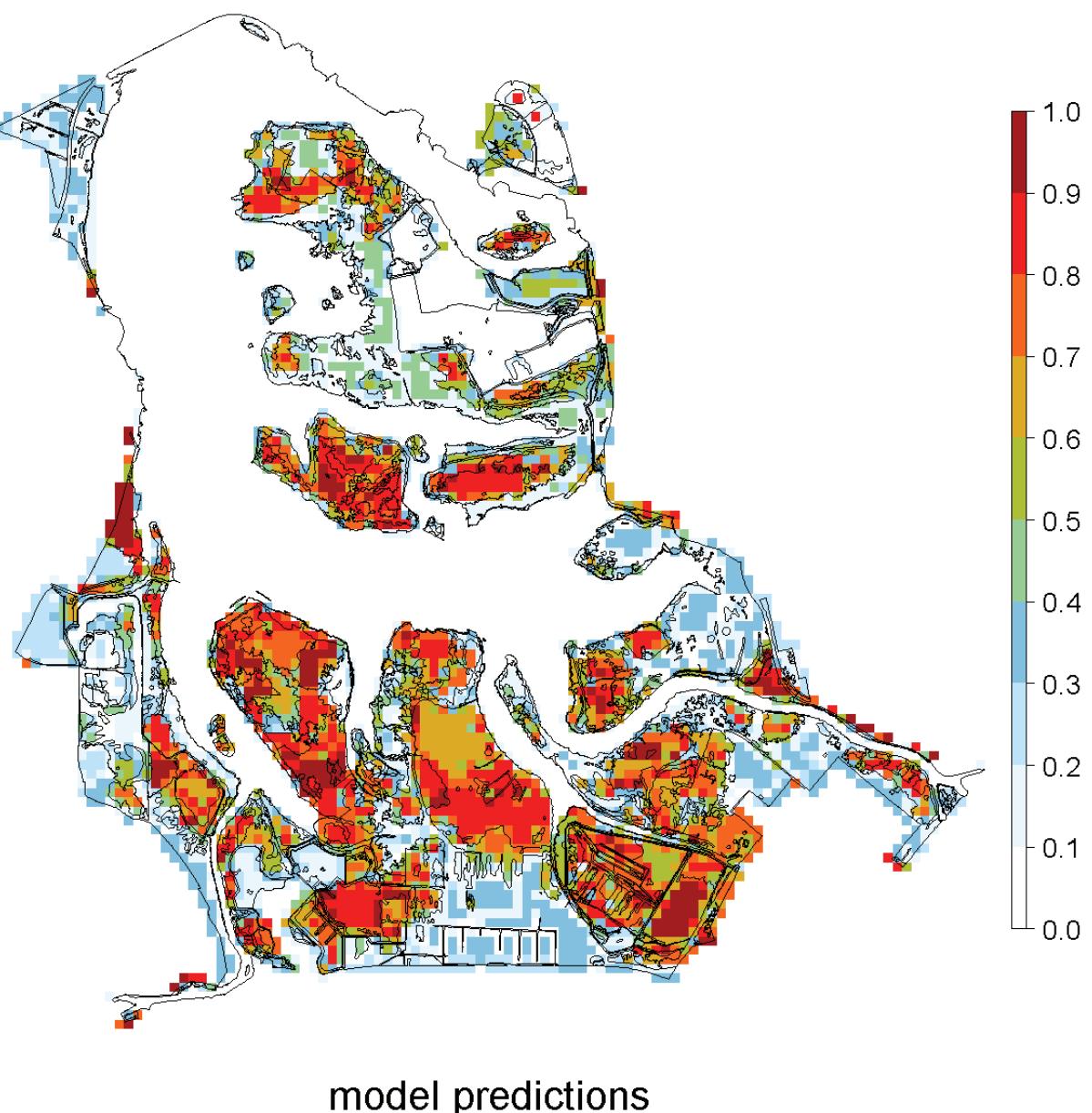
Kleine Karekiet



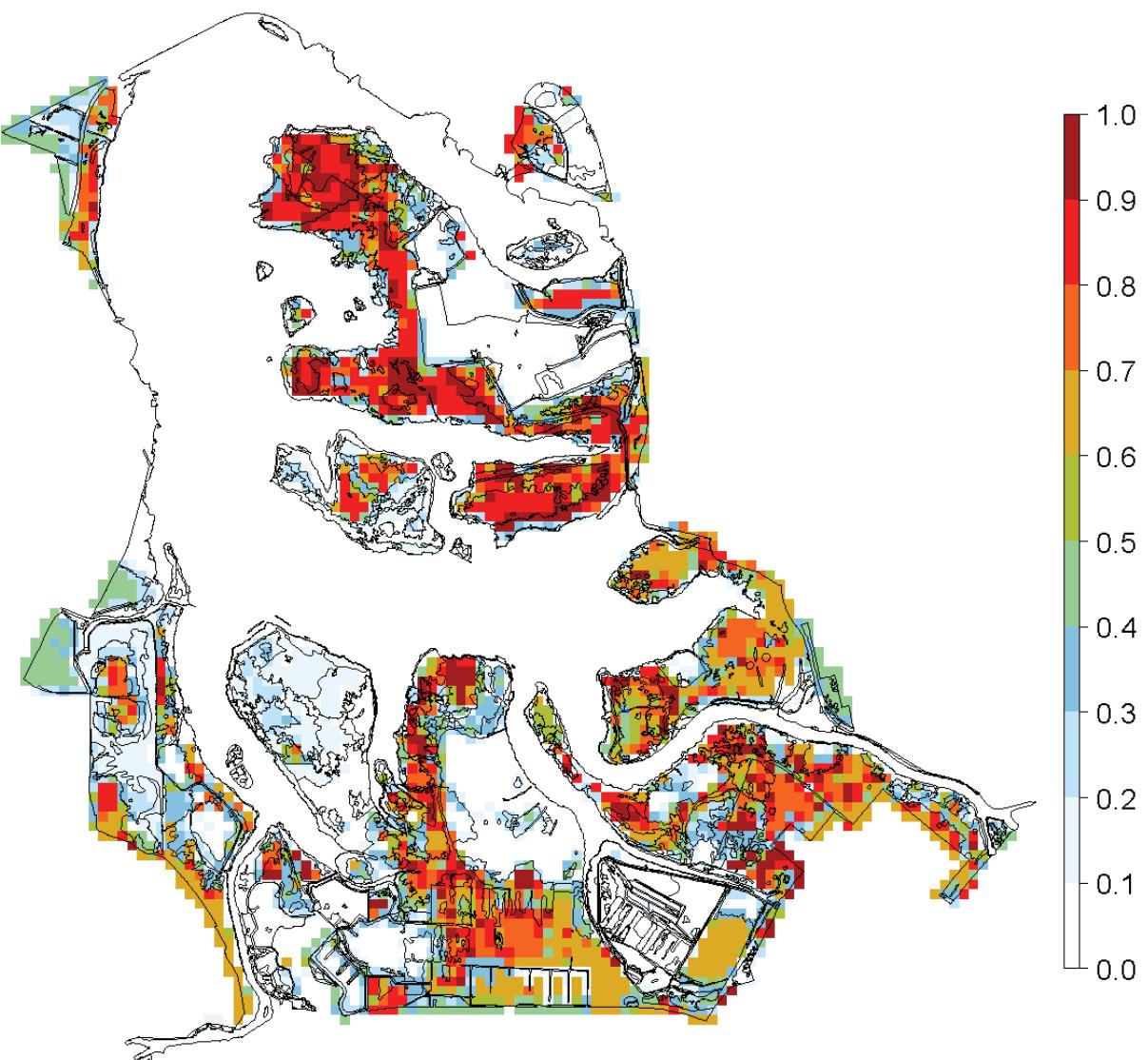
Rietzanger



Blauwborst

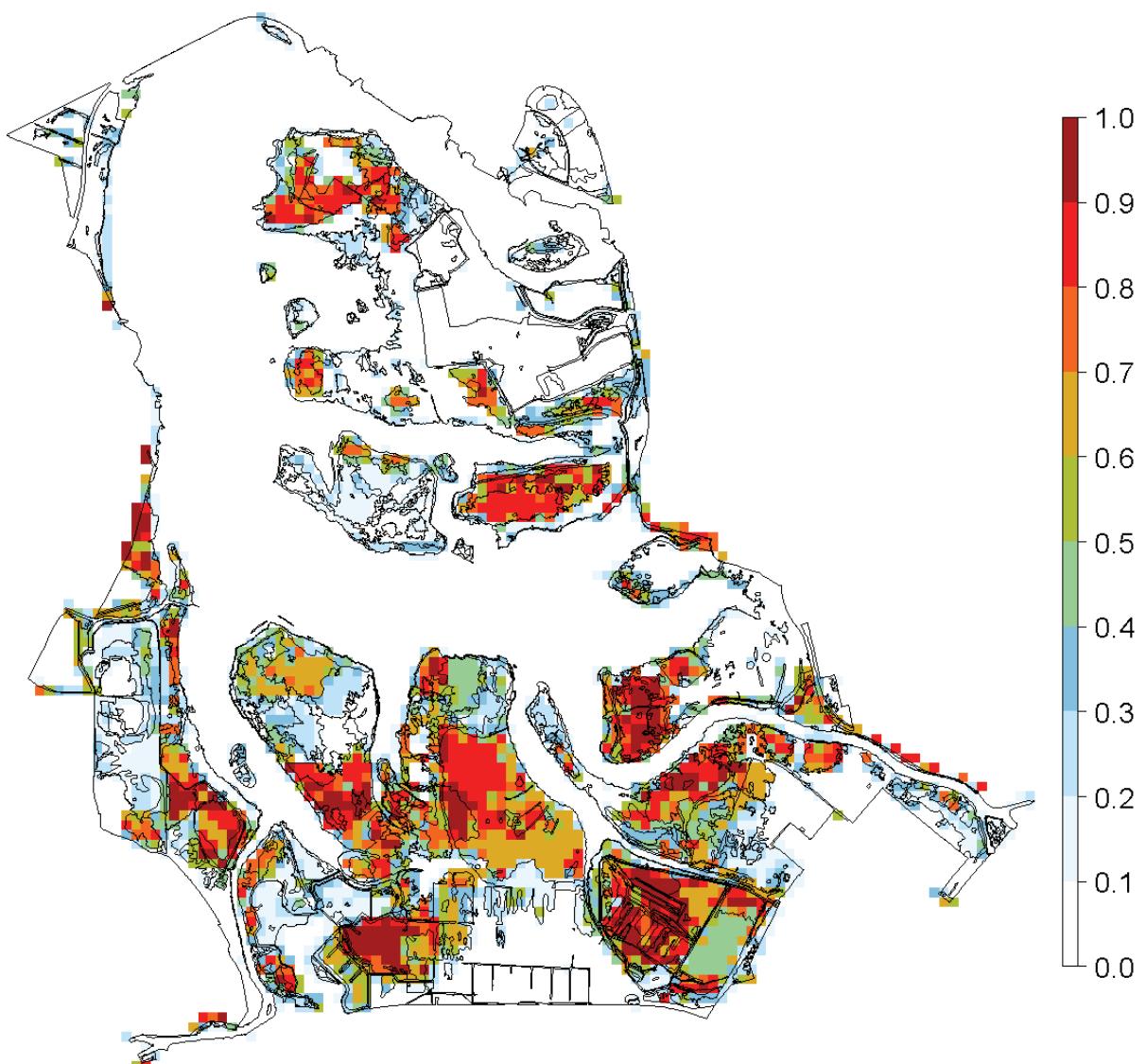


Graspieper



model predictions

Rietgors



model predictions

### Bijlage 13. Regressiebomen-analyse watervogels en slaapplaatsen

Een geschikte functie voor de evaluatie van een regressieboom maximaliseert de nauwkeurigheid van het model gemeten aan de training-gegevens en minimaliseert de complexiteit van het model. De functie kan op deze manier worden opgeschreven

$$\begin{aligned}\text{loss}(Y, f(X, \theta)) &= N \log \text{MSE}(Y, f(X, \theta)) \\ &= N \log \left\{ \sum_{n=1}^N (Y_n - f(X_{\cdot n}, \theta))^2 \right\}, \\ \text{comp}(\theta) &= \alpha \cdot 4 \cdot (M + 1) \cdot \log N.\end{aligned}$$

met

Y, antwoordvariabele

X, verklarende variabelen

$\Theta$ , structuur van de regressieboom

N, aantal waarnemingen

MSE, gemiddelde kwadratische afwijking

$Y_n$ , waarde van antwoordvariabele van de n-de waarneming

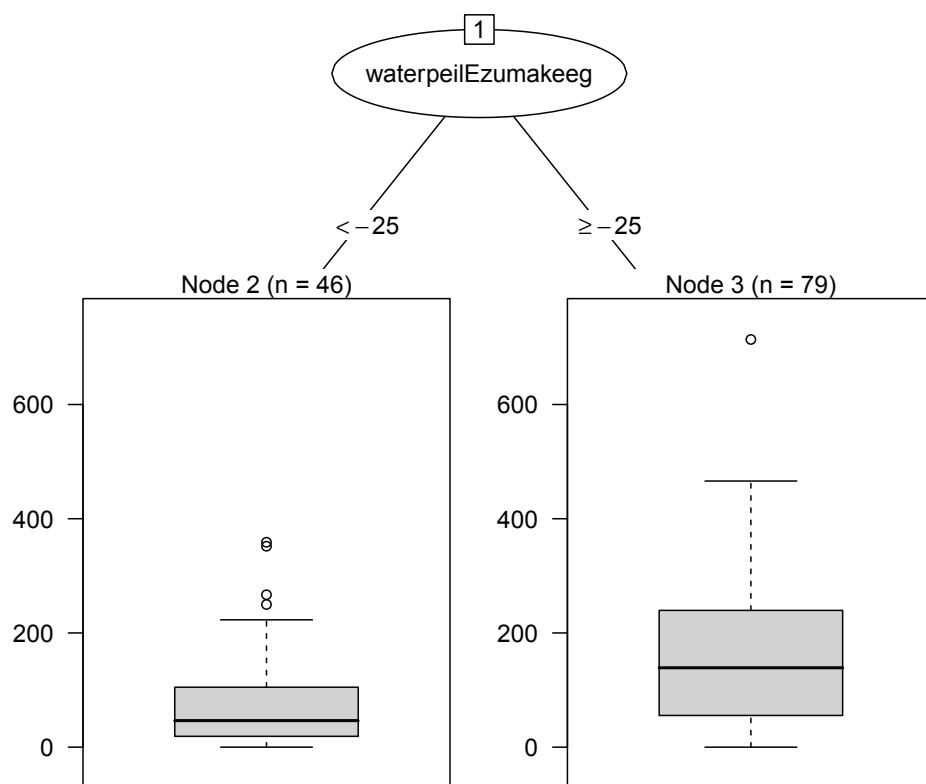
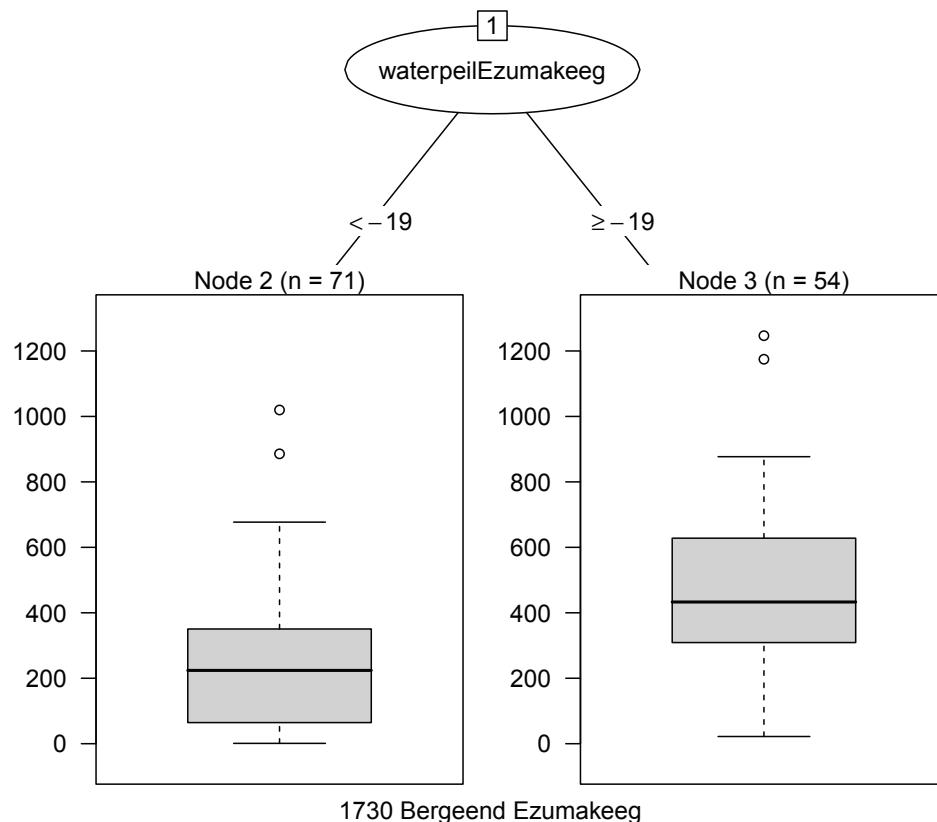
$X_{\cdot n}$ , waarden van de verklarende variabelen van de n-de waarneming

$\alpha$ , gebruiker-specifiek parameter (default = 1)

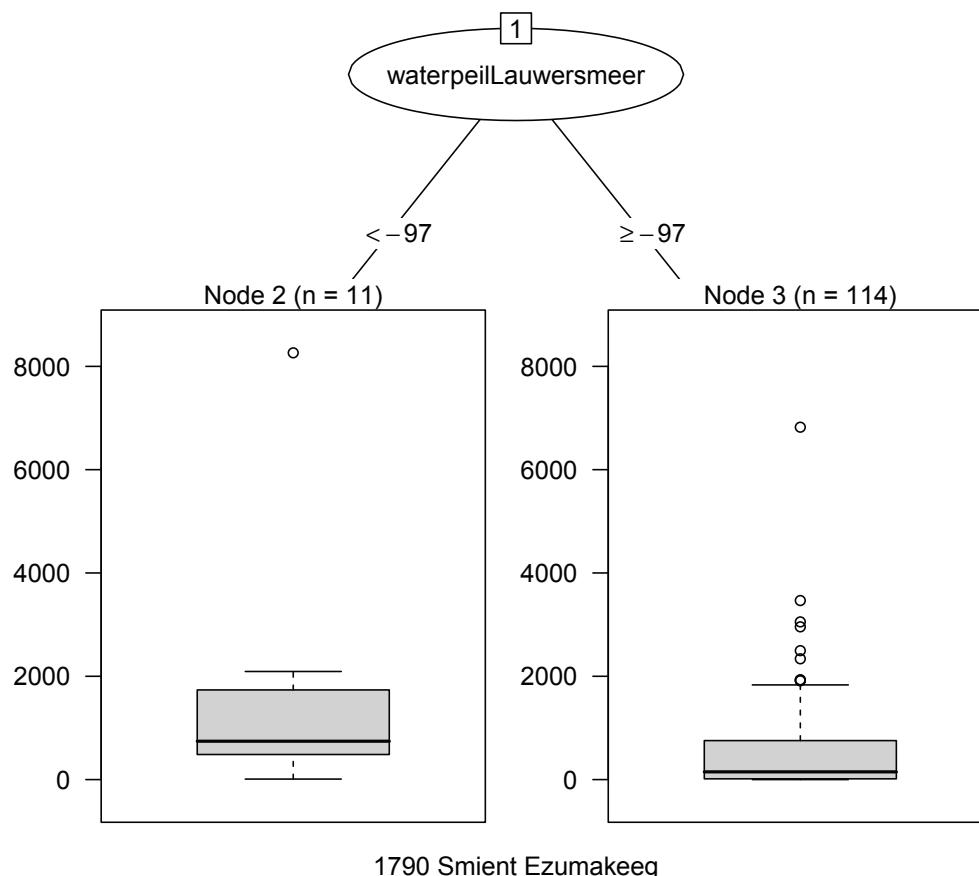
M, aantal van terminale knopen in de boom

**Bijlage 13a. Regressiebomen watervogels met alleen waterpeilen als verklarende variabelen**

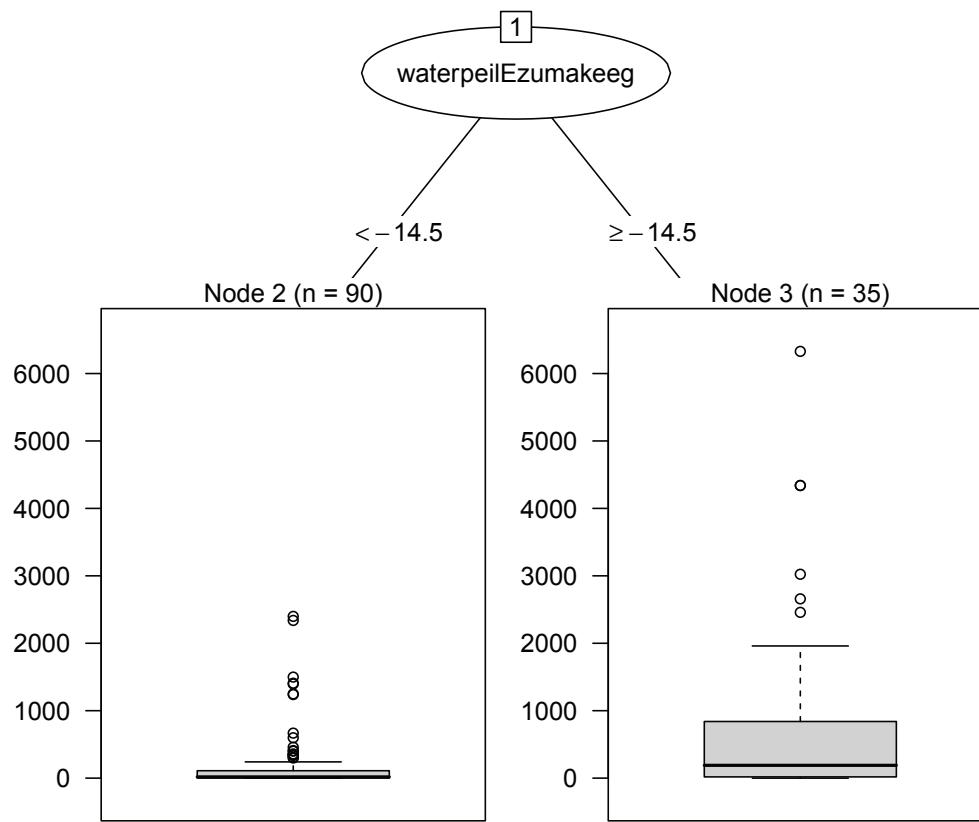
1730 Bergeend Lauwersmeer



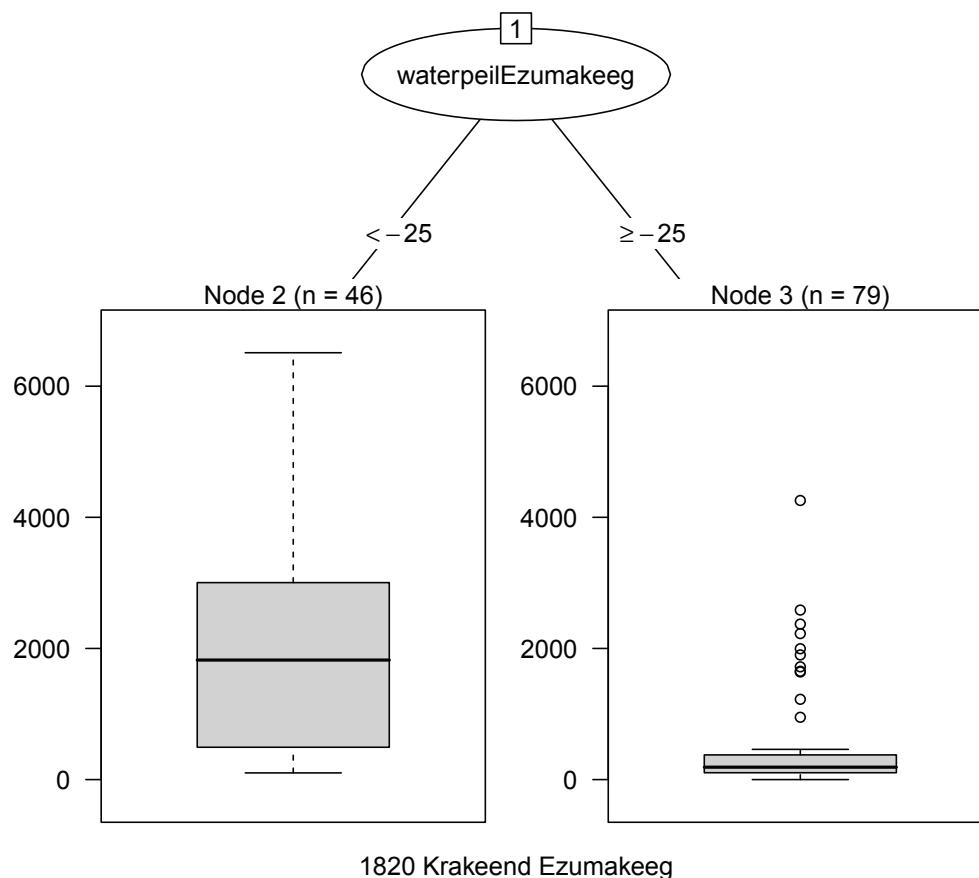
1790 Smient Lauwersmeer



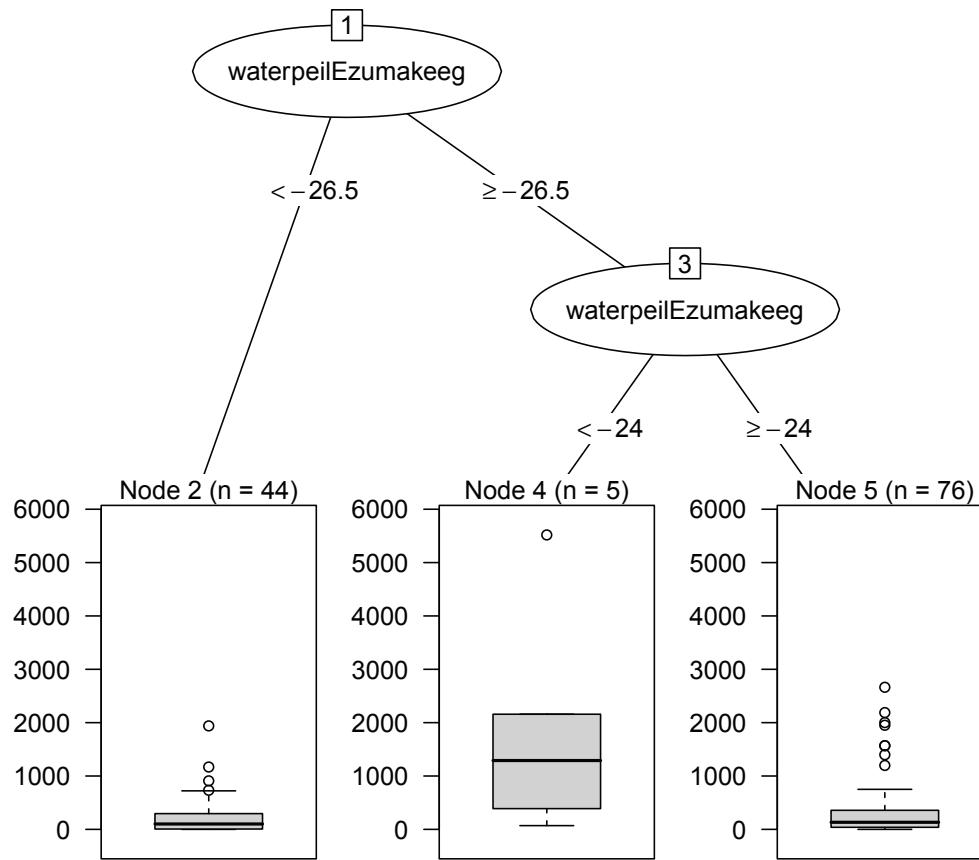
1790 Smient Ezumakeeg



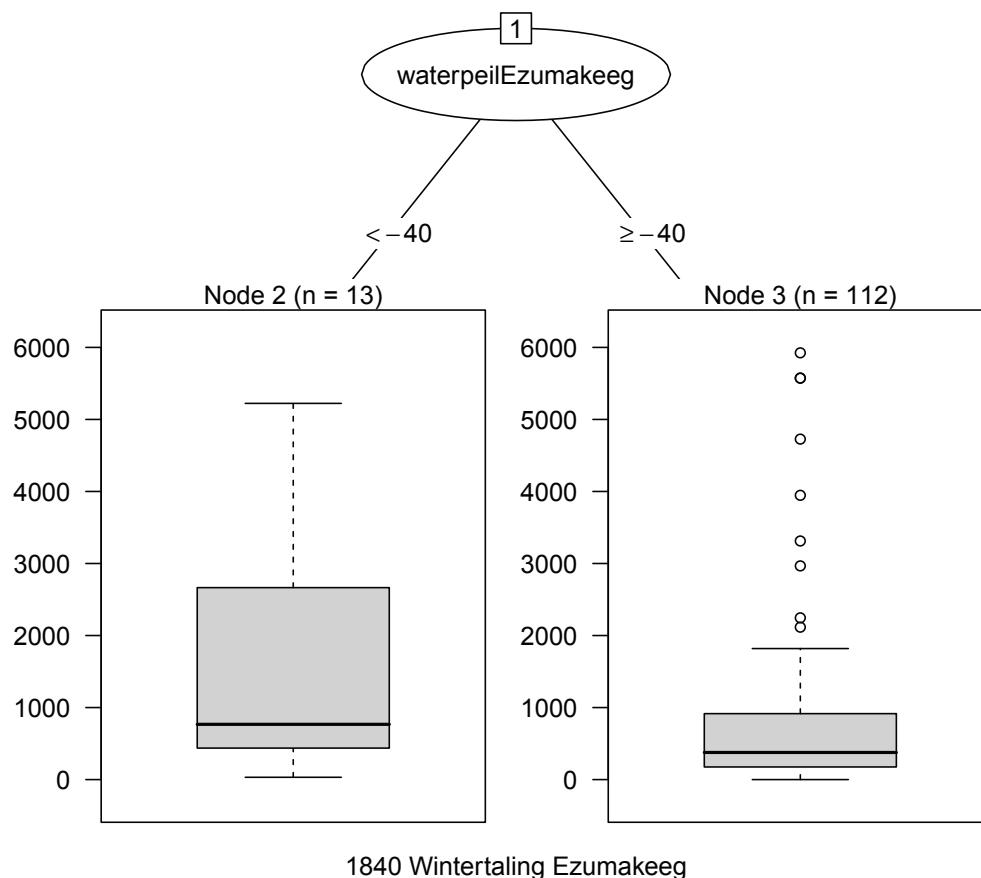
1820 Krakeend Lauwersmeer



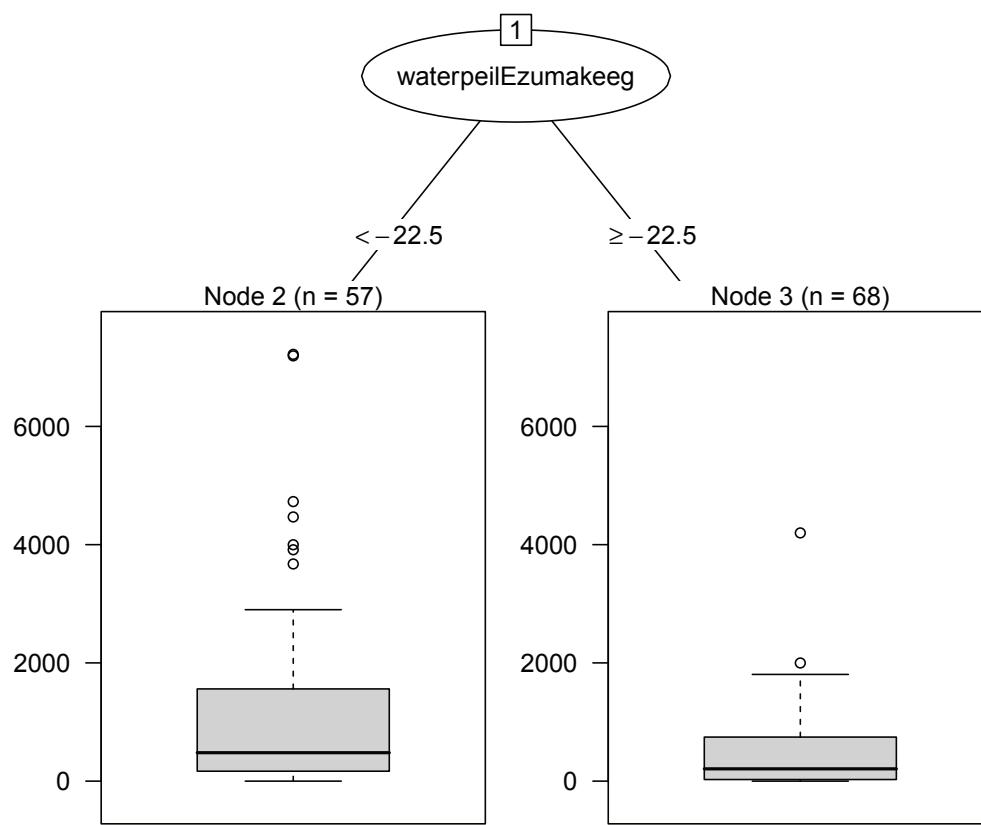
1820 Krakeend Ezumakeeg



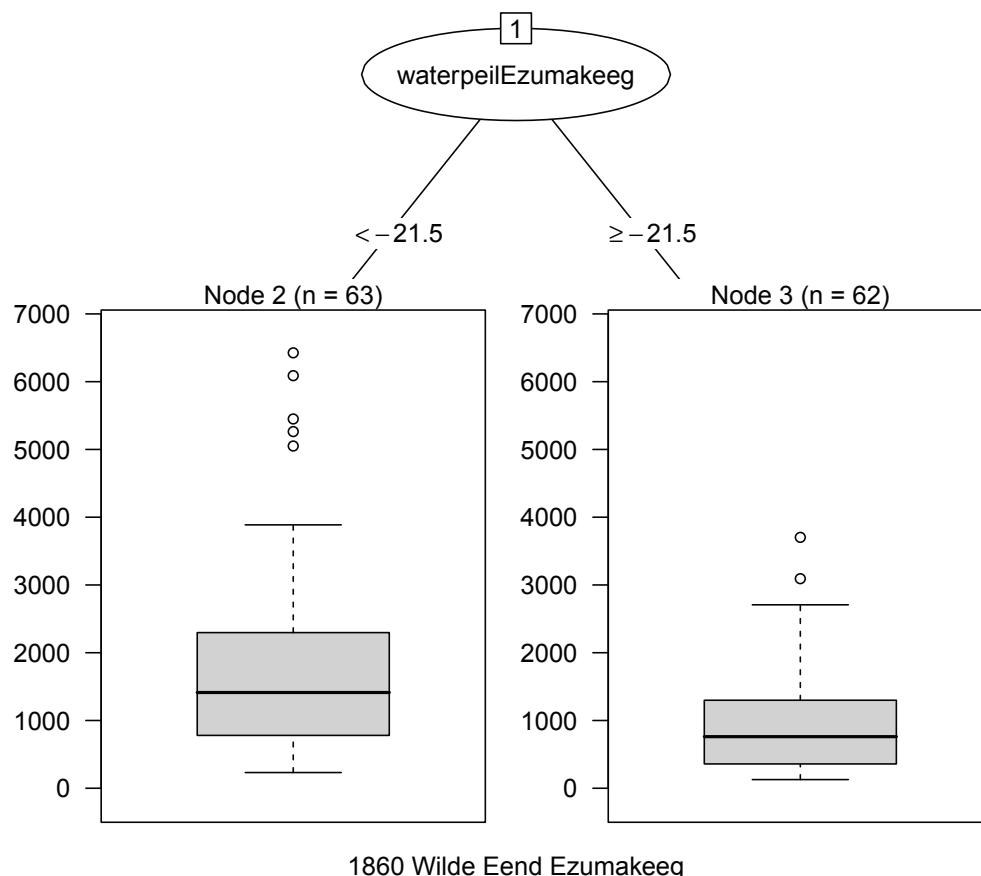
1840 Wintertaling Lauwersmeer



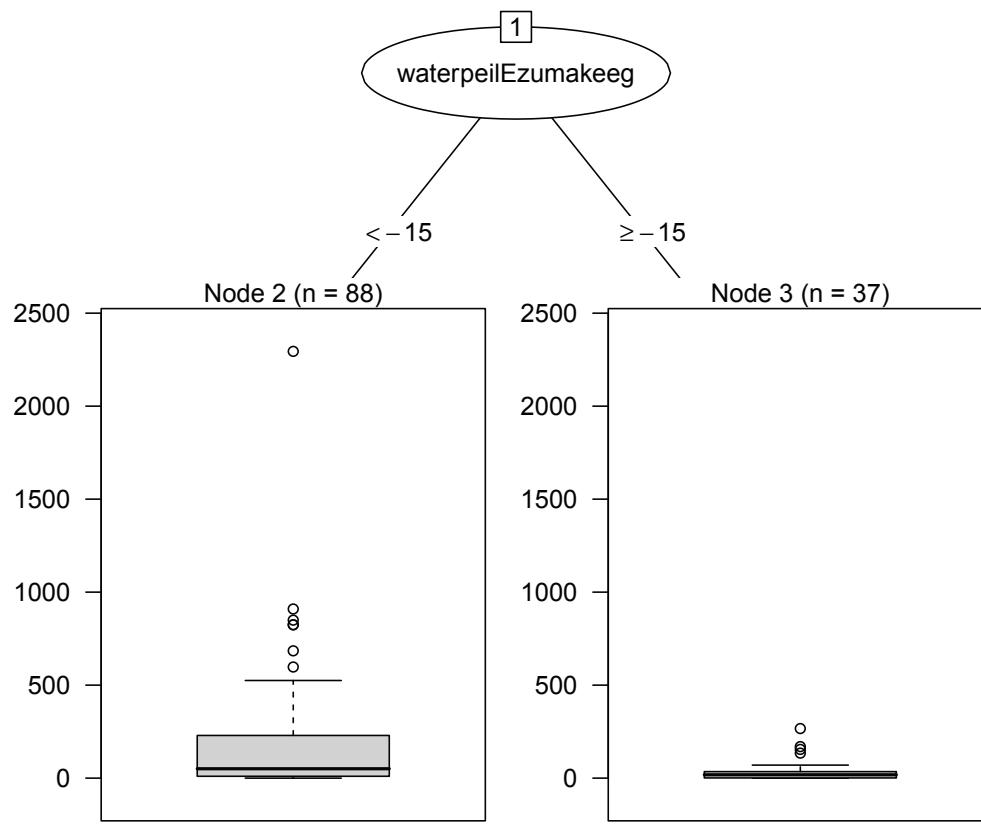
1840 Wintertaling Ezumakeeg



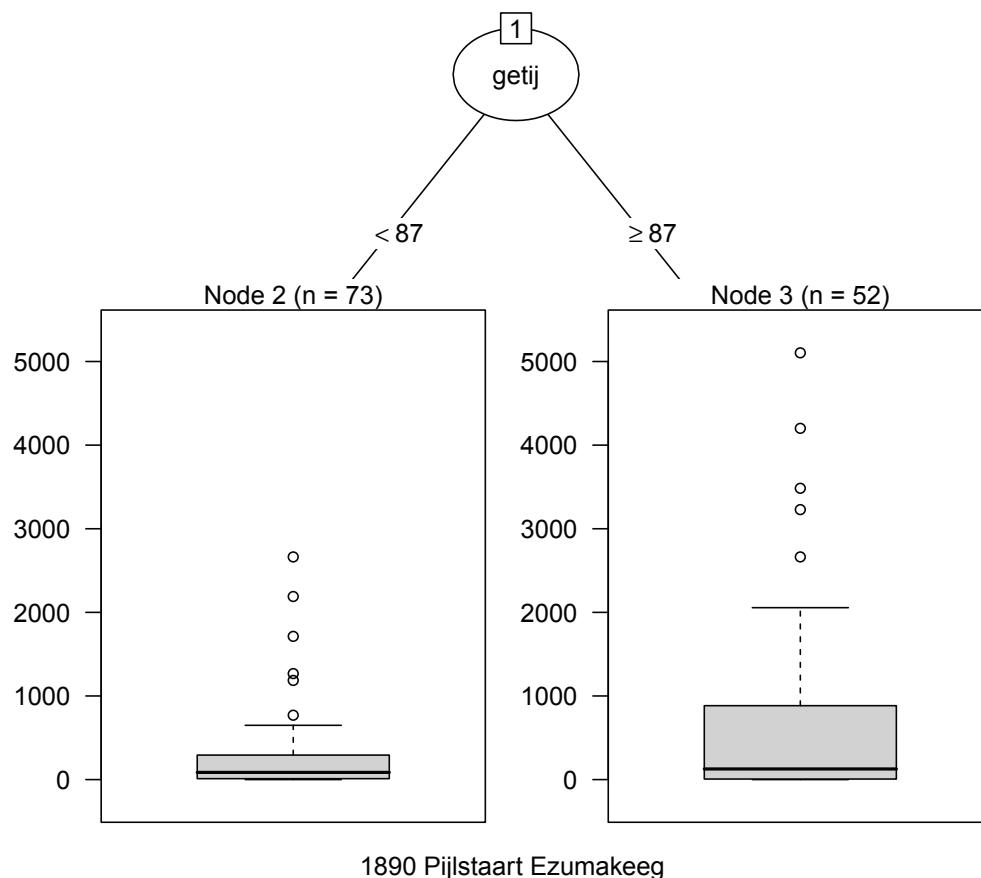
1860 Wilde Eend Lauwersmeer



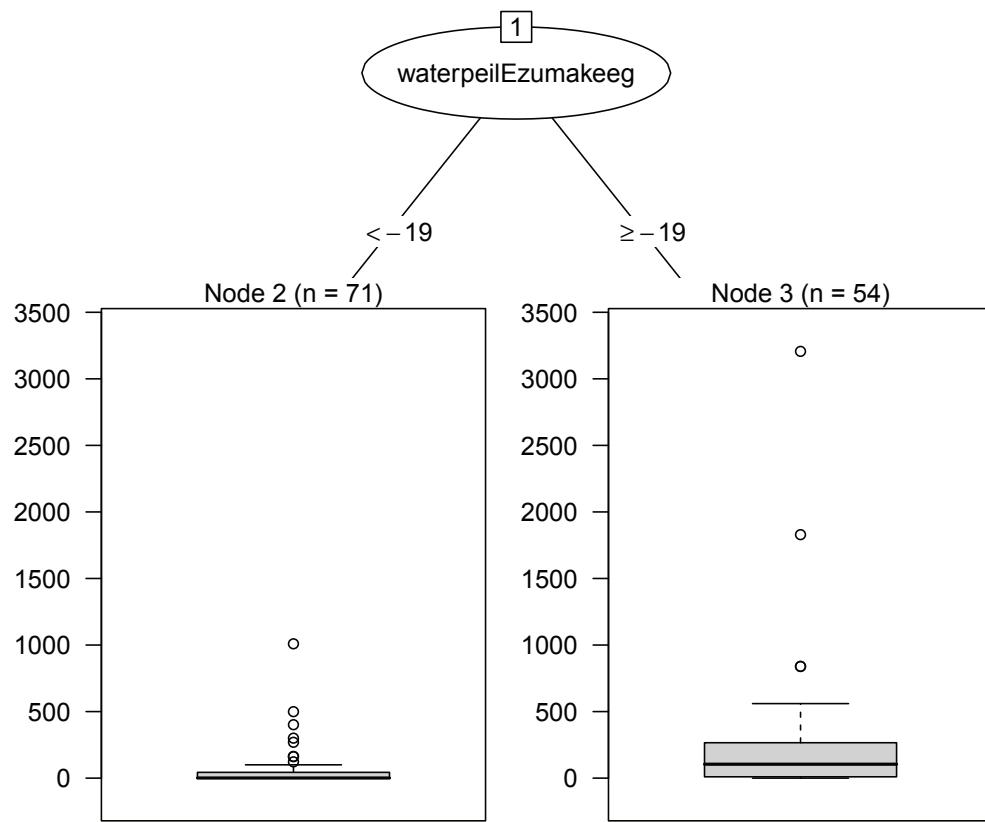
1860 Wilde Eend Ezumakeeg



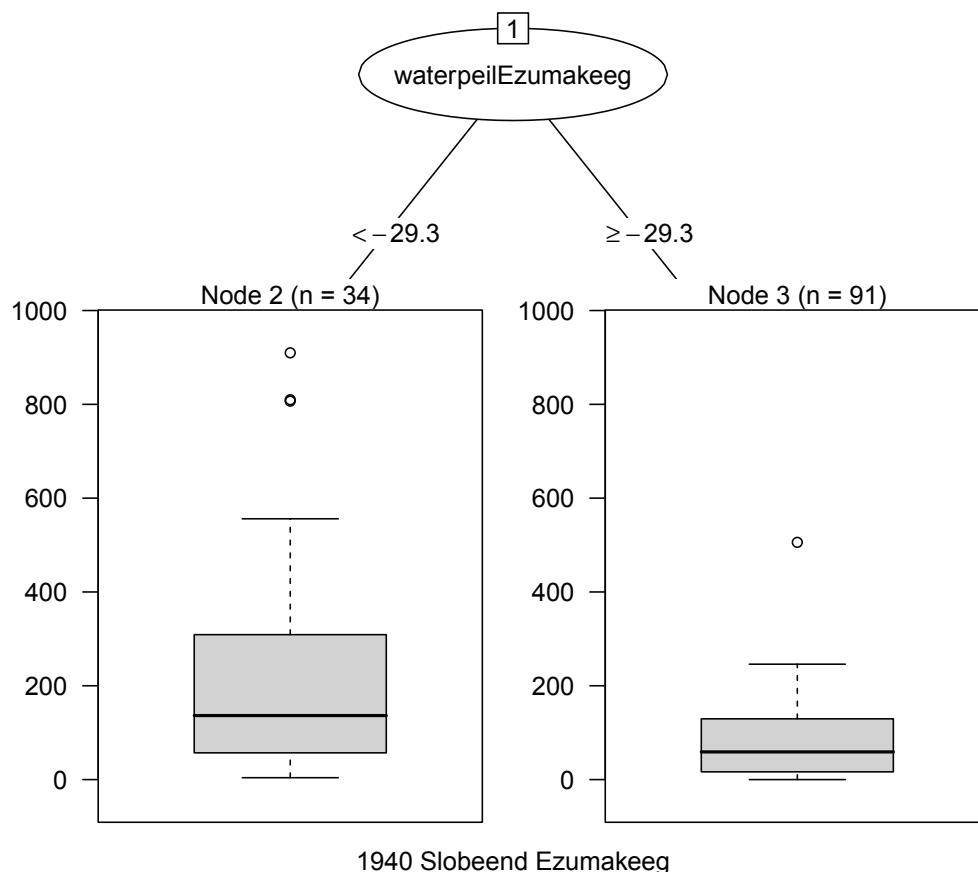
1890 Pijlstaart Lauwersmeer



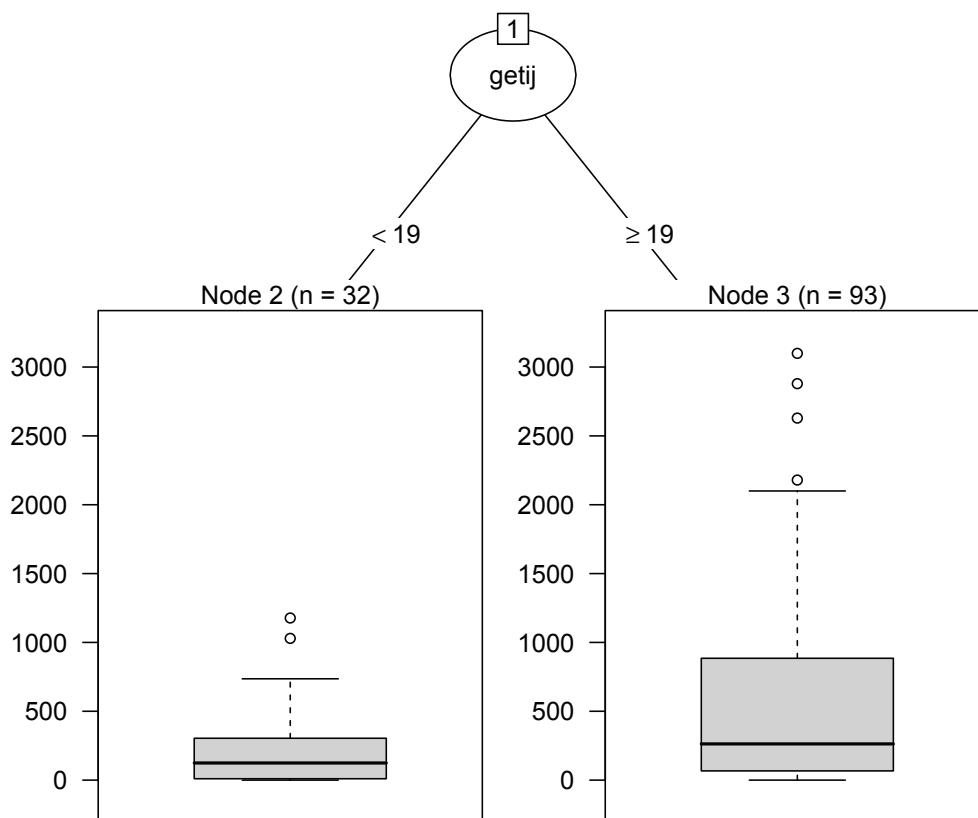
1890 Pijlstaart Ezumakeeg



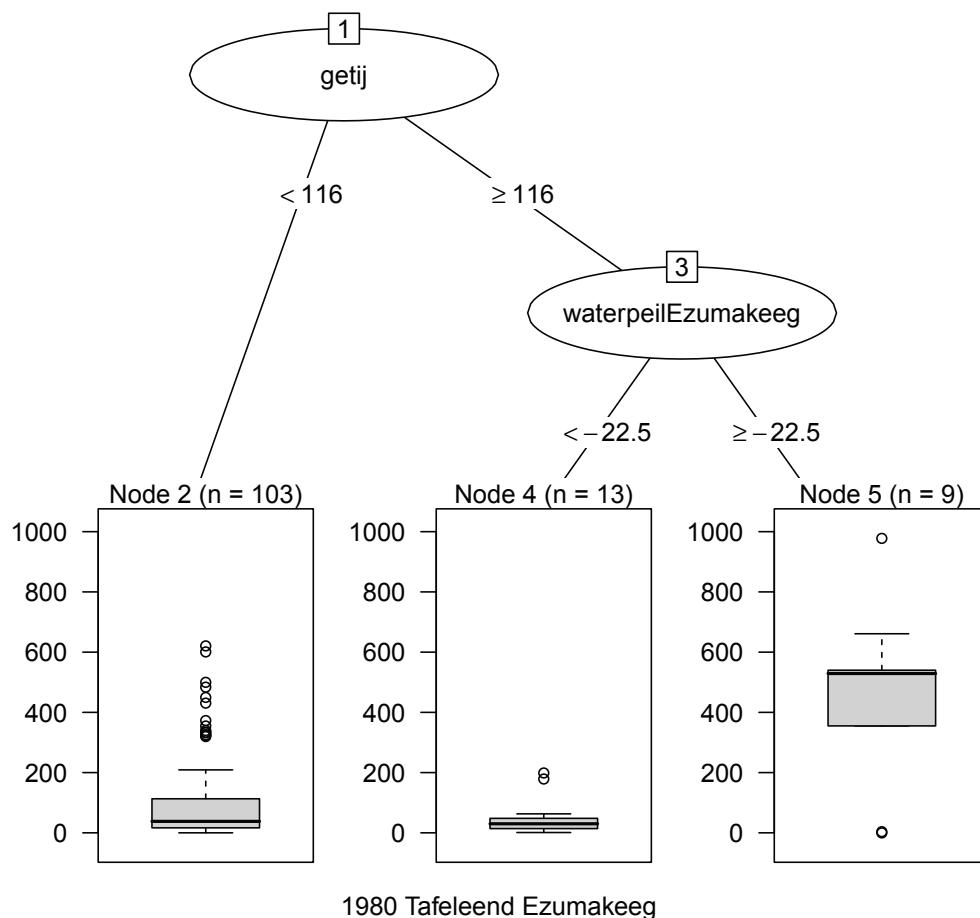
1940 Slobeend Lauwersmeer



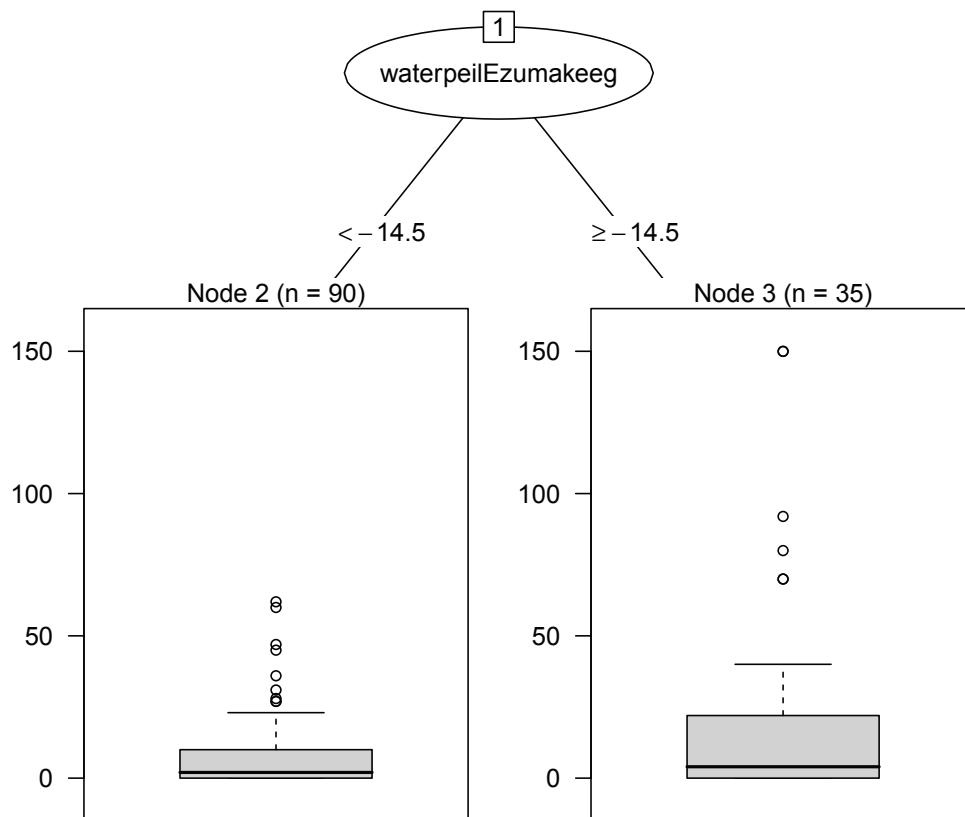
1940 Slobeend Ezumakeeg



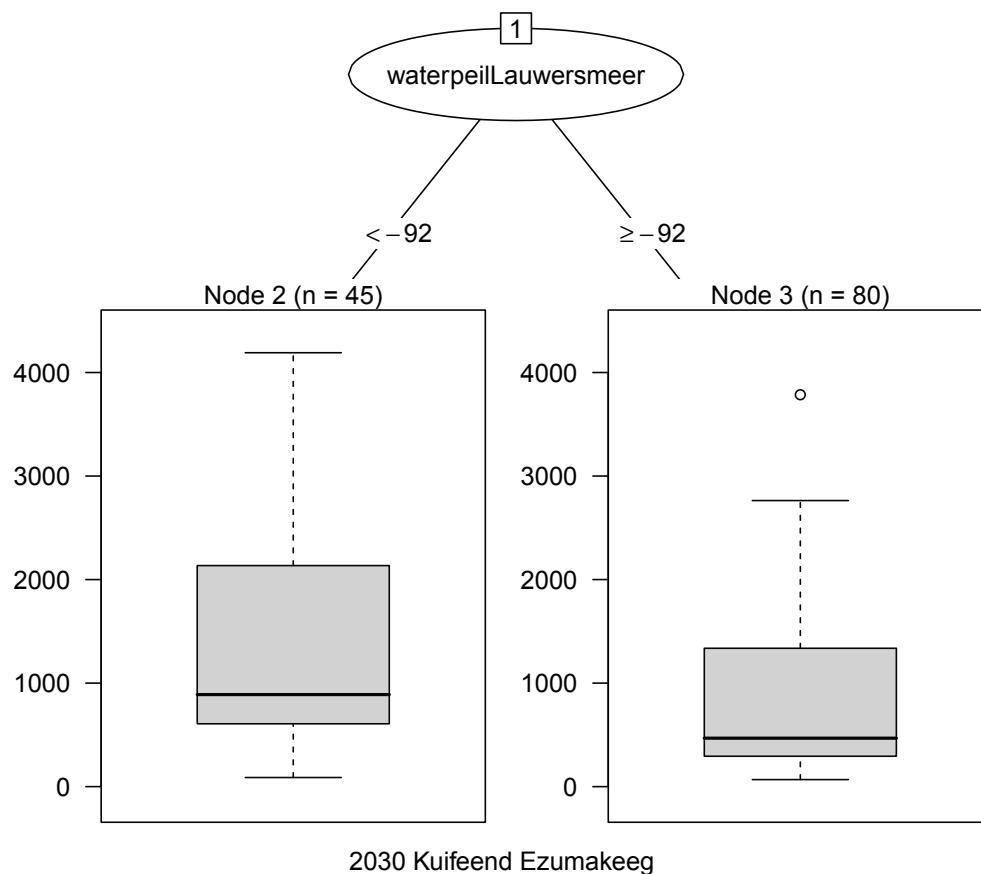
1980 Tafeleend Lauwersmeer



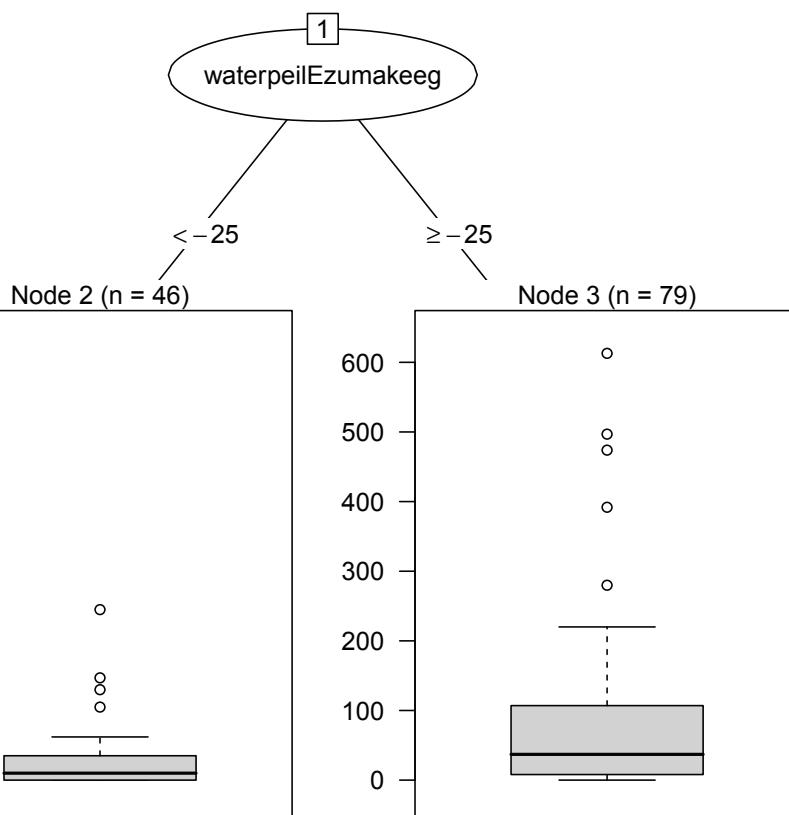
1980 Tafeleend Ezumakeeg



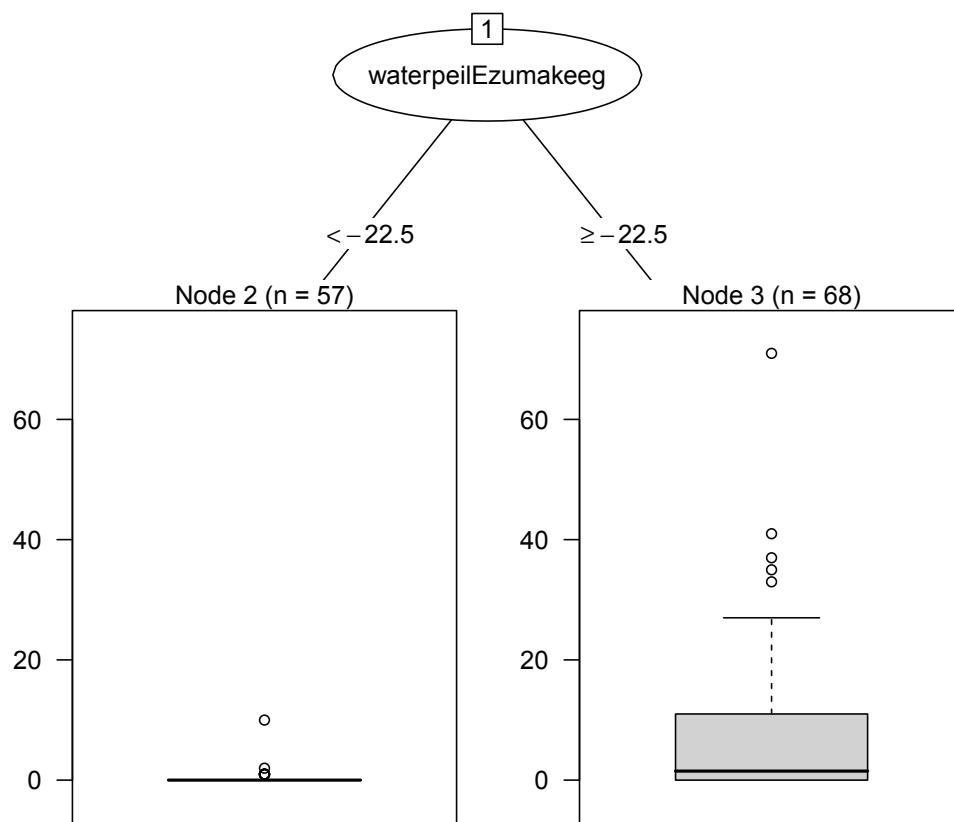
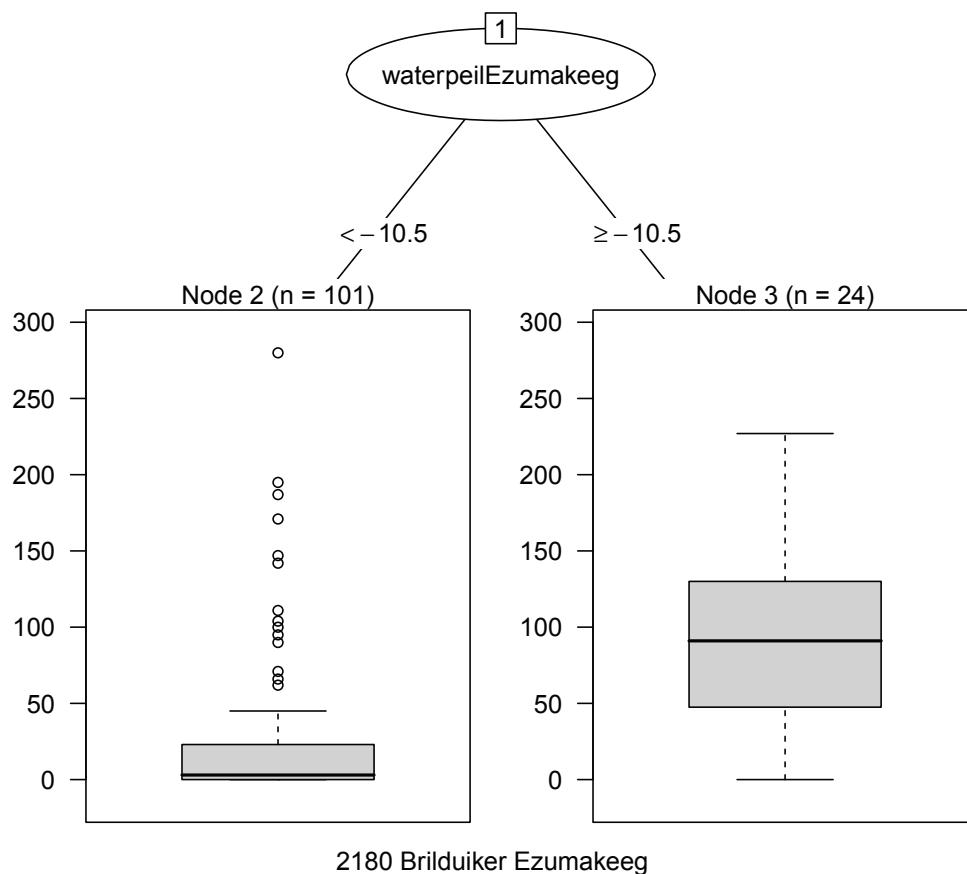
2030 Kuifeend Lauwersmeer



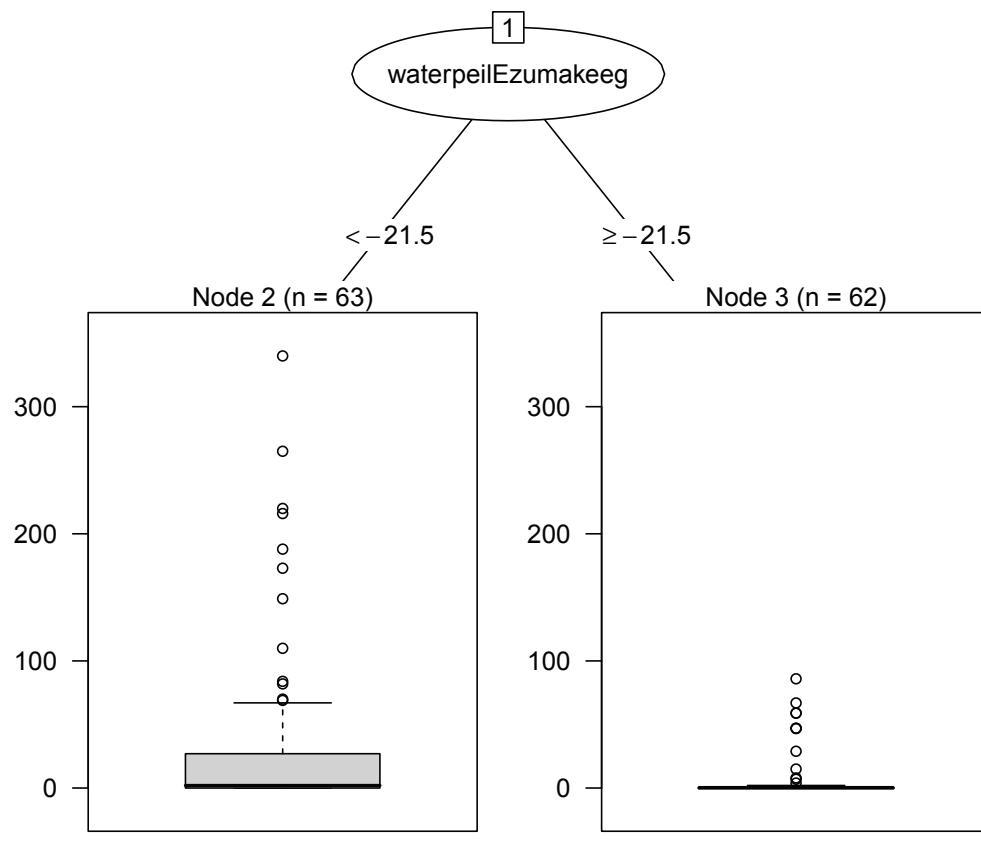
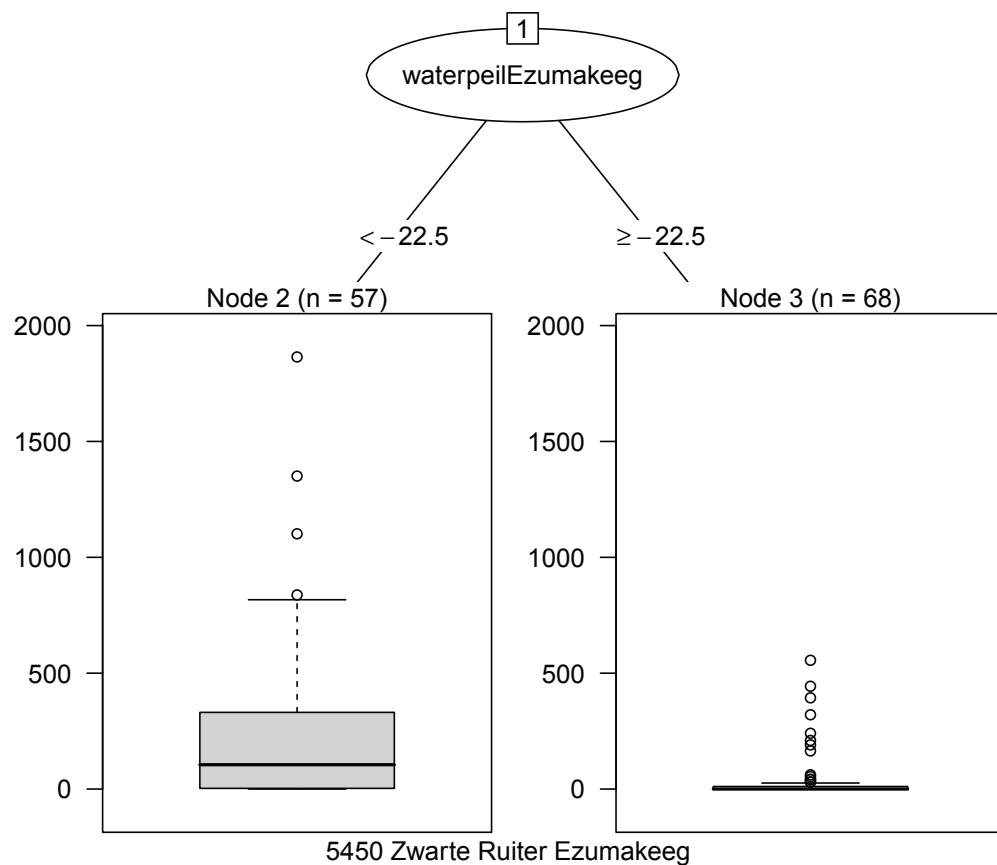
2030 Kuifeend Ezumakeeg



2180 Brilduiker Lauwersmeer

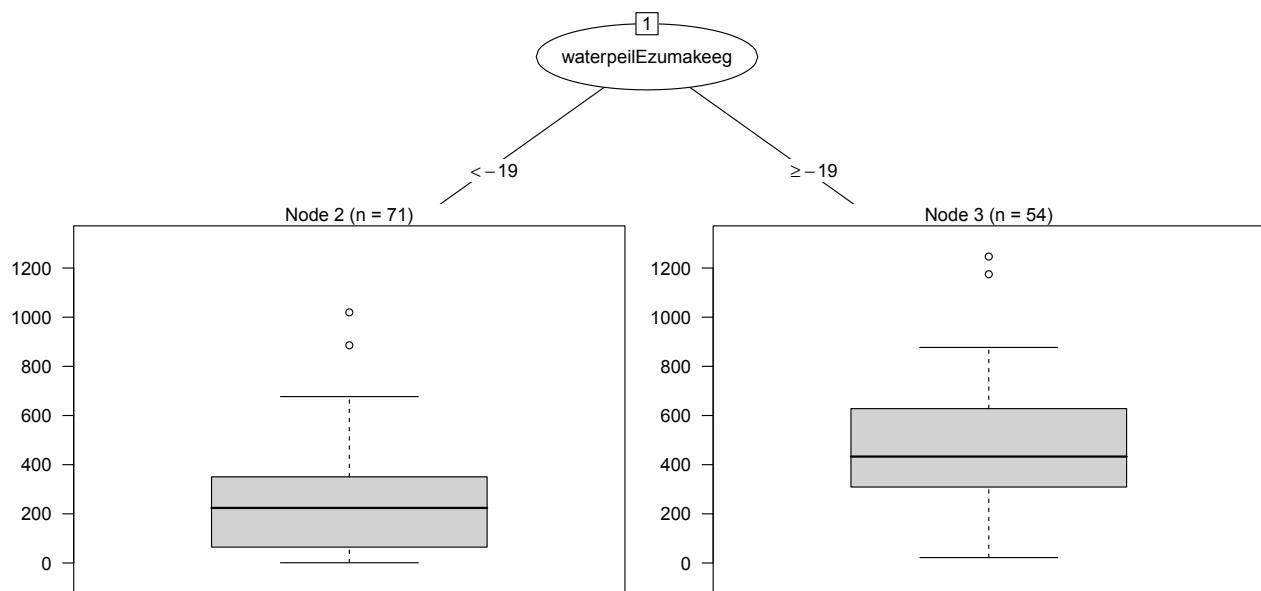


5450 Zwarte Ruiter Lauwersmeer

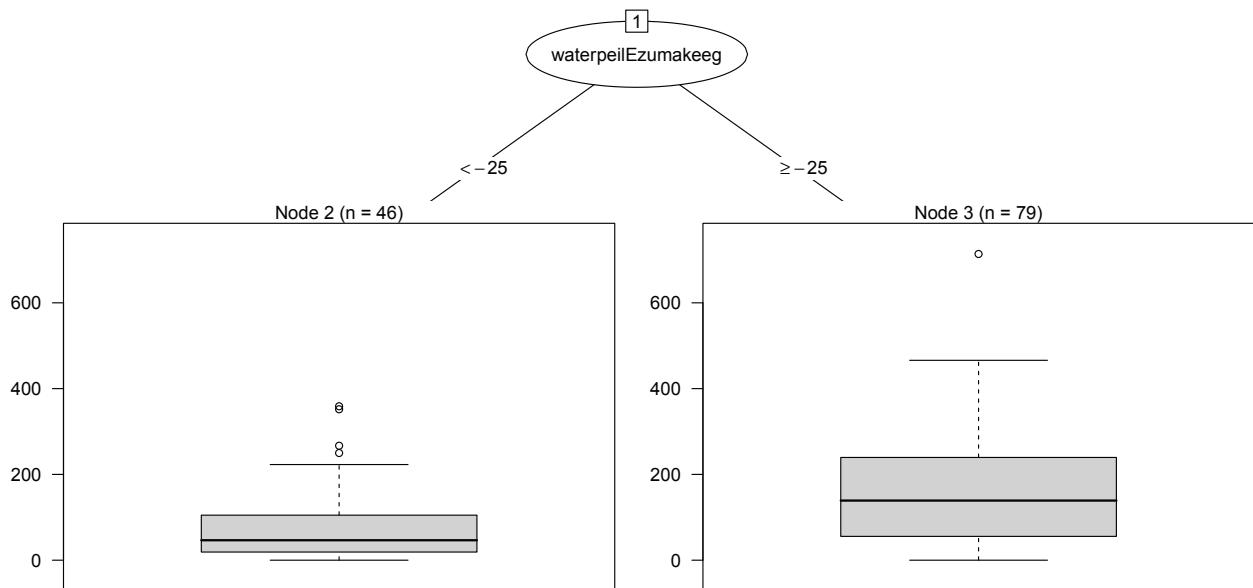


**Bijlage 13b. Regressiebomen watervogels met naast waterpeilen ook seizoen en jaar als verklarende variabelen**

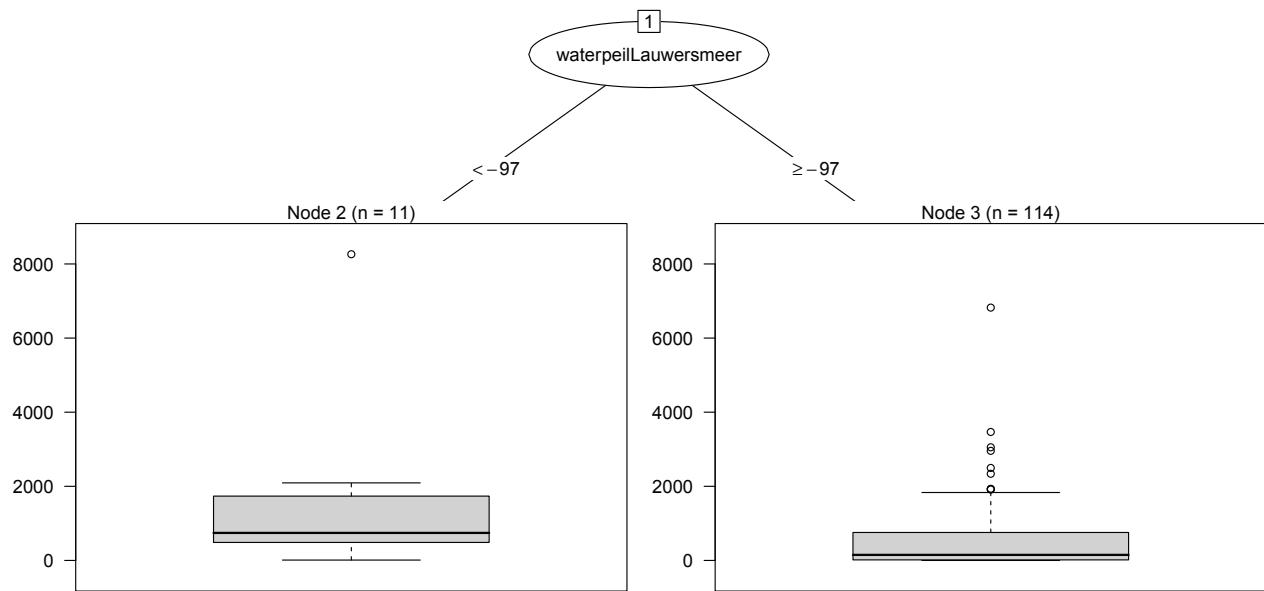
1730 Bergeend Lauwersmeer



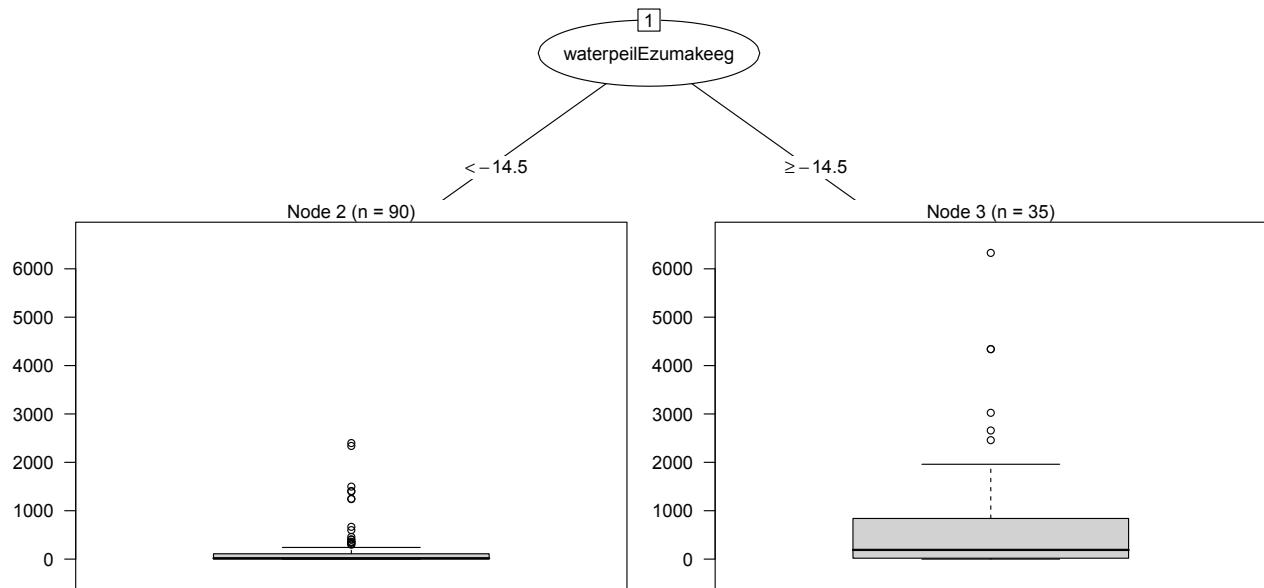
1730 Bergeend Ezumakeeg



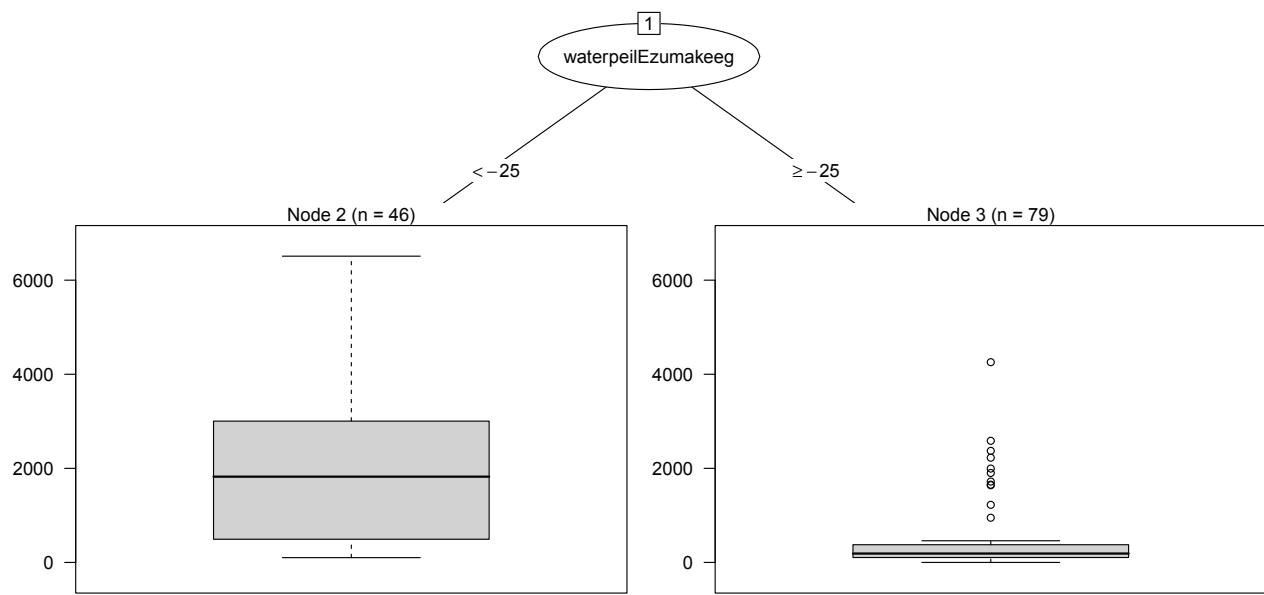
1790 Smient Lauwersmeer



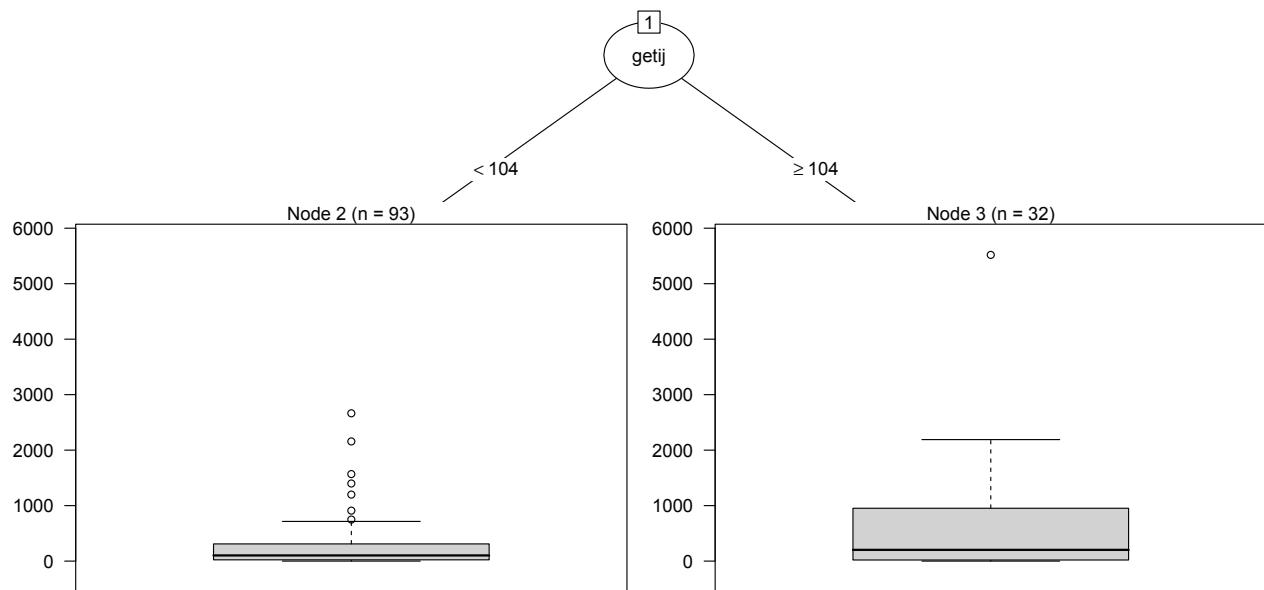
1790 Smient Ezumakeeg



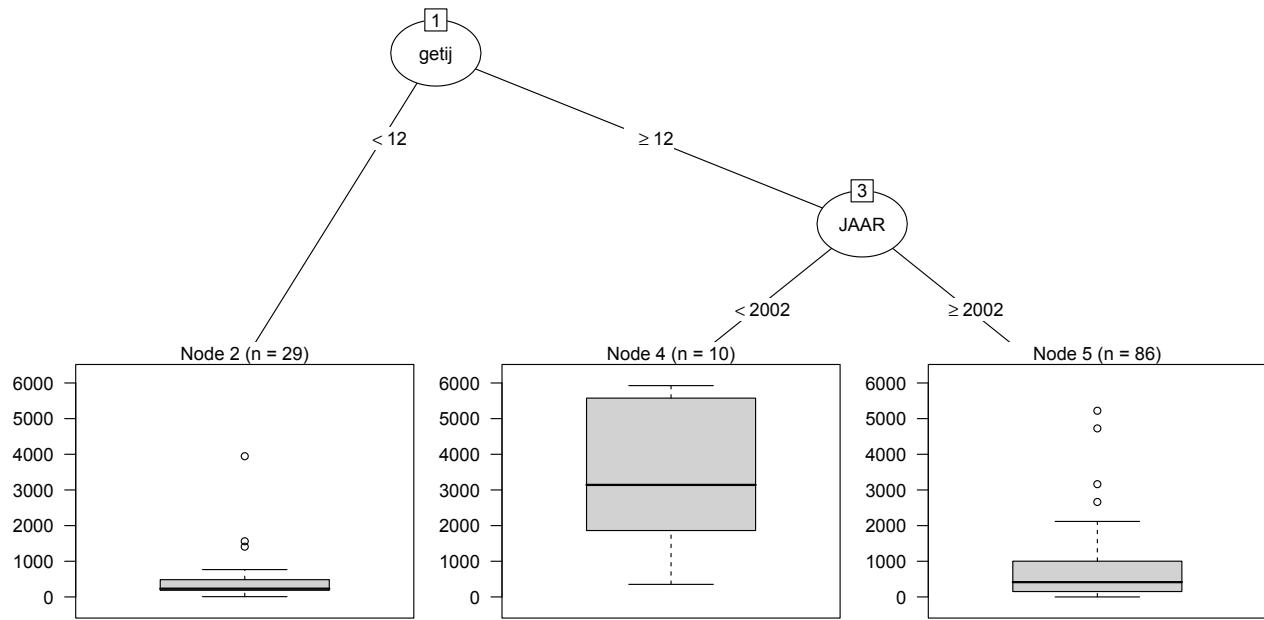
1820 Krakeend Lauwersmeer



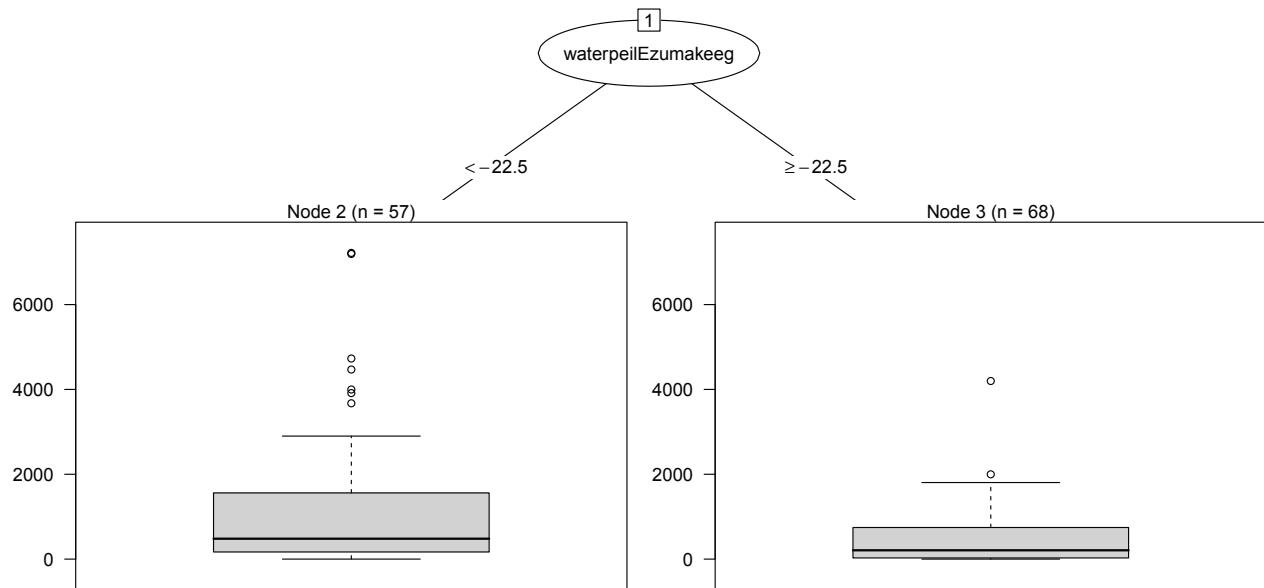
1820 Krakeend Ezumakeeg



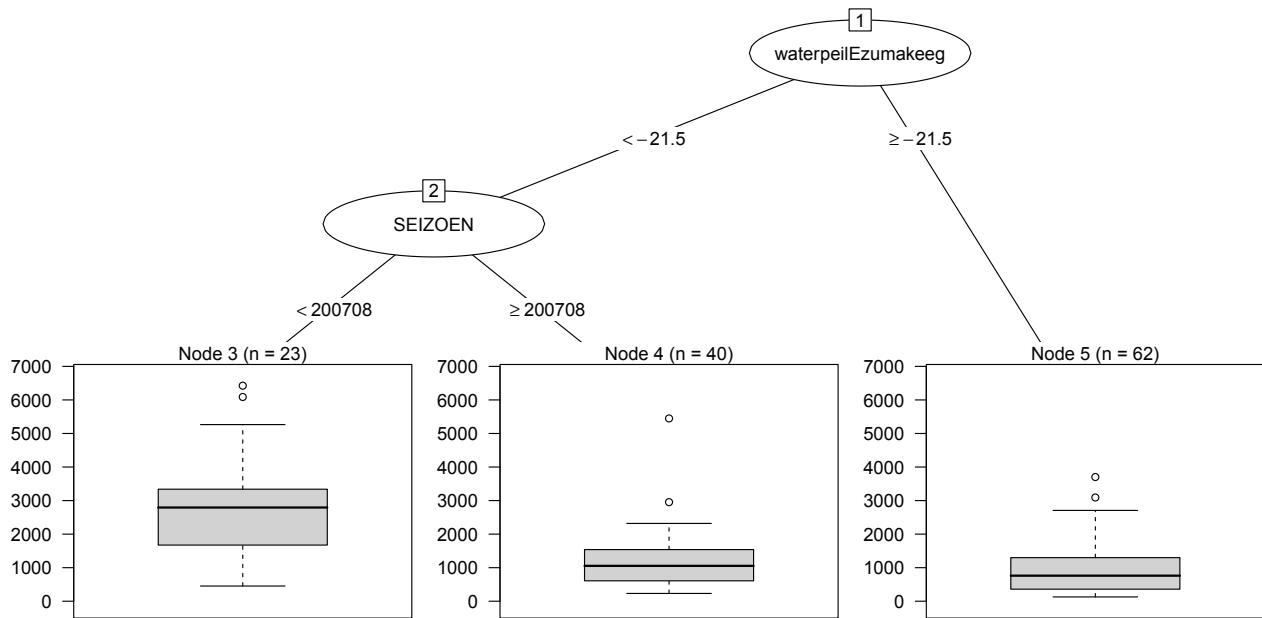
1840 Wintertaling Lauwersmeer



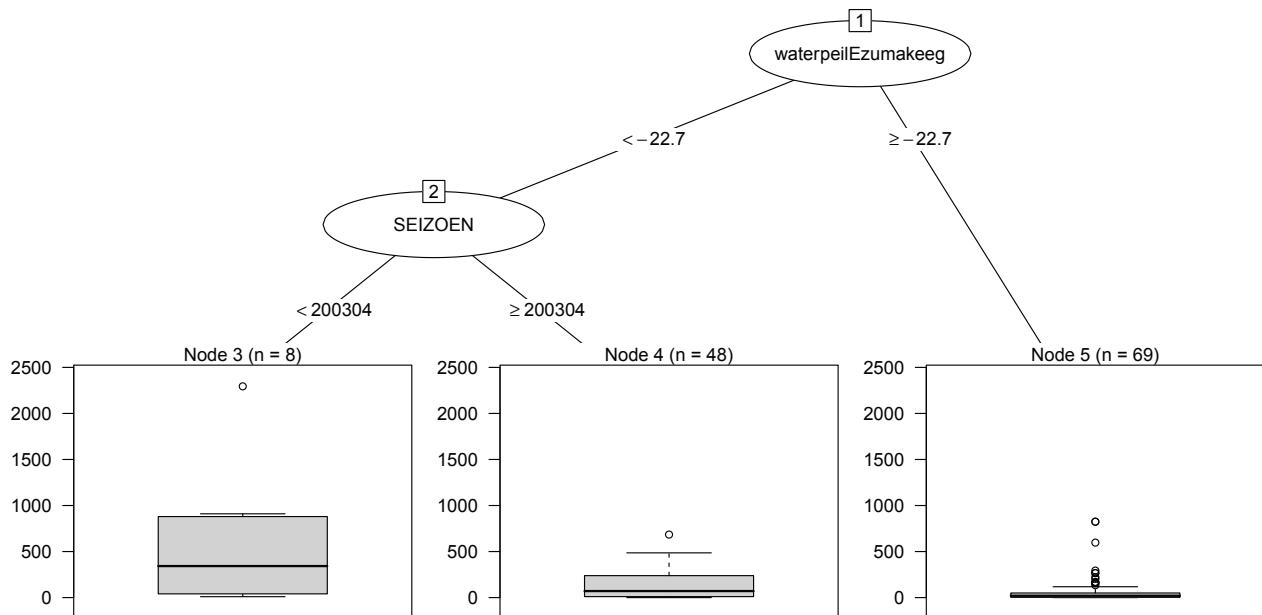
1840 Wintertaling Ezumakeeg



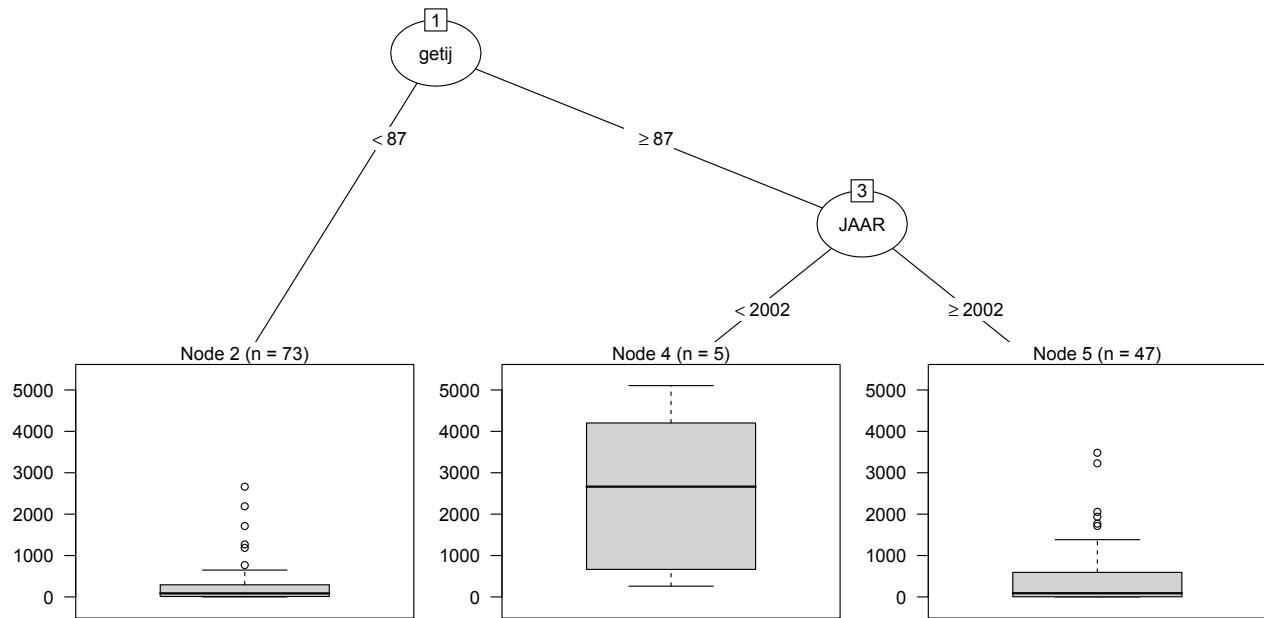
1860 Wilde Eend Lauwersmeer



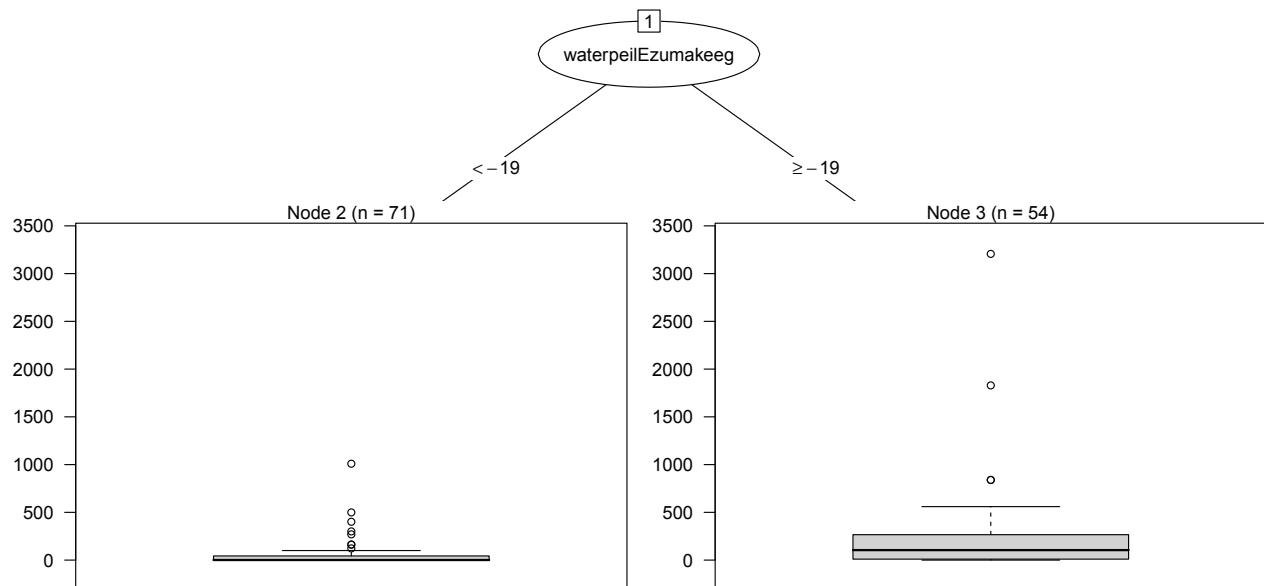
1860 Wilde Eend Ezumakeeg



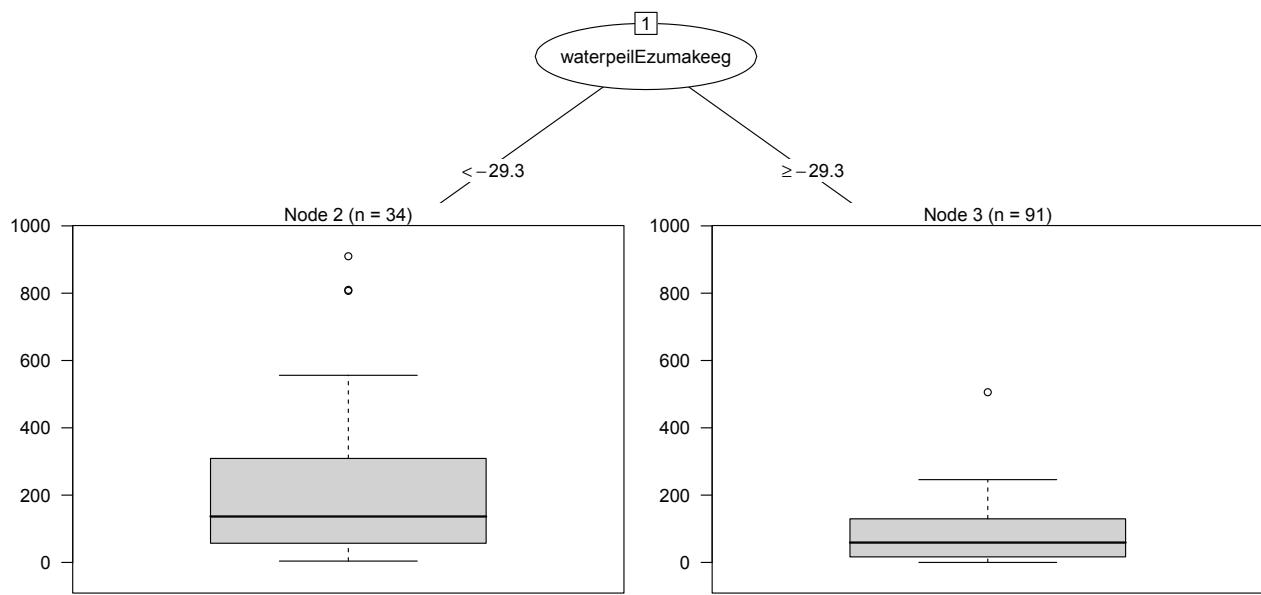
1890 Pijlstaart Lauwersmeer



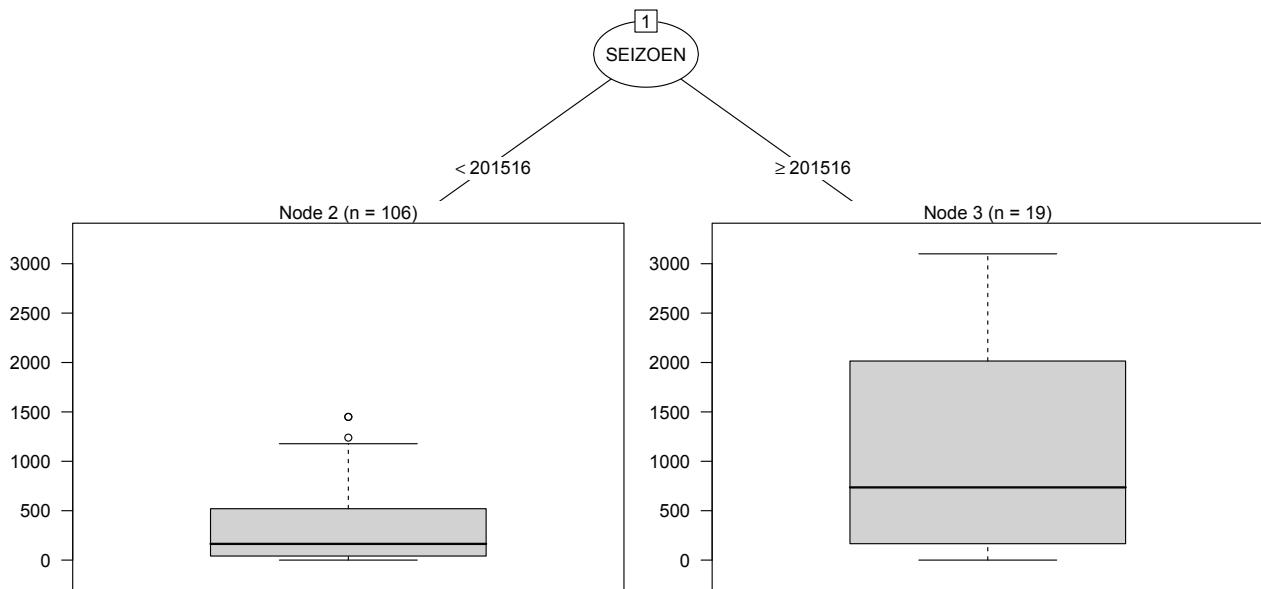
1890 Pijlstaart Ezumakeeg



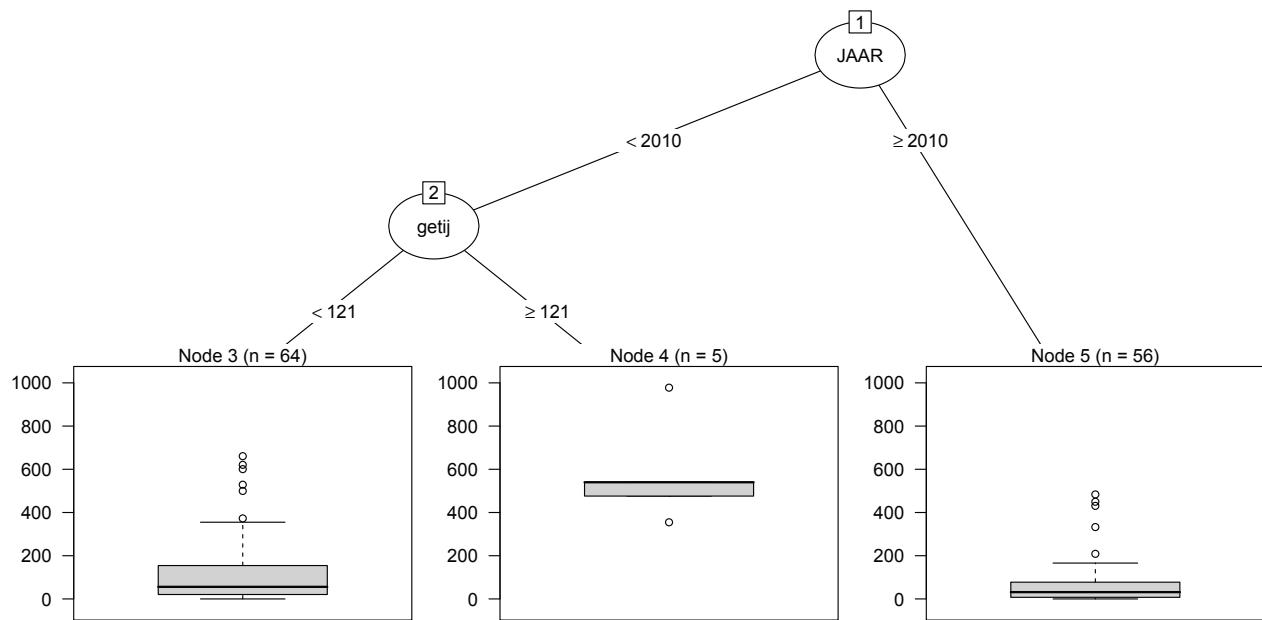
1940 Slobeend Lauwersmeer



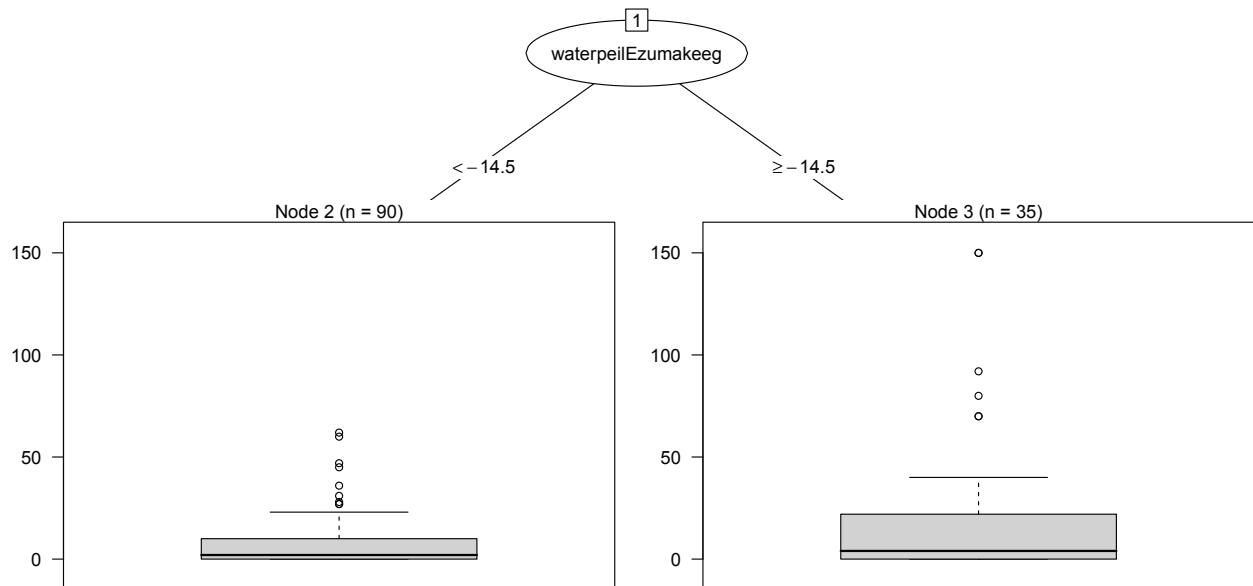
1940 Slobeend Ezumakeeg



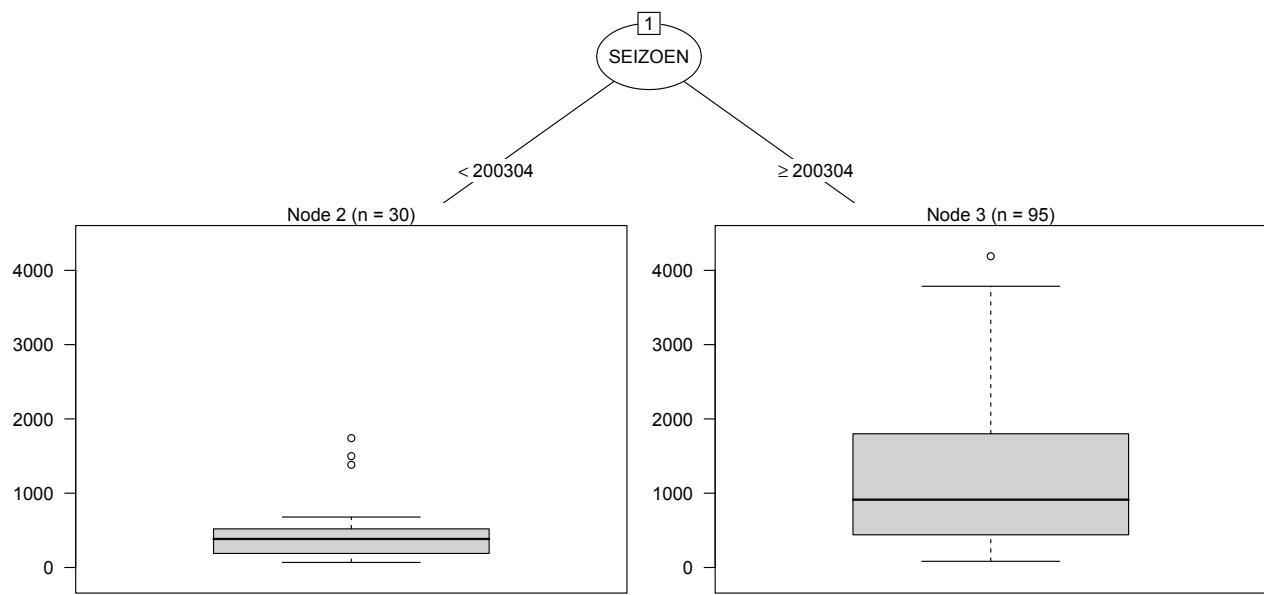
1980 Tafeleend Lauwersmeer



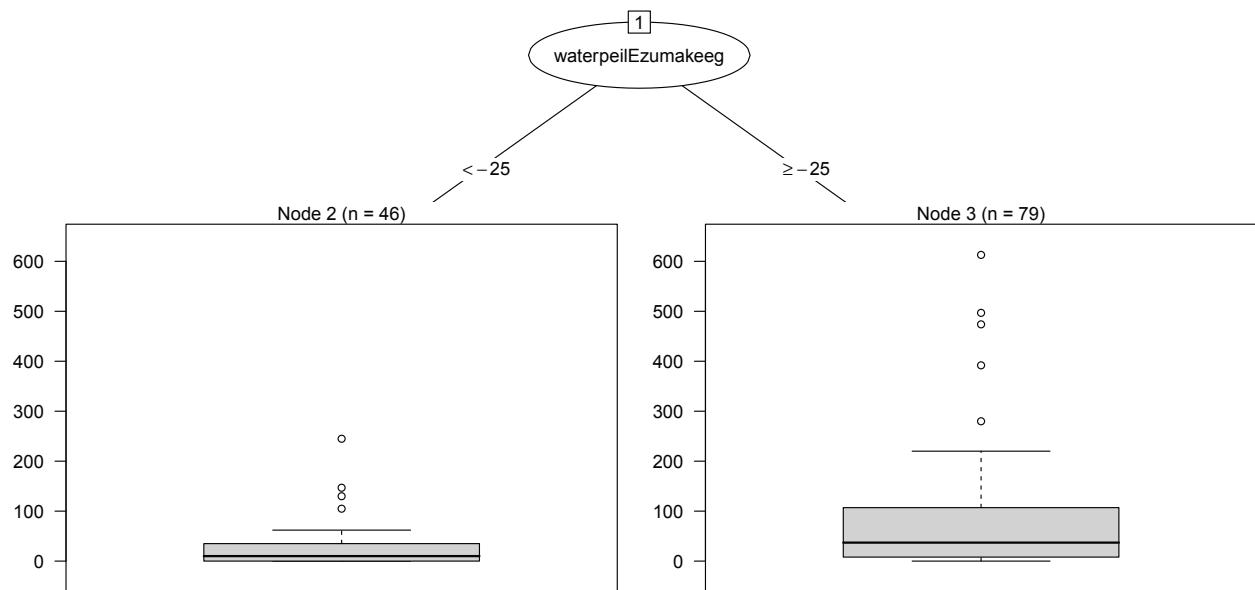
1980 Tafeleend Ezumakeeg



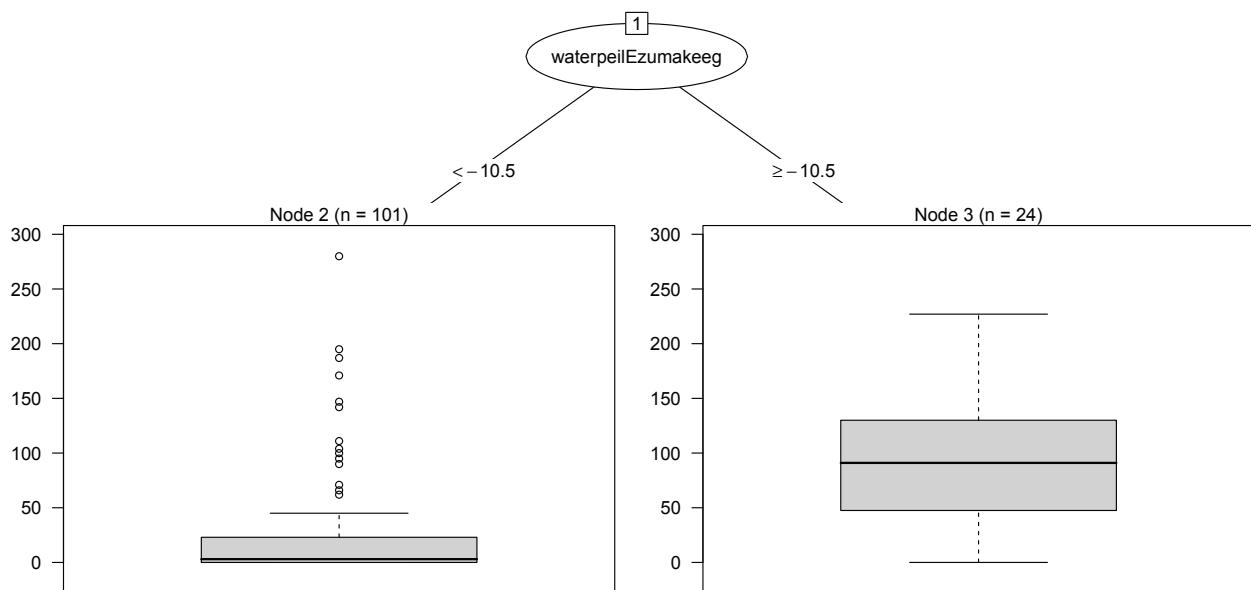
2030 Kuifeend Lauwersmeer



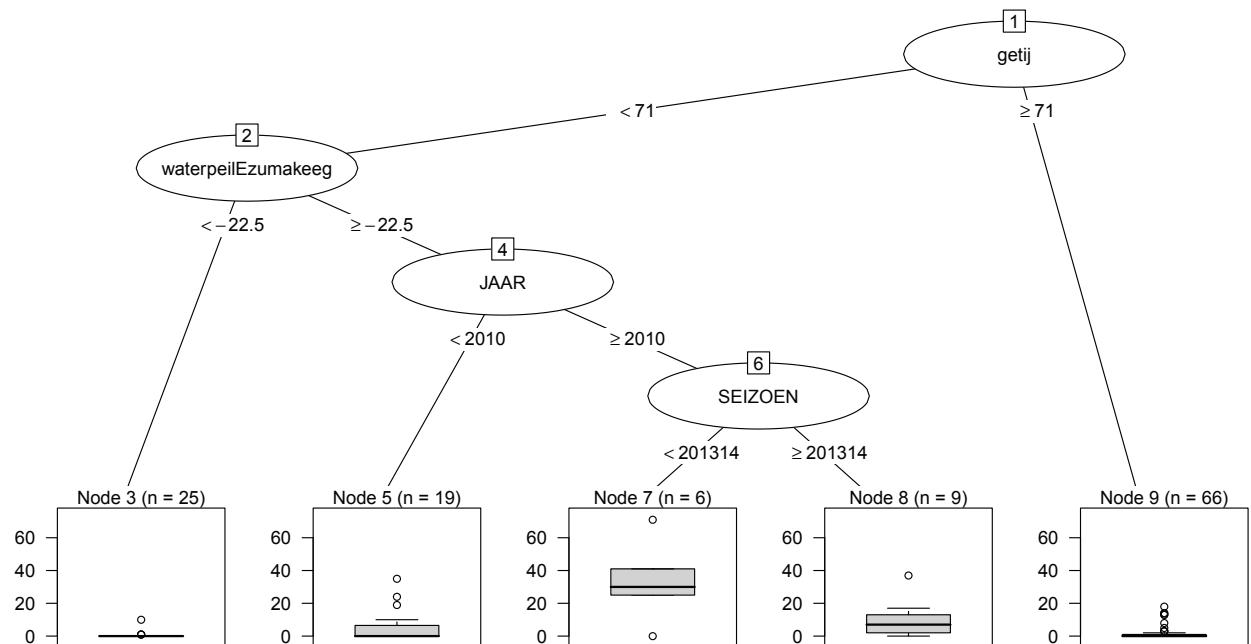
2030 Kuifeend Ezumakeeg



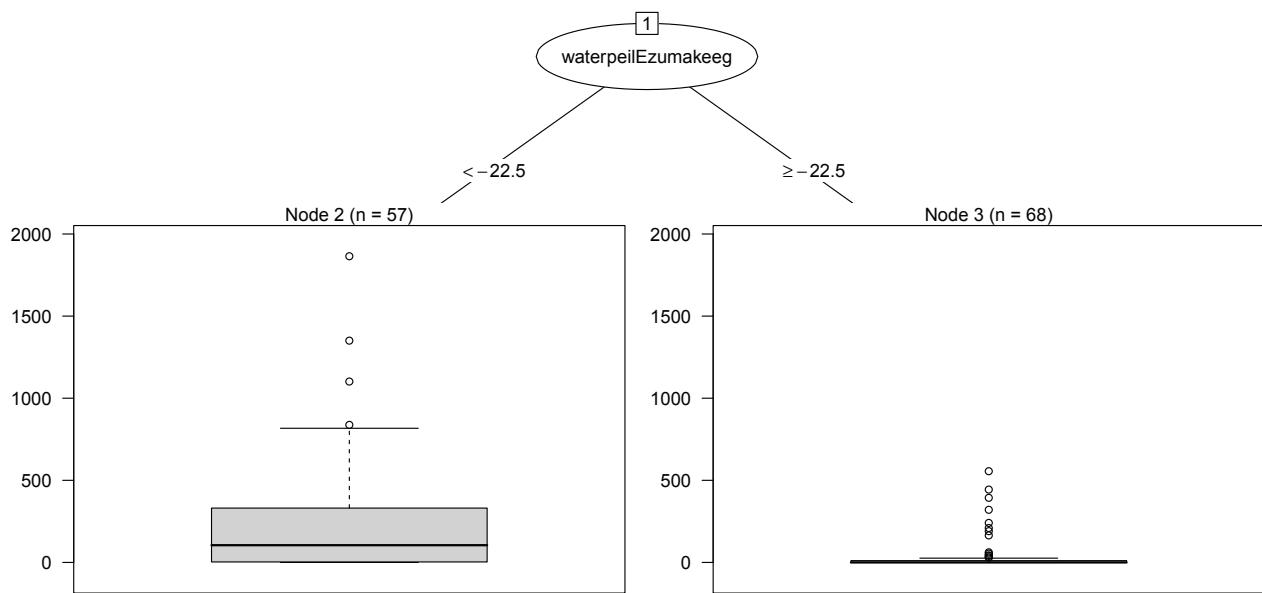
2180 Brilduiker Lauwersmeer



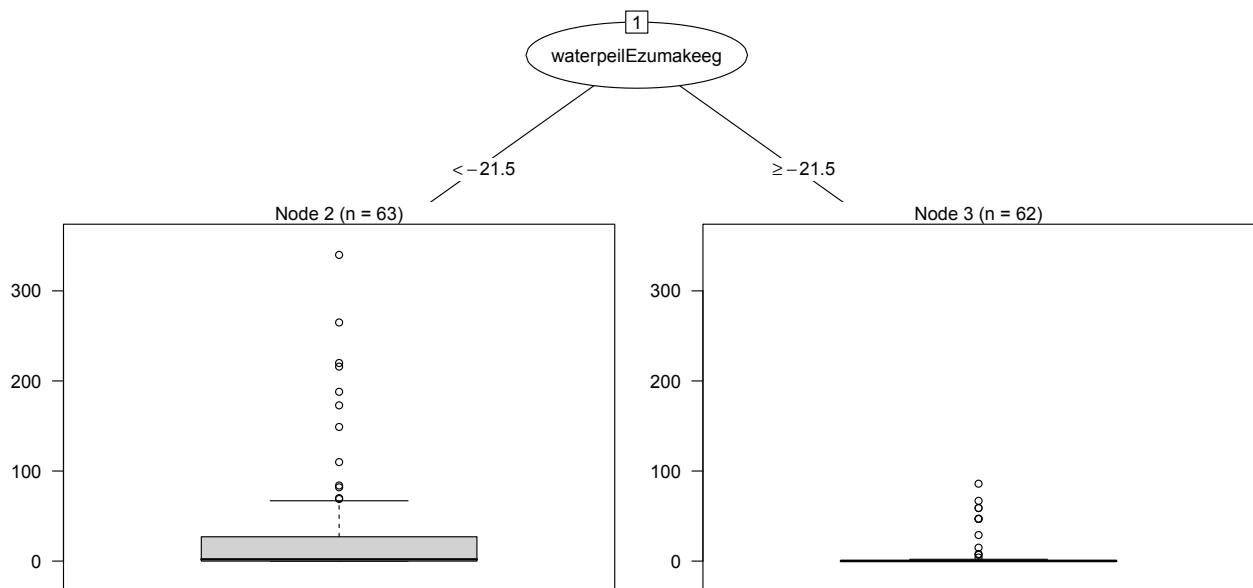
2180 Brilduiker Ezumakeeg



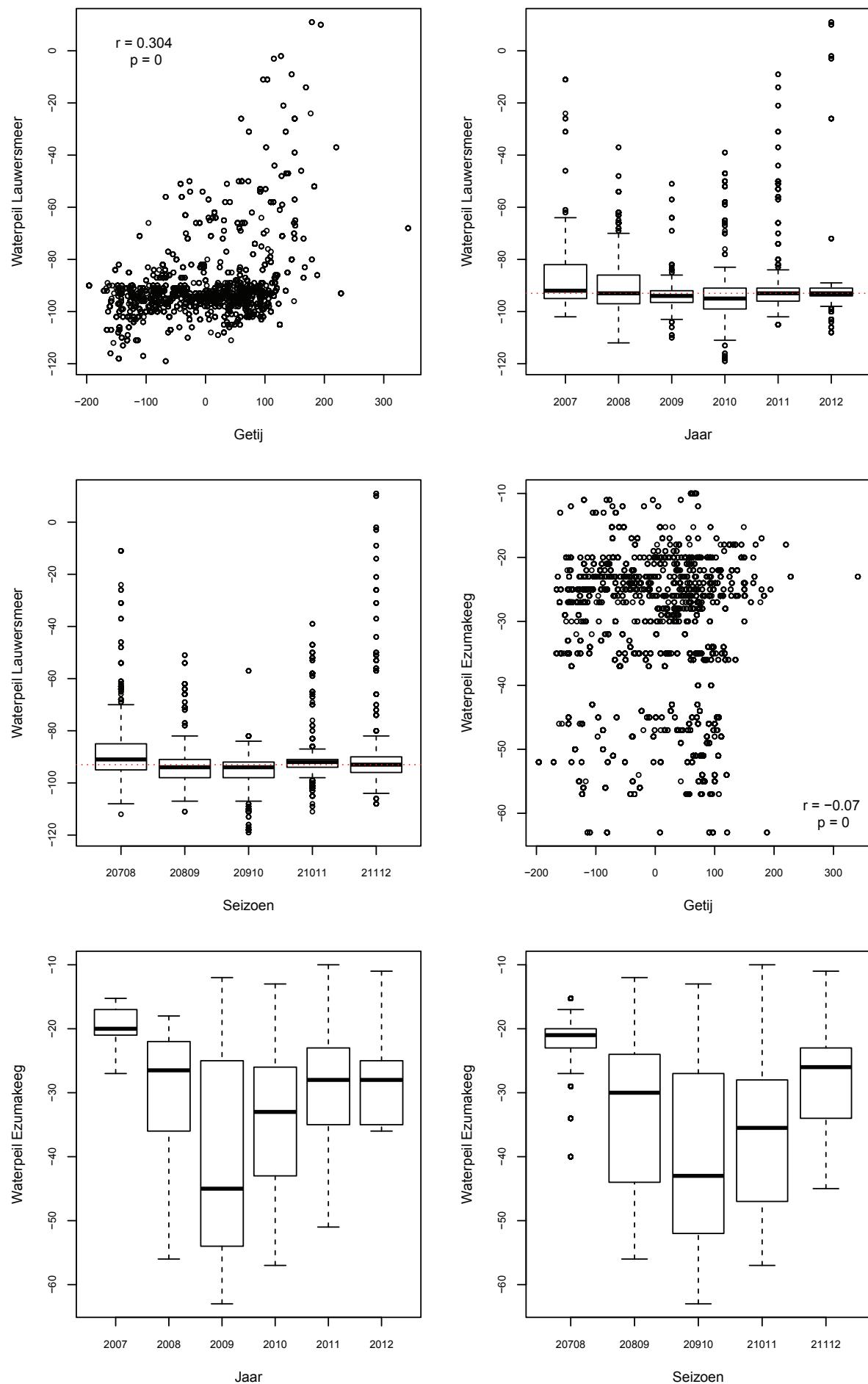
5450 Zwarte Ruiter Lauwersmeer

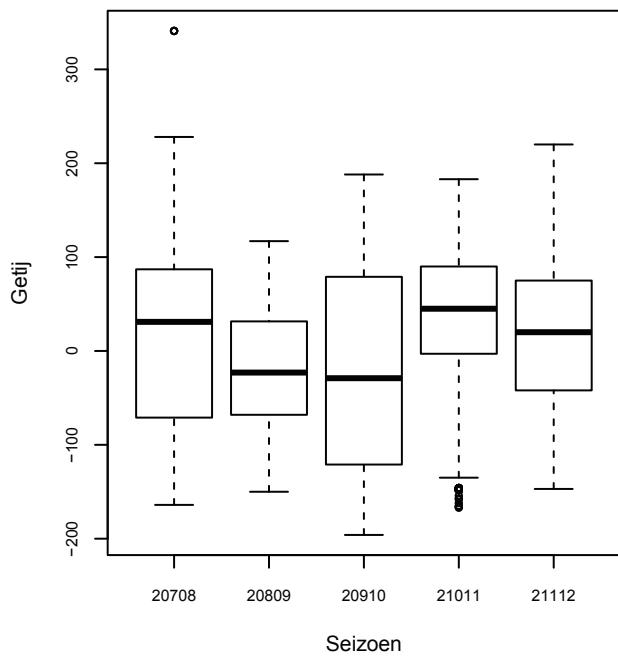
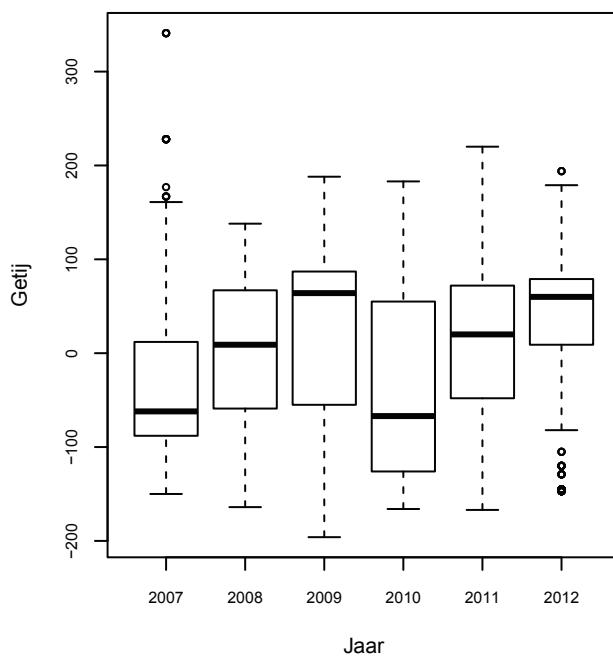
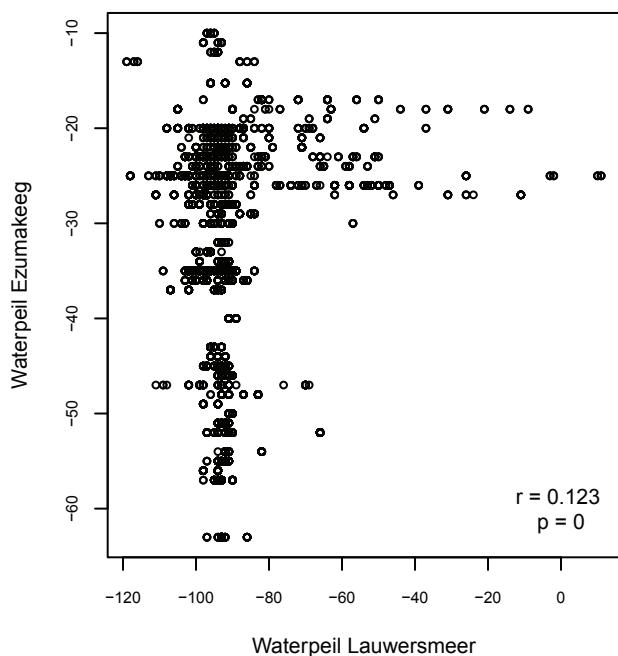


5450 Zwarte Ruiter Ezumakeeg



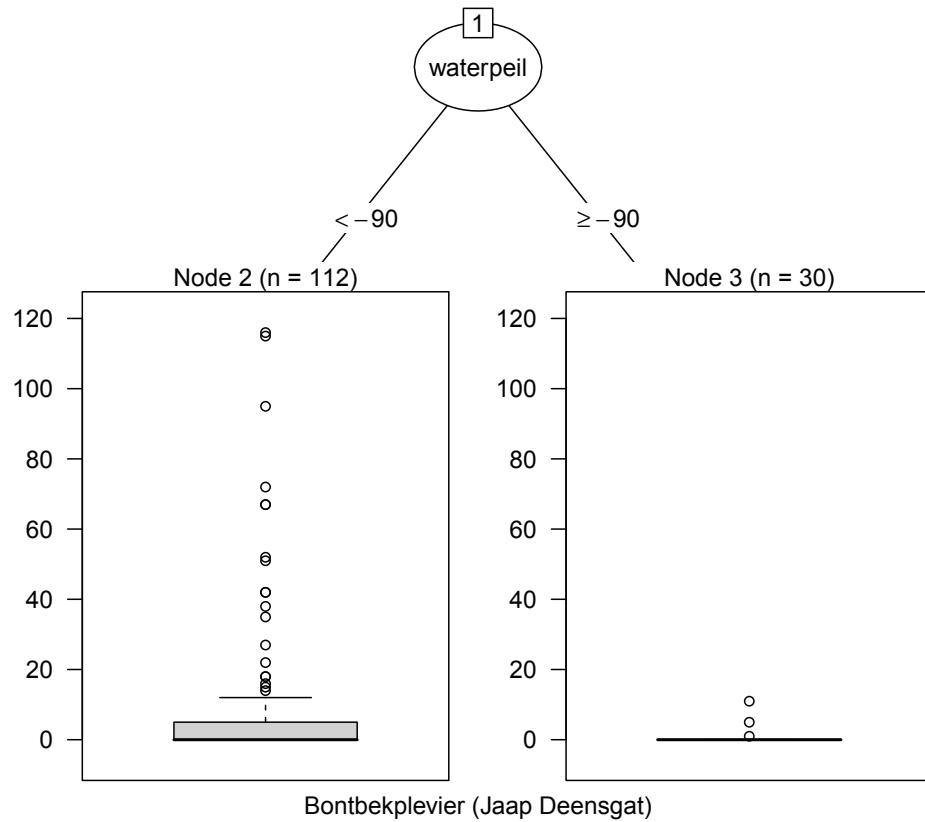
### Bijlage 13c. Gegevensverkenning waterstanden t.b.v. analyse slaapplaatsdata



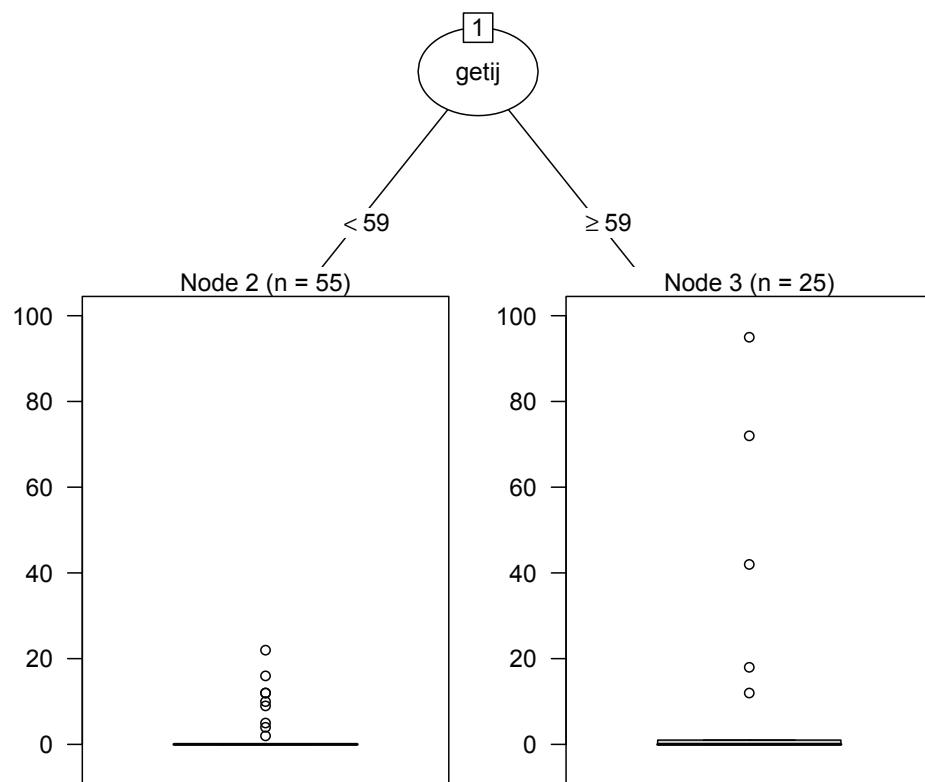


**Bijlage 13d. Regressiebomen voor 9 soorten op slaapplaatsen met de waterstanden van Lauwersmeer, Ezumakeeg en Waddenzee als verklarende variabelen.**

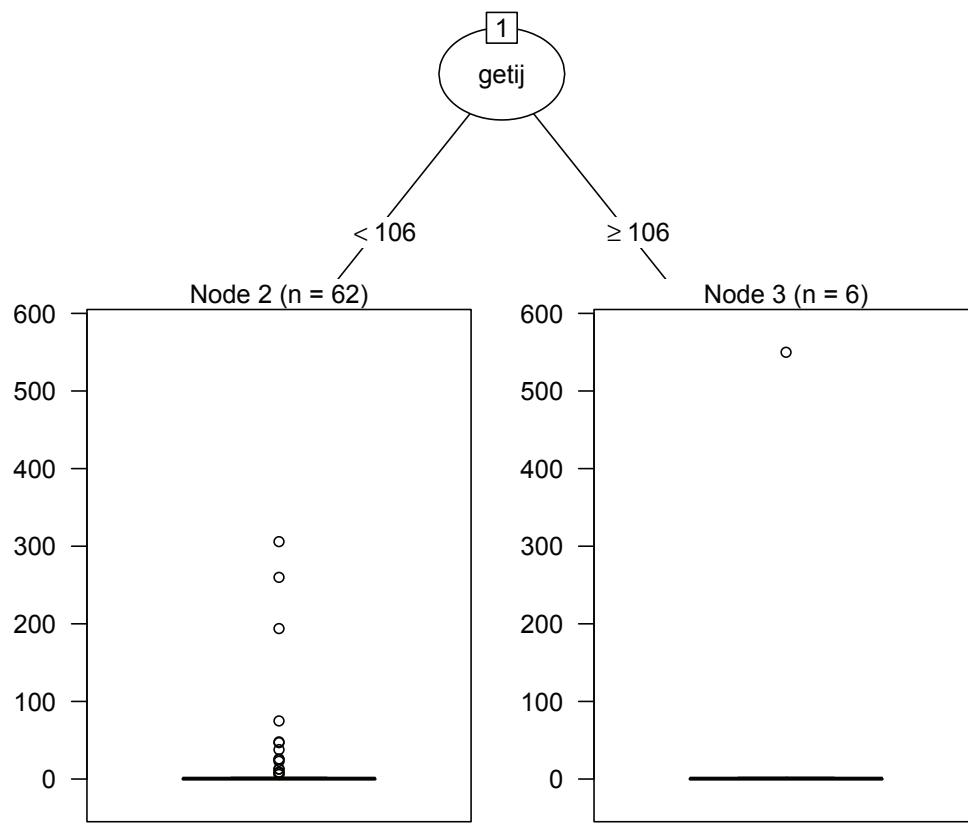
Bontbekplevier (Lauwersmeer)



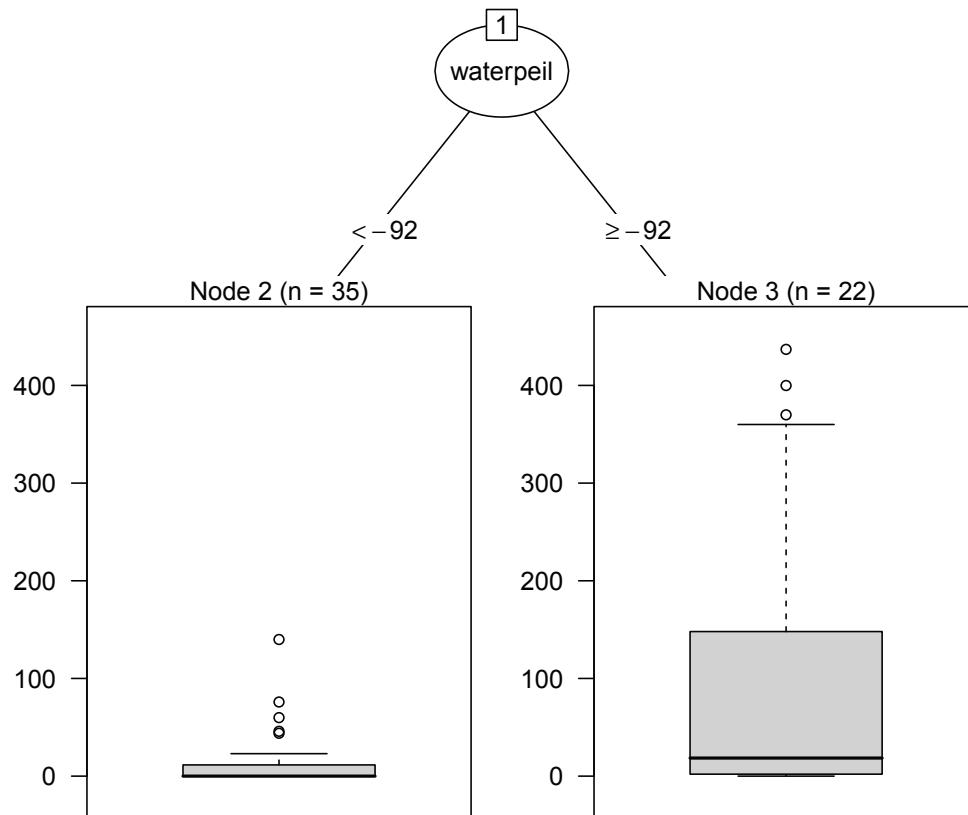
Bontbekplevier (Jaap Deensgat)



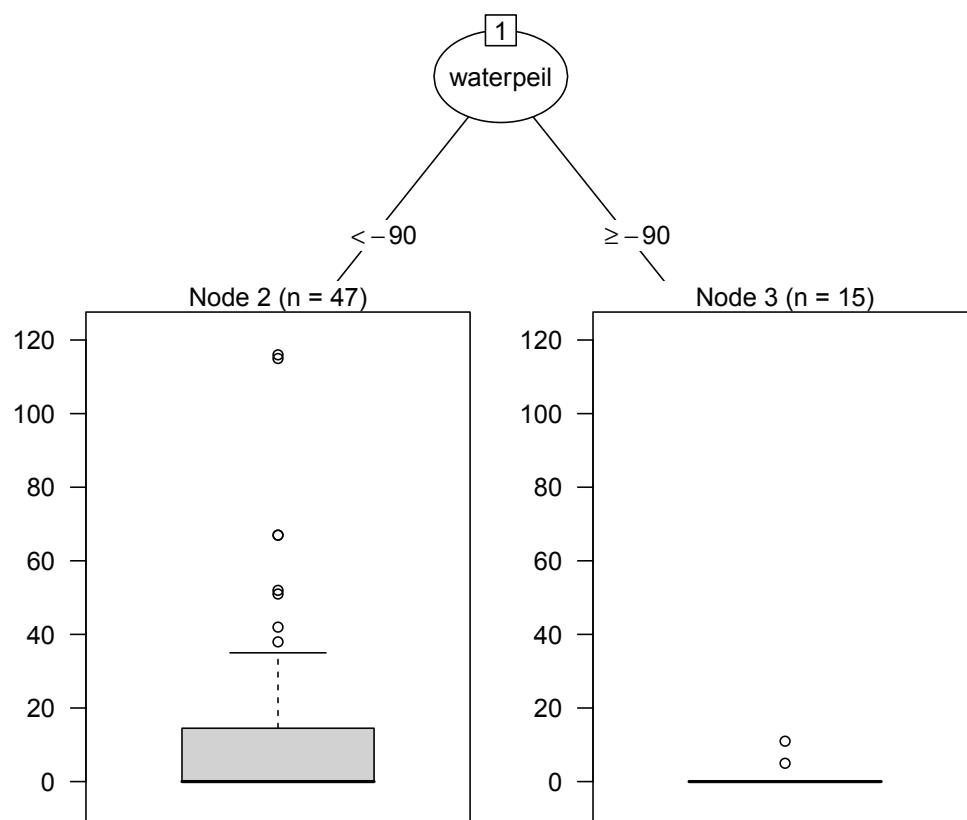
Bontbekplevier (Ezumakeeg Zuid)



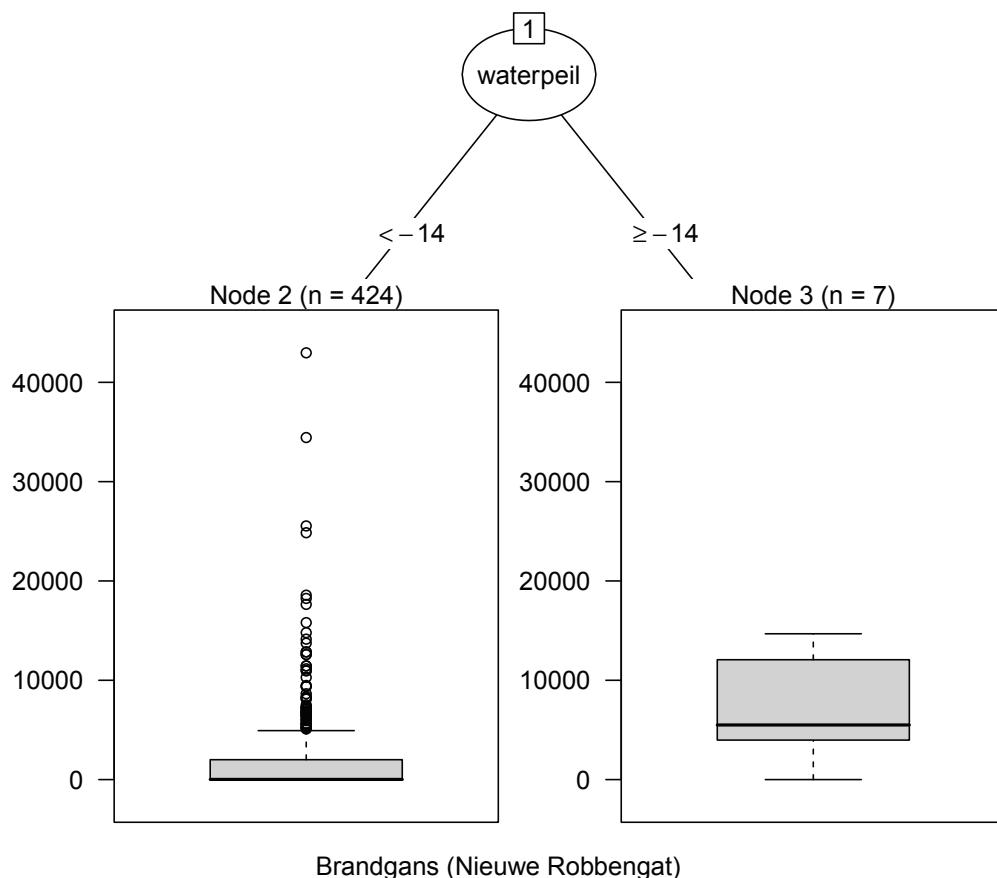
Bontbekplevier (Ezumakeeg Noord)



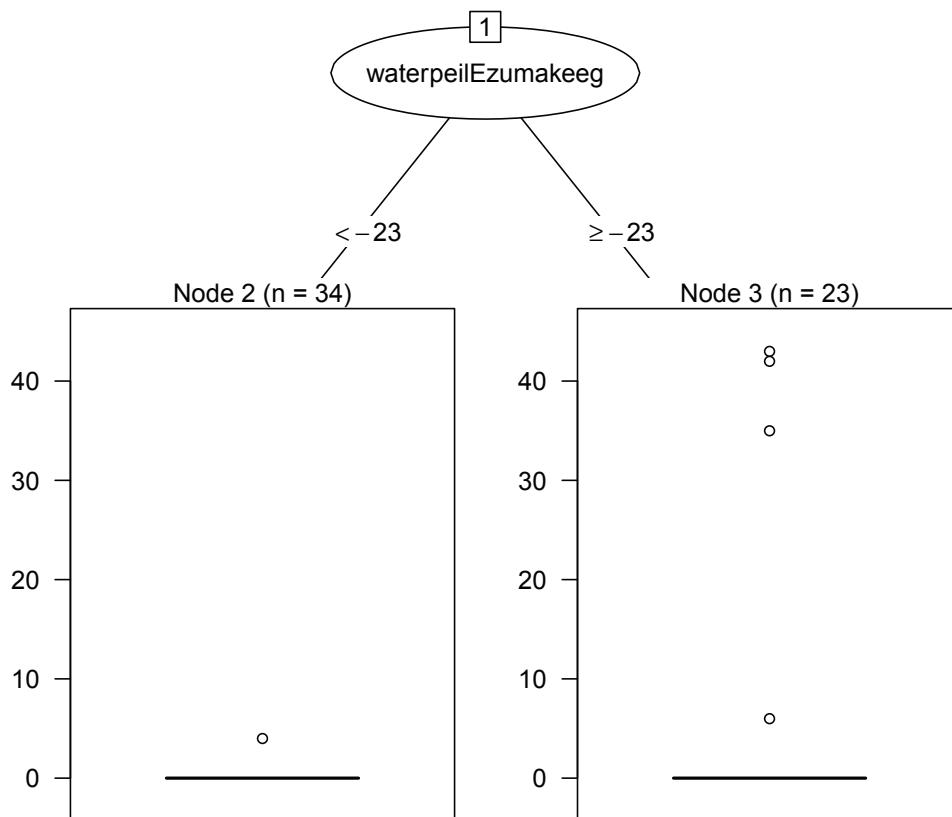
Bontbekplevier (Achter de Zwartens)



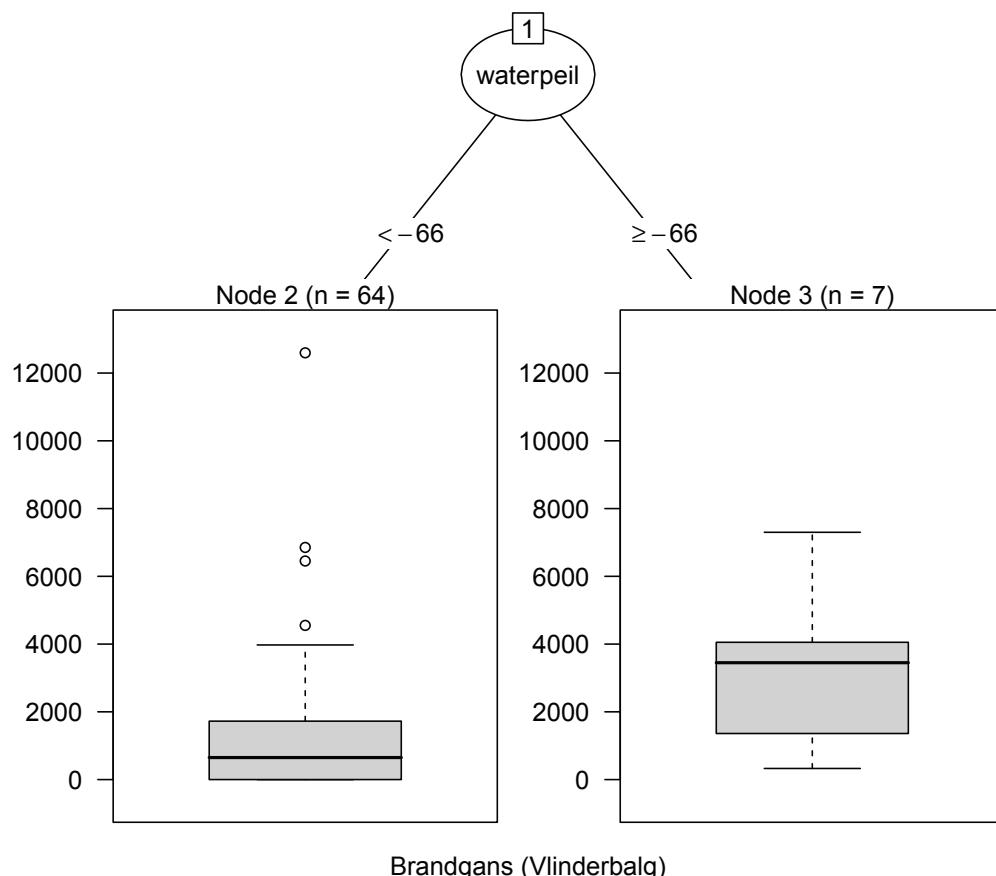
Brandgans (Lauwersmeer)



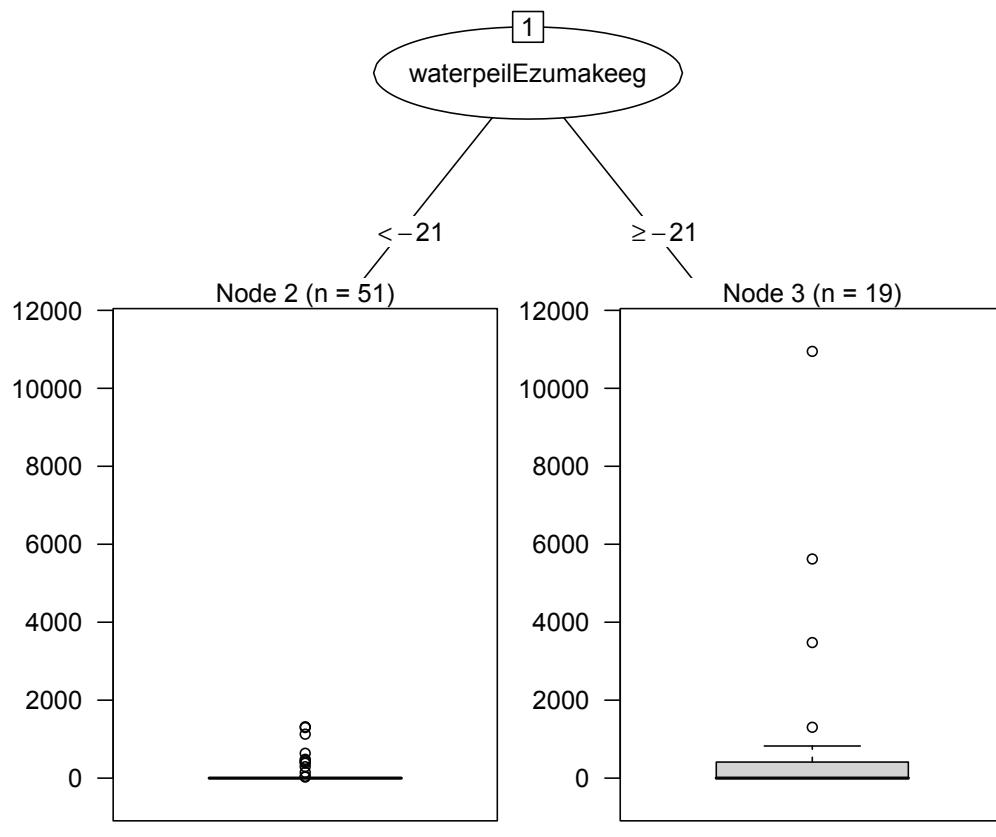
Brandgans (Nieuwe Robbengat)



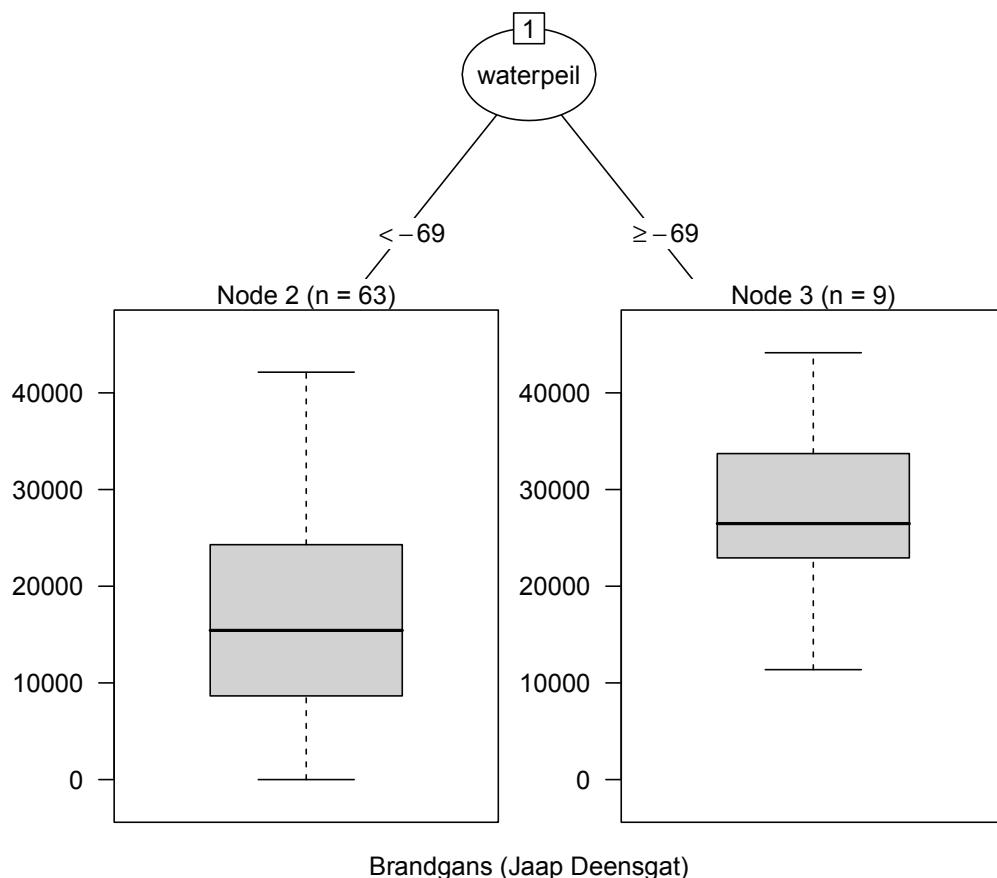
## Brandgans (Oude Robbengat)



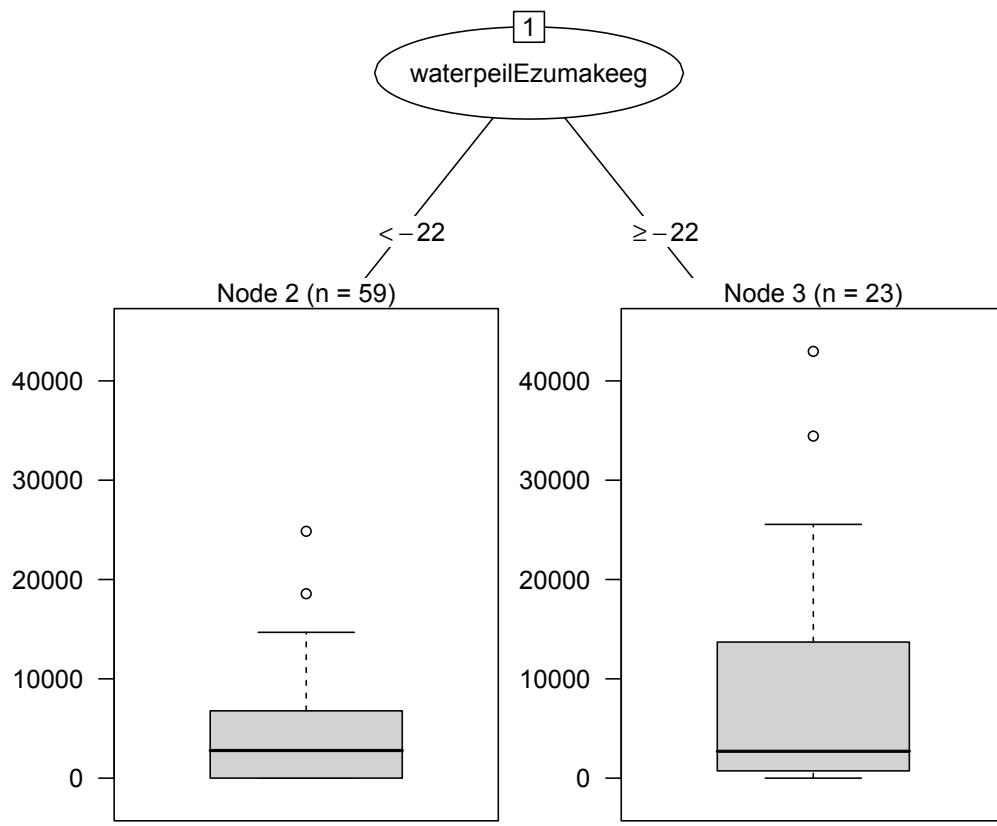
## Brandgans (Vlinderbalg)



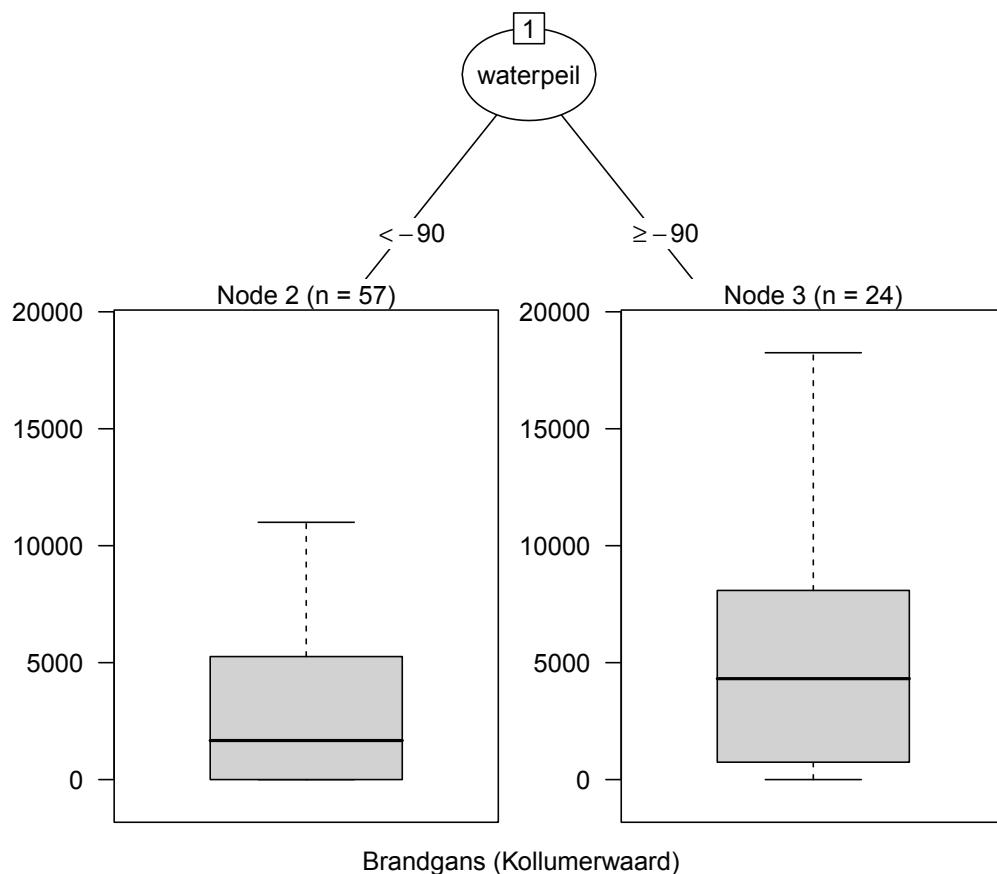
Brandgans (Ezumakeeg)



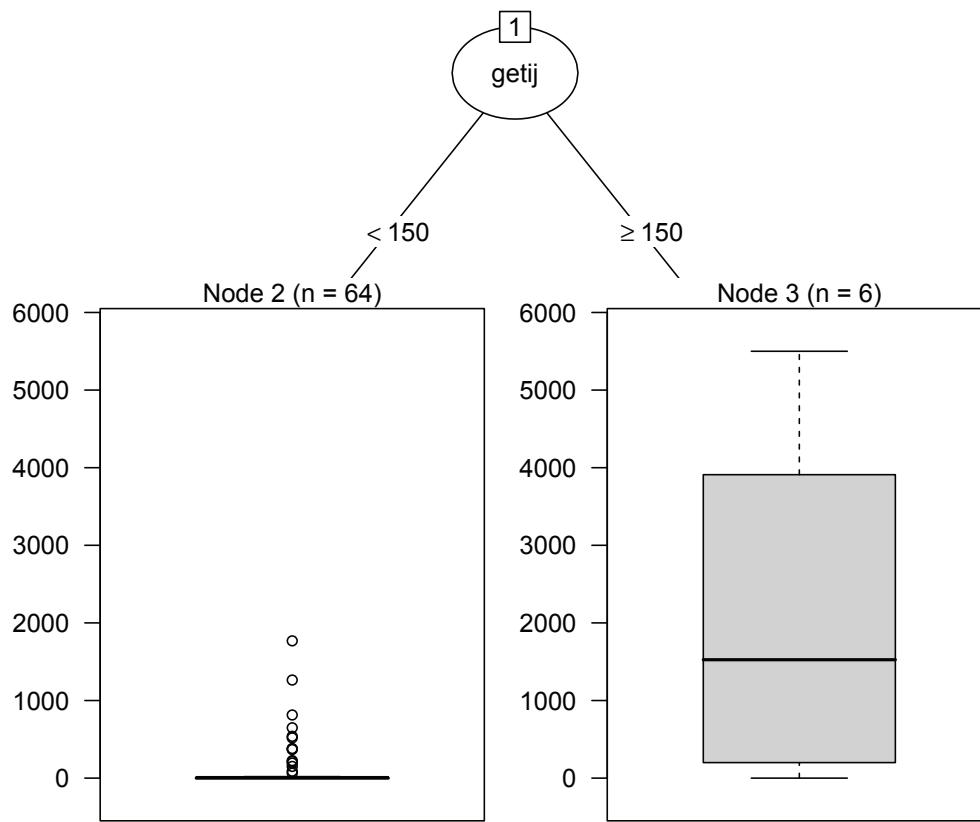
Brandgans (Jaap Deensgat)



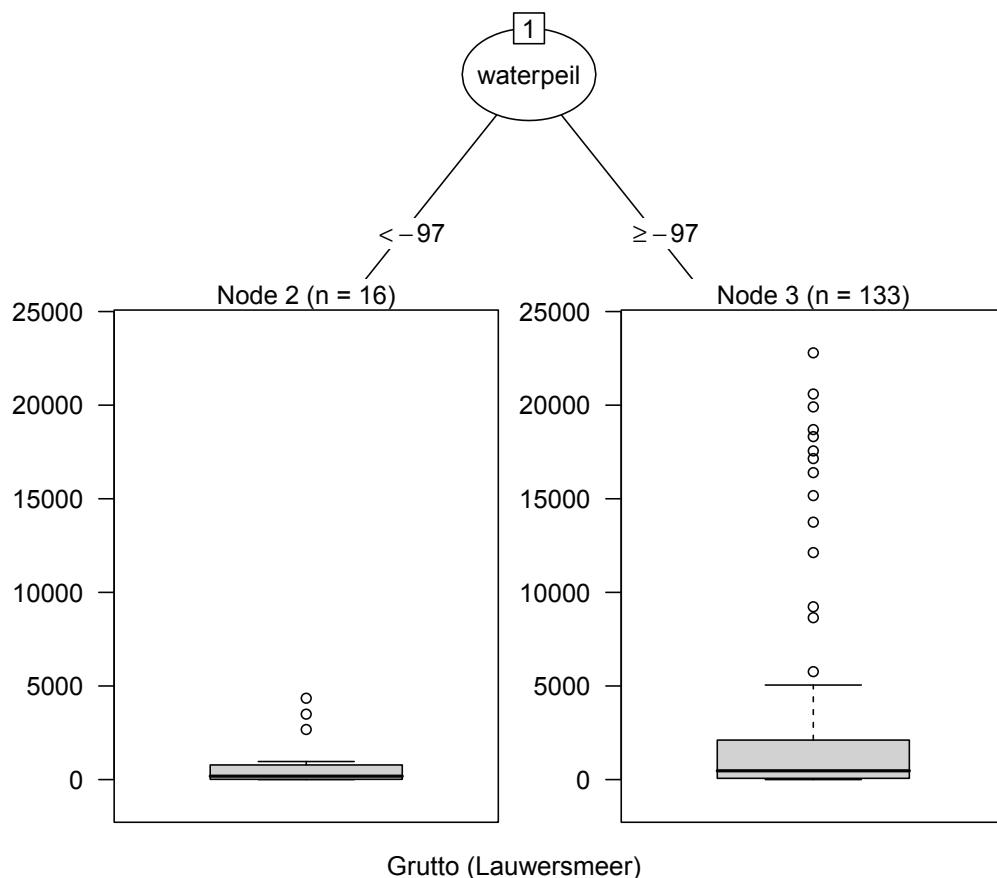
Brandgans (Achter de Zwartens)



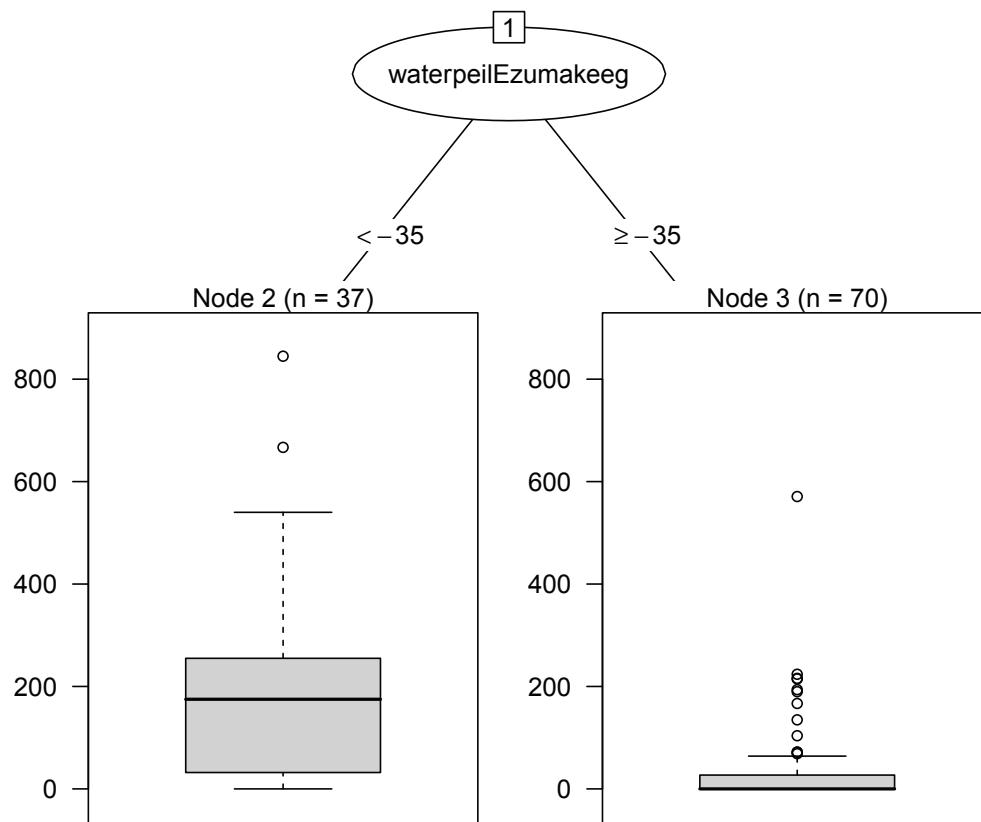
Brandgans (Kollumerwaard)



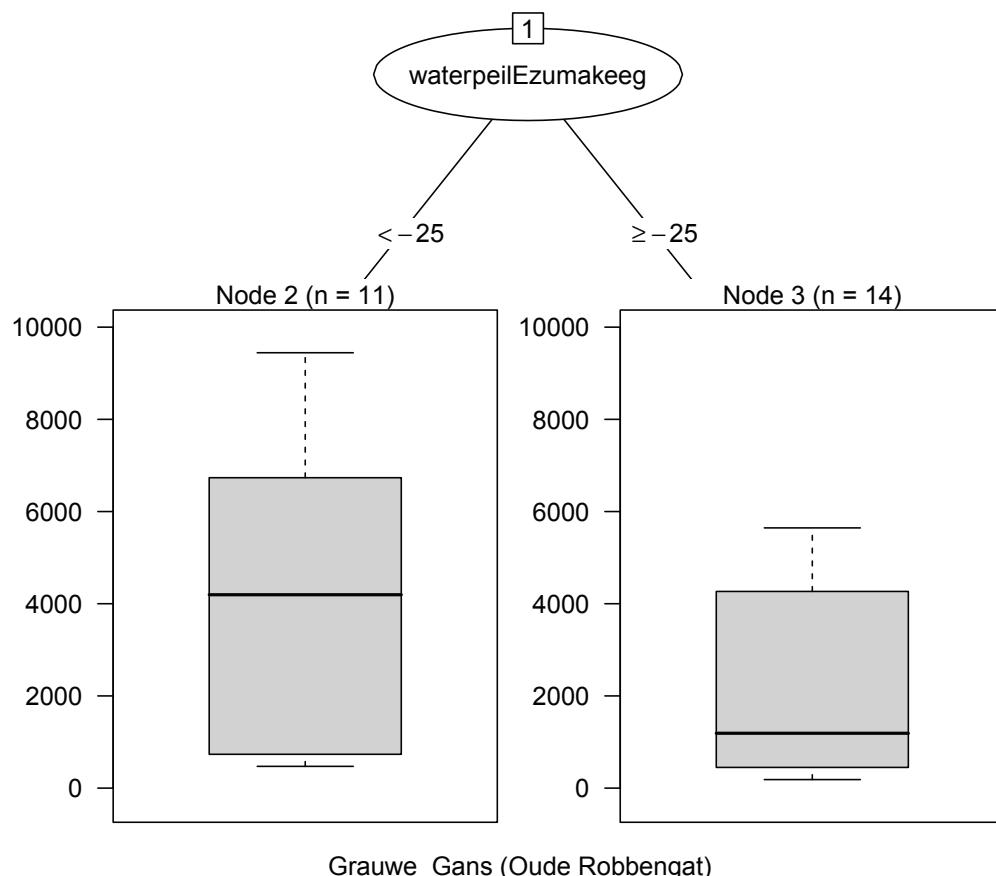
Grauwe\_Gans (Lauwersmeer)



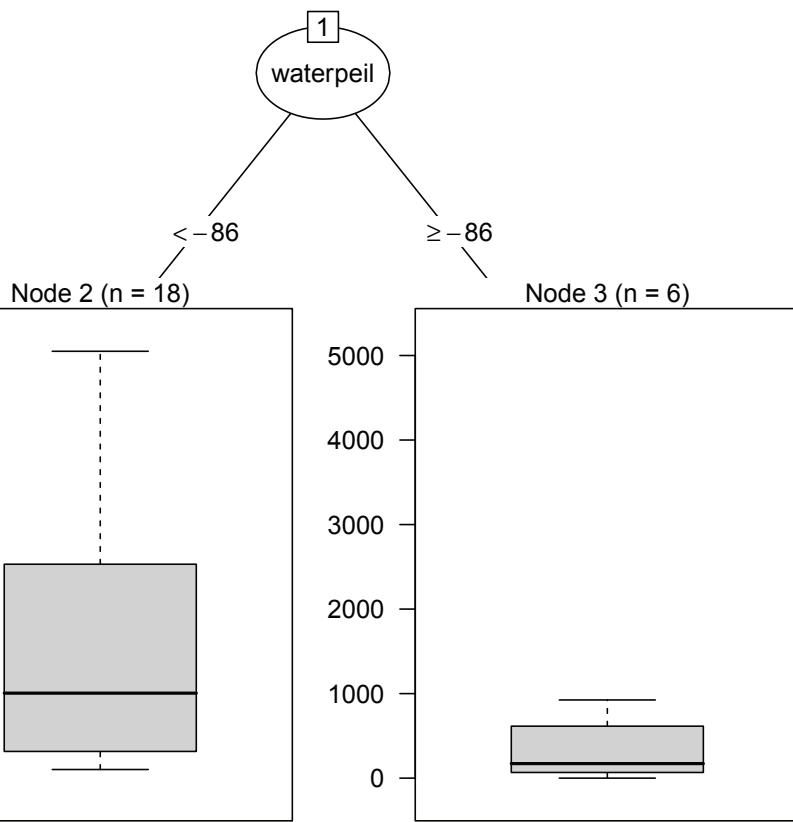
Grutto (Lauwersmeer)



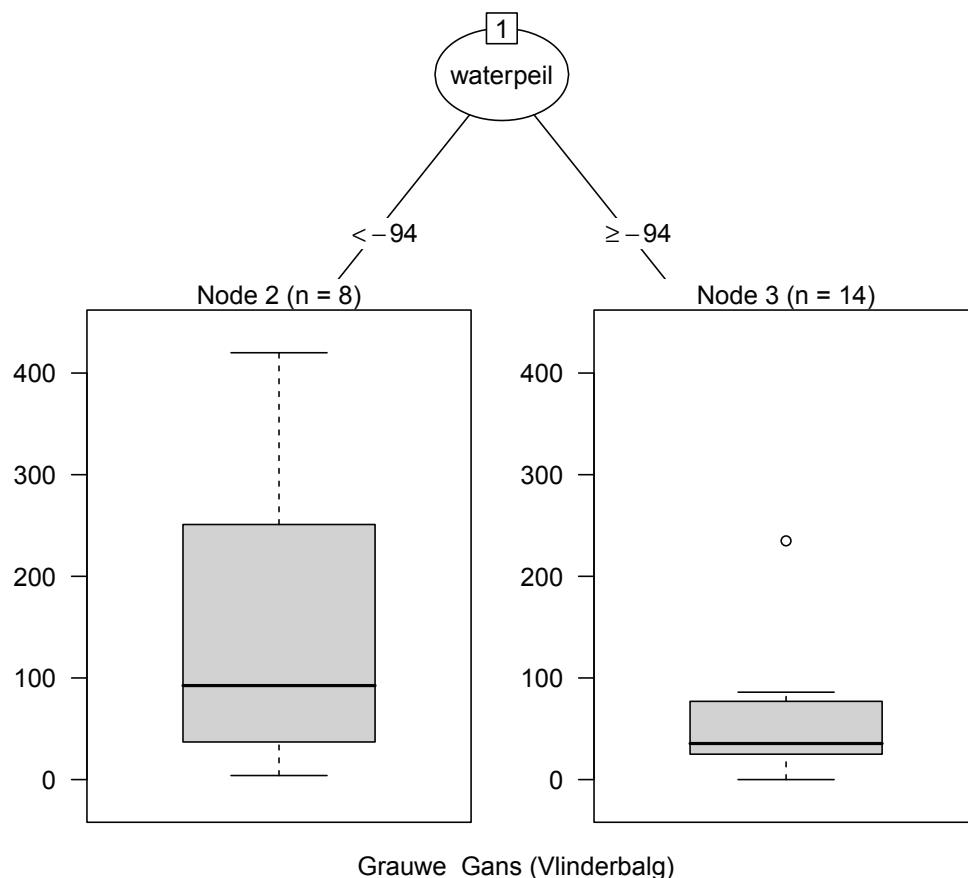
Grauwe\_Gans (Ezumakeeg)



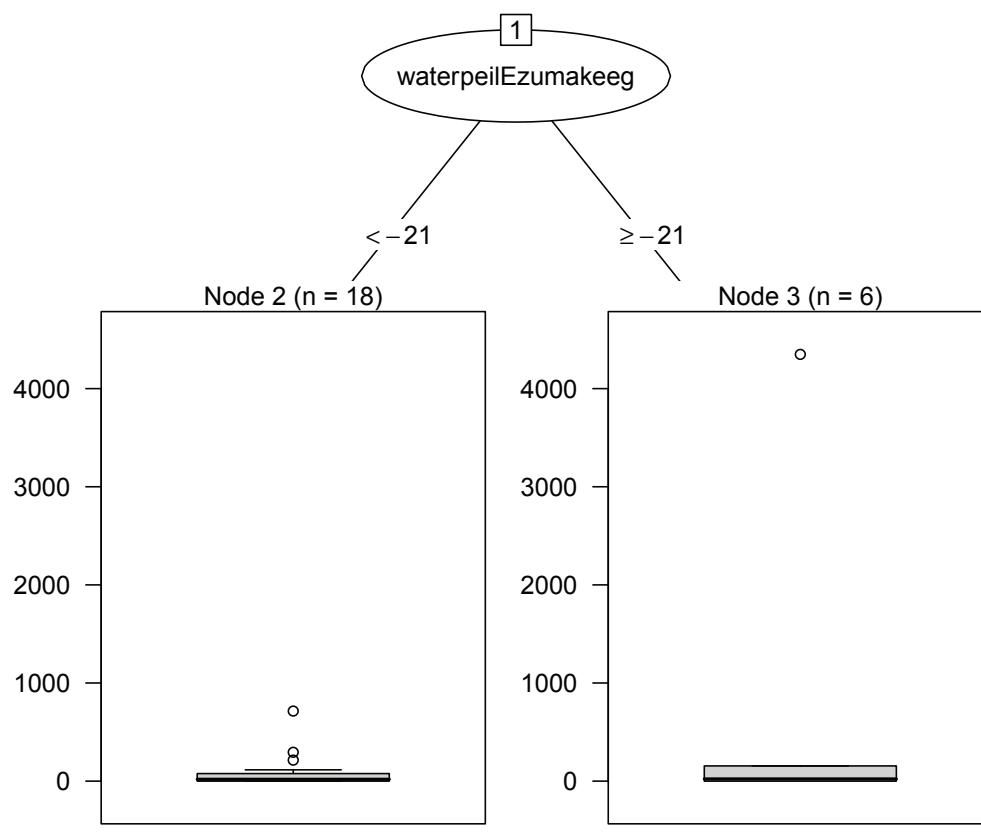
Grauwe\_Gans (Oude Robbengat)



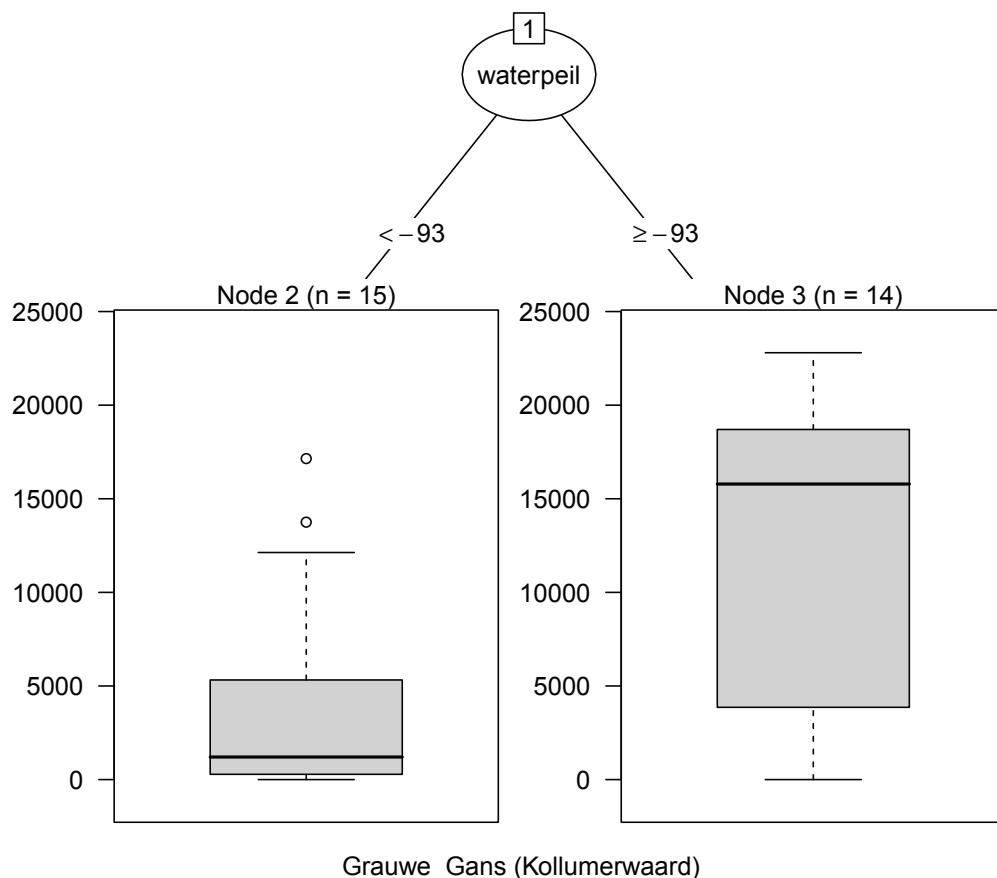
Grauwe\_Gans (Nieuwe Robbengat)



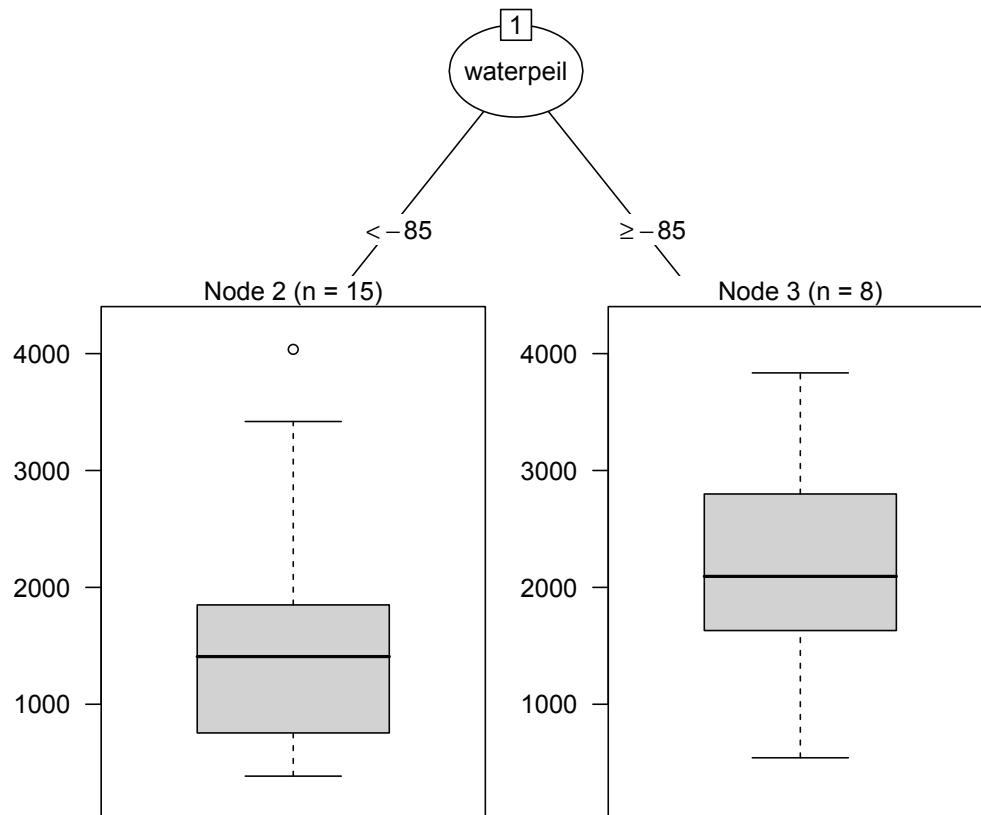
Grauwe\_Gans (Vlinderbalg)



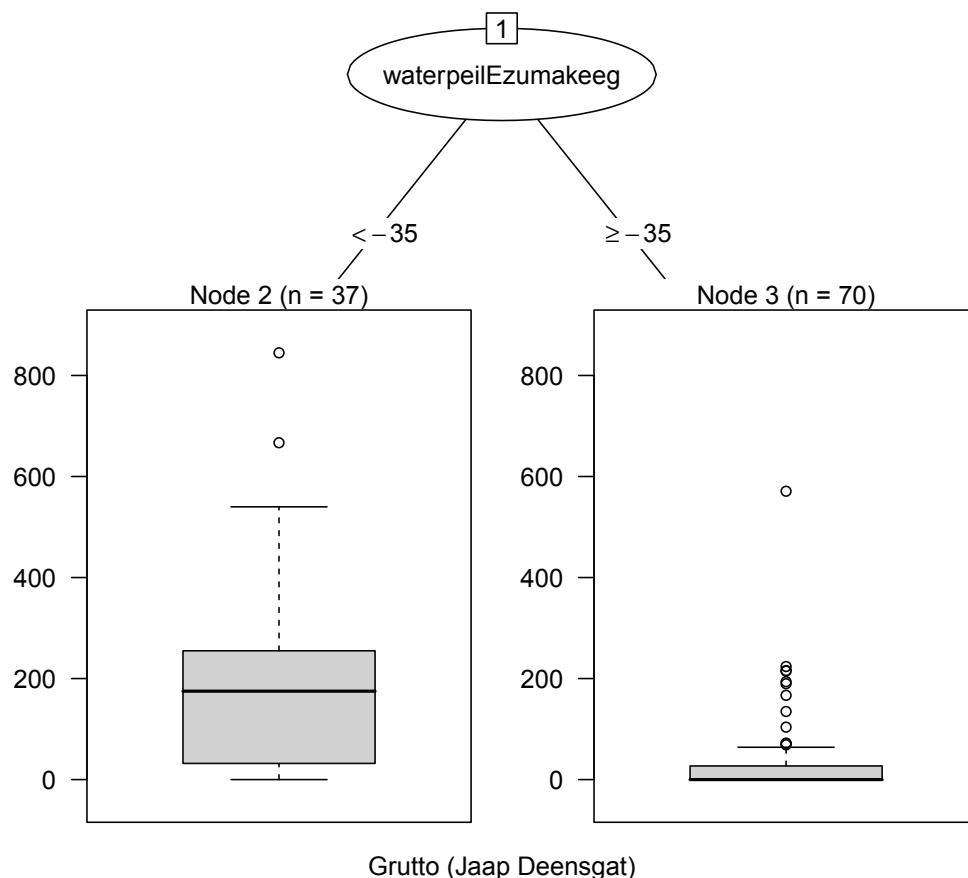
Grauwe\_Gans (Jaap Deensgat)



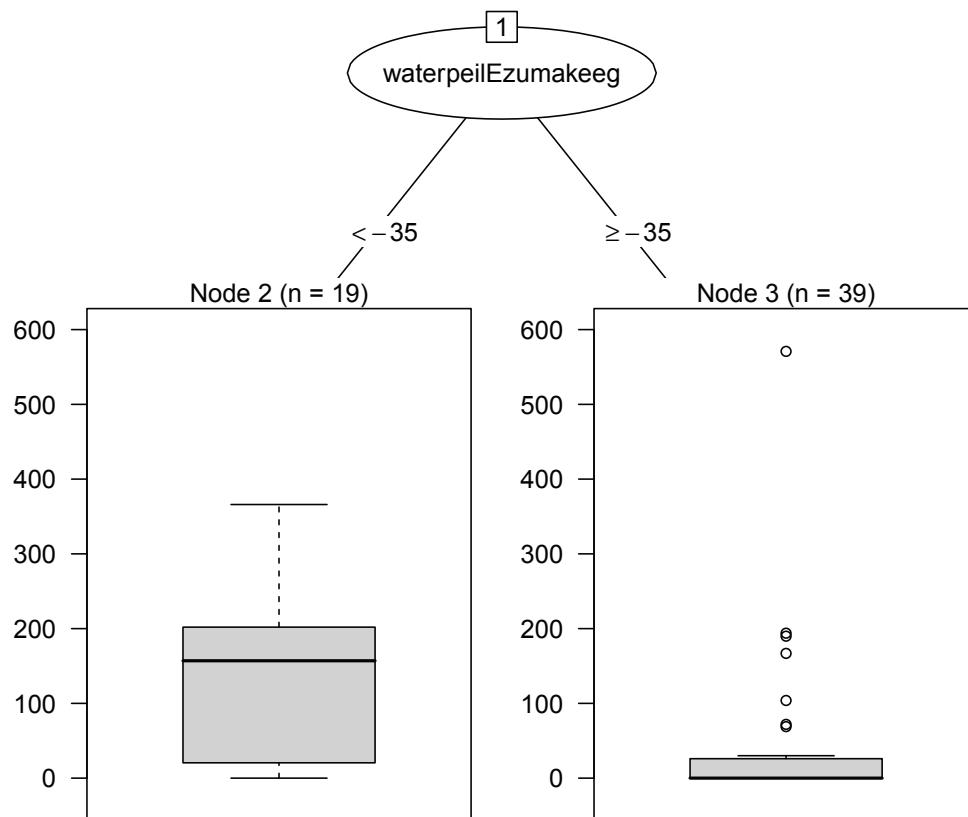
Grauwe\_Gans (Kollumerwaard)



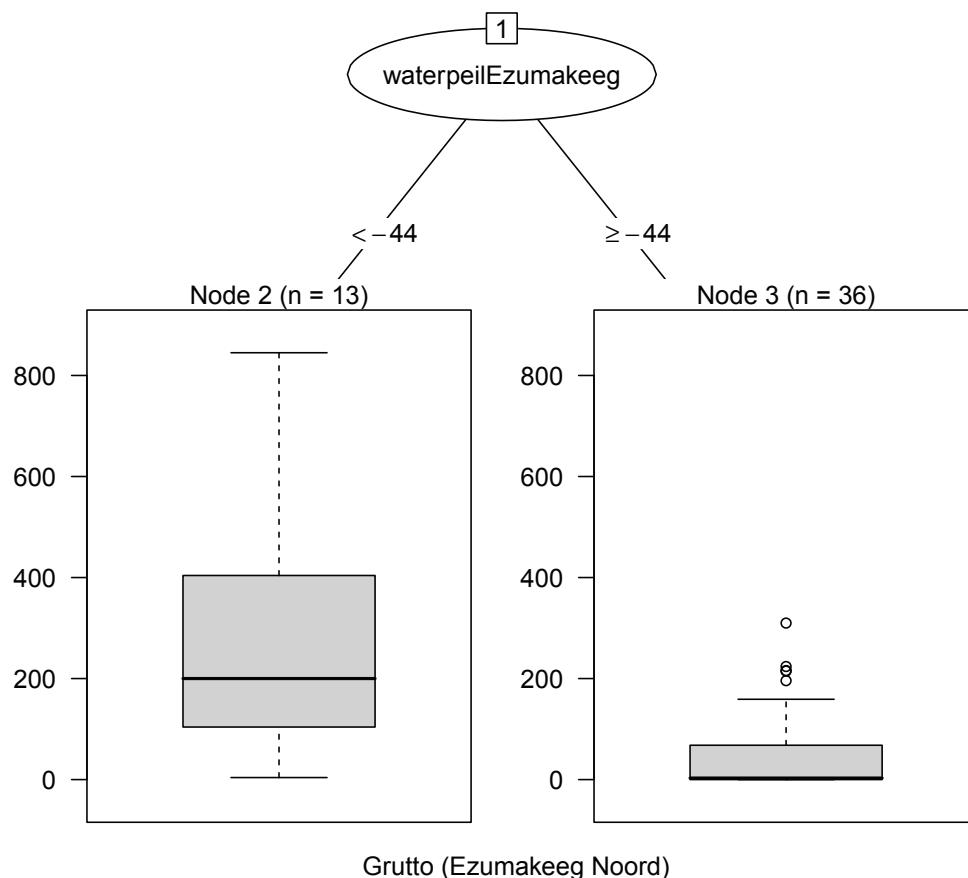
Grutto (Lauwersmeer)



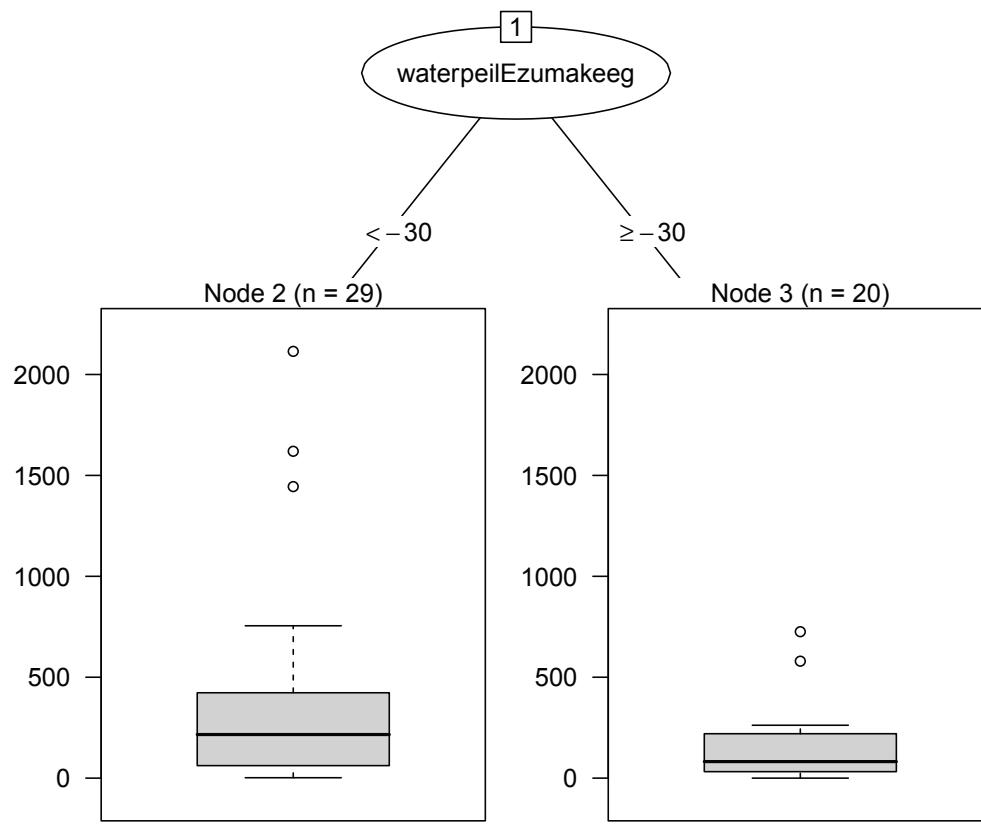
Grutto (Jaap Deensgat)



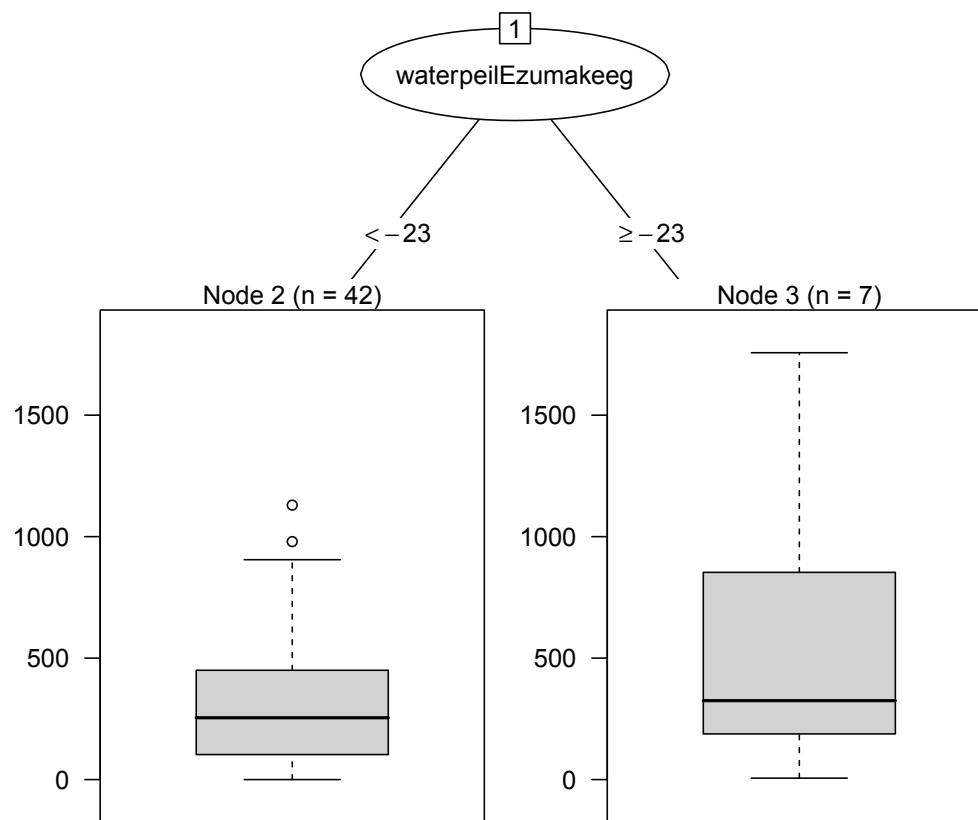
Grutto (Achter de Zwartens)



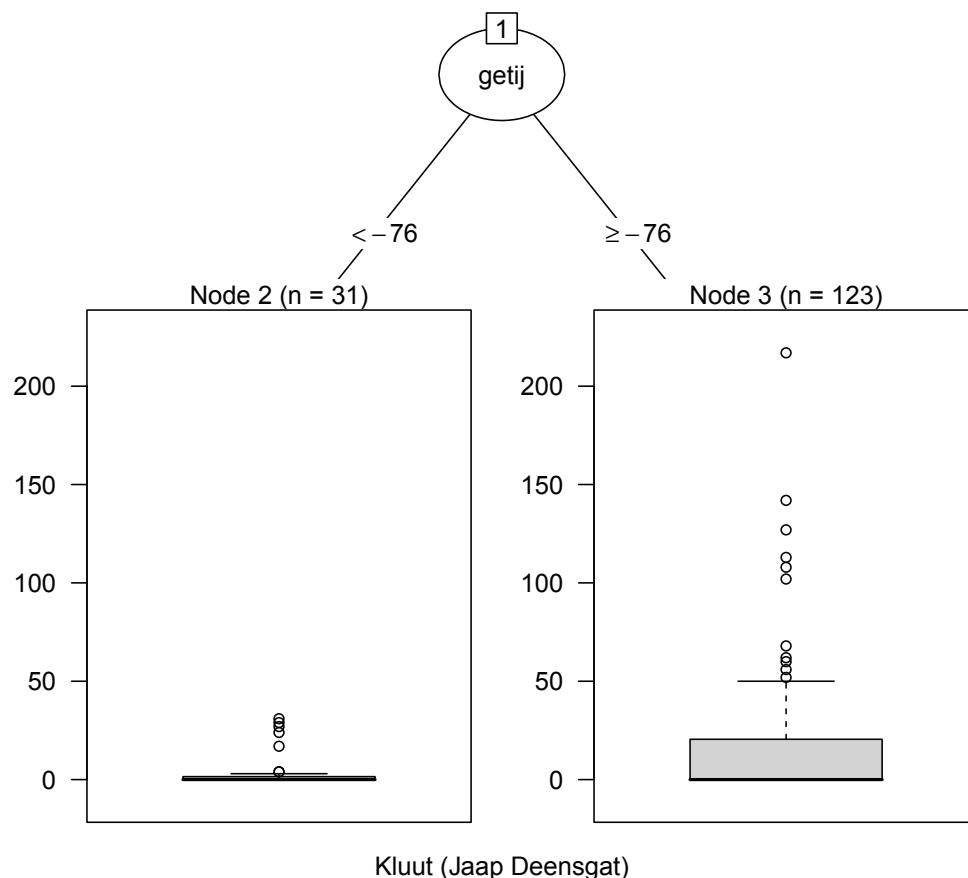
Grutto (Ezumakeeg Noord)



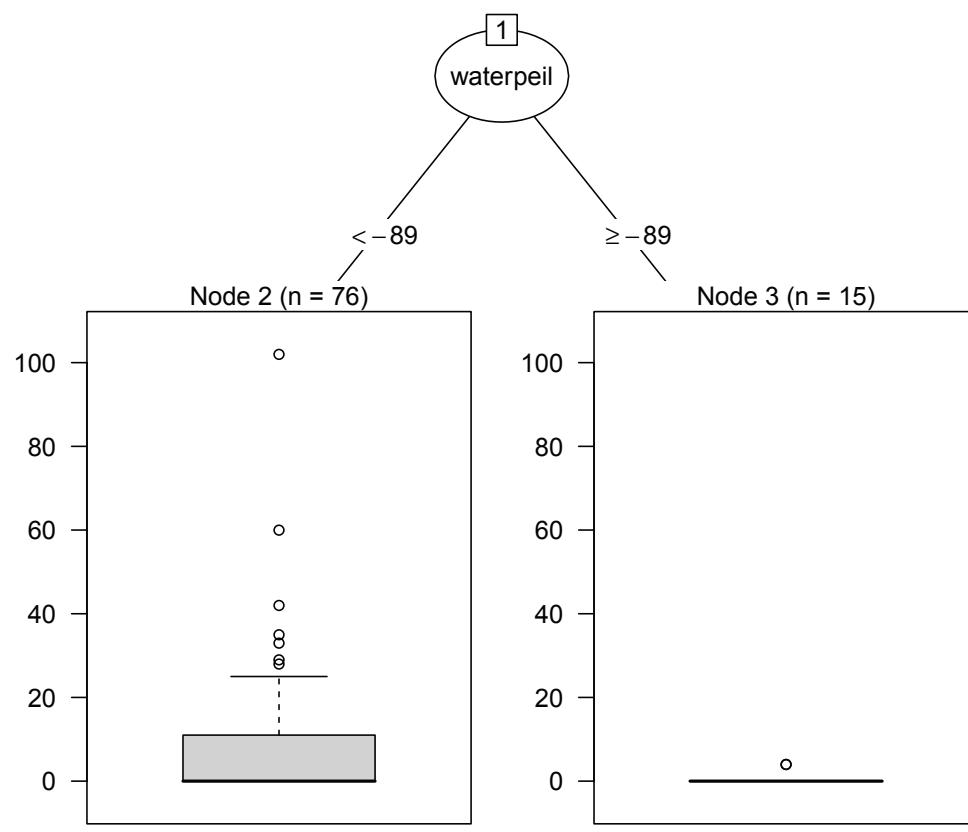
Grutto (Ezumakeeg Zuid)



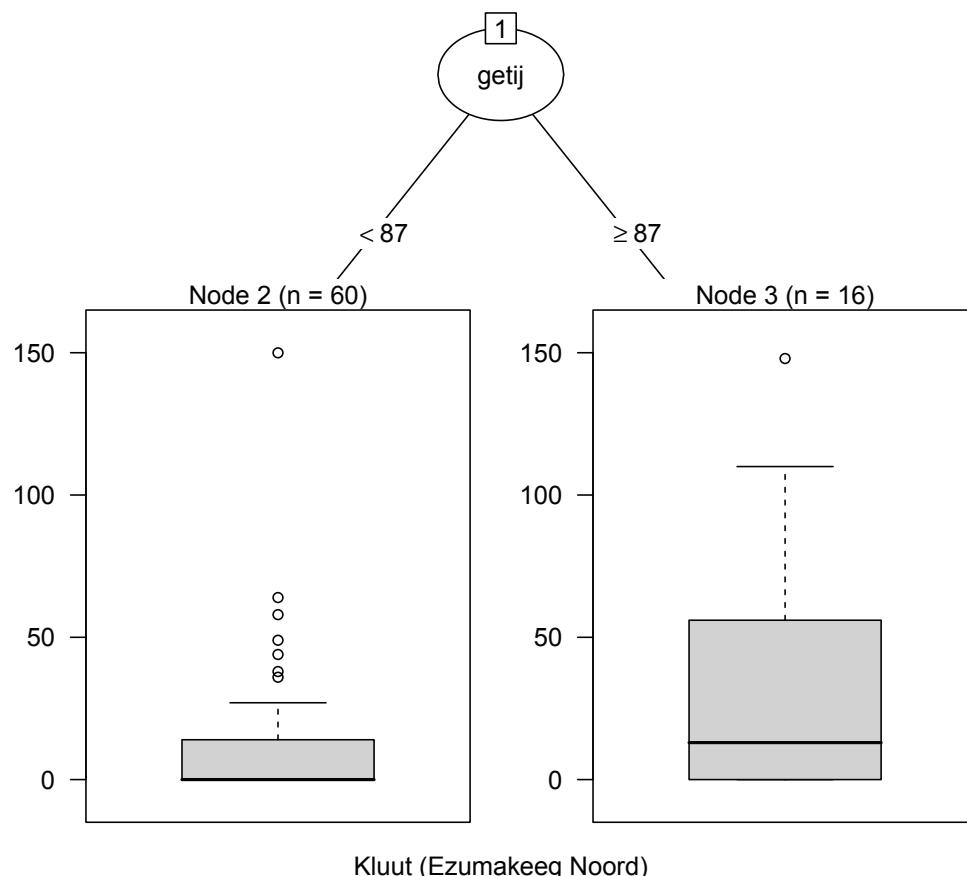
Kluut (Lauwersmeer)



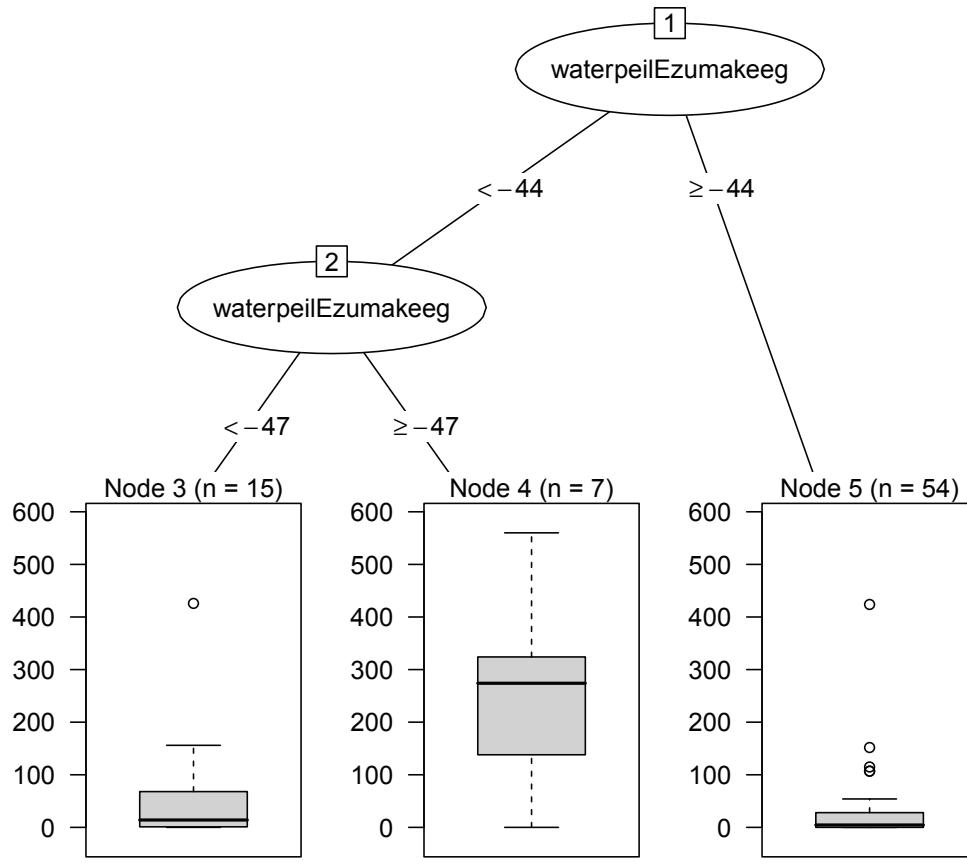
Kluut (Jaap Deensgat)



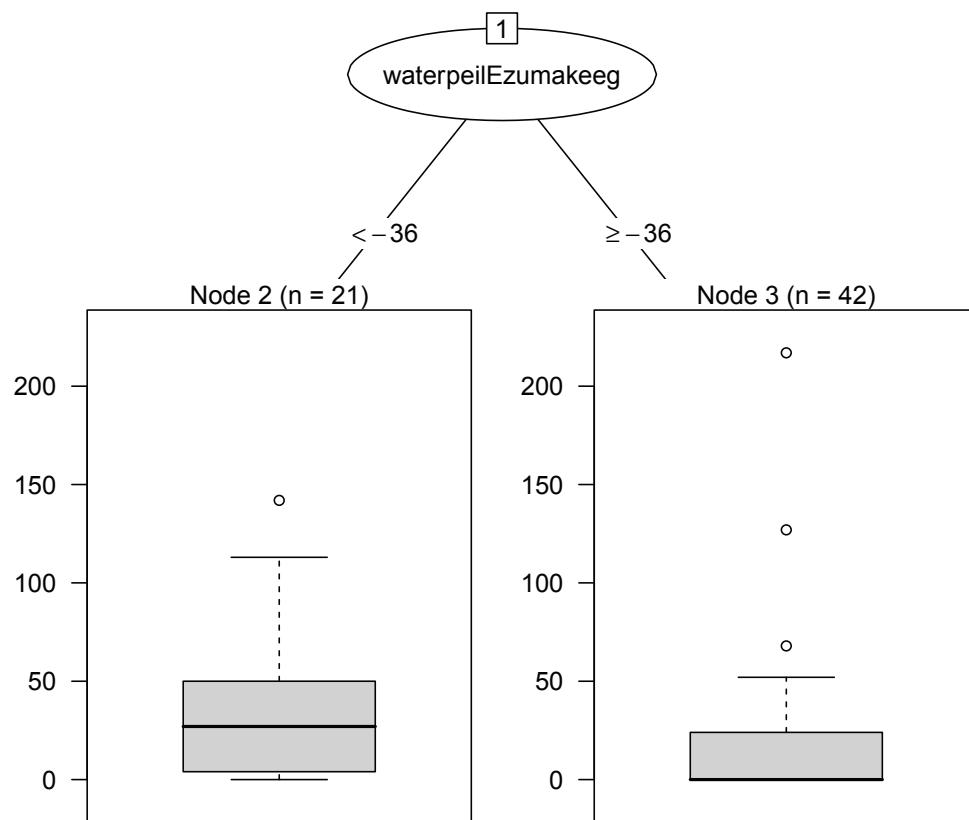
Kluut (Ezumakeeg Zuid)



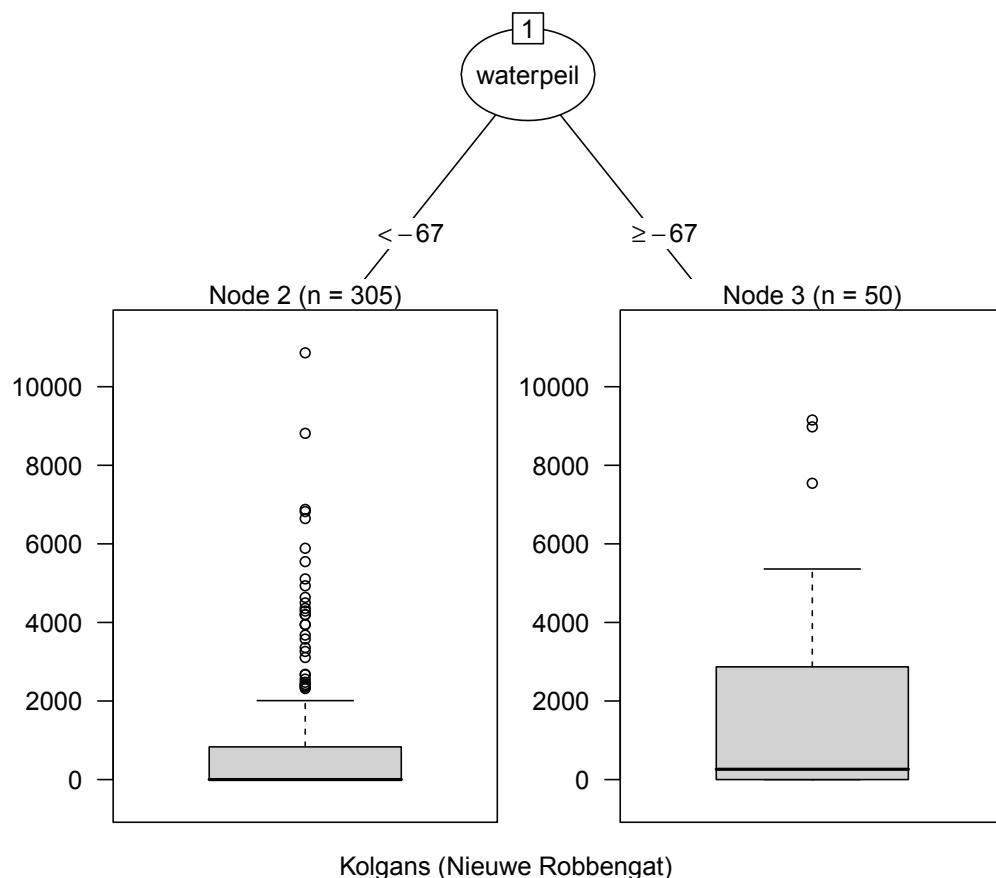
Kluut (Ezumakeeg Noord)



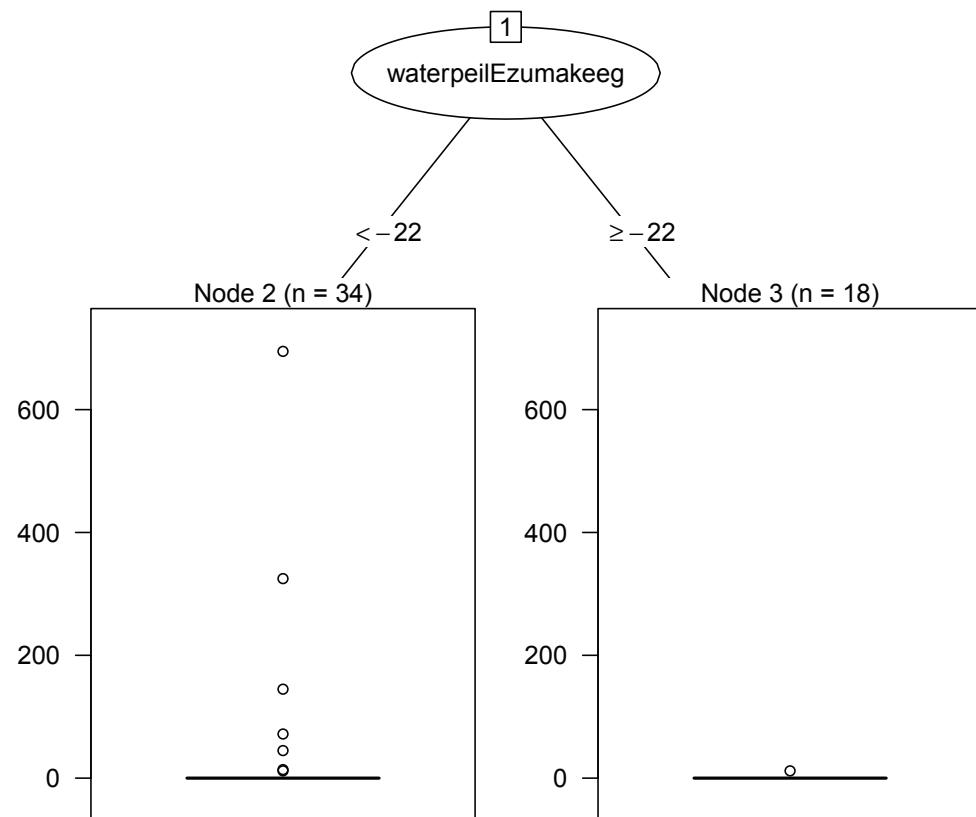
Kluut (Achter de Zwartens)



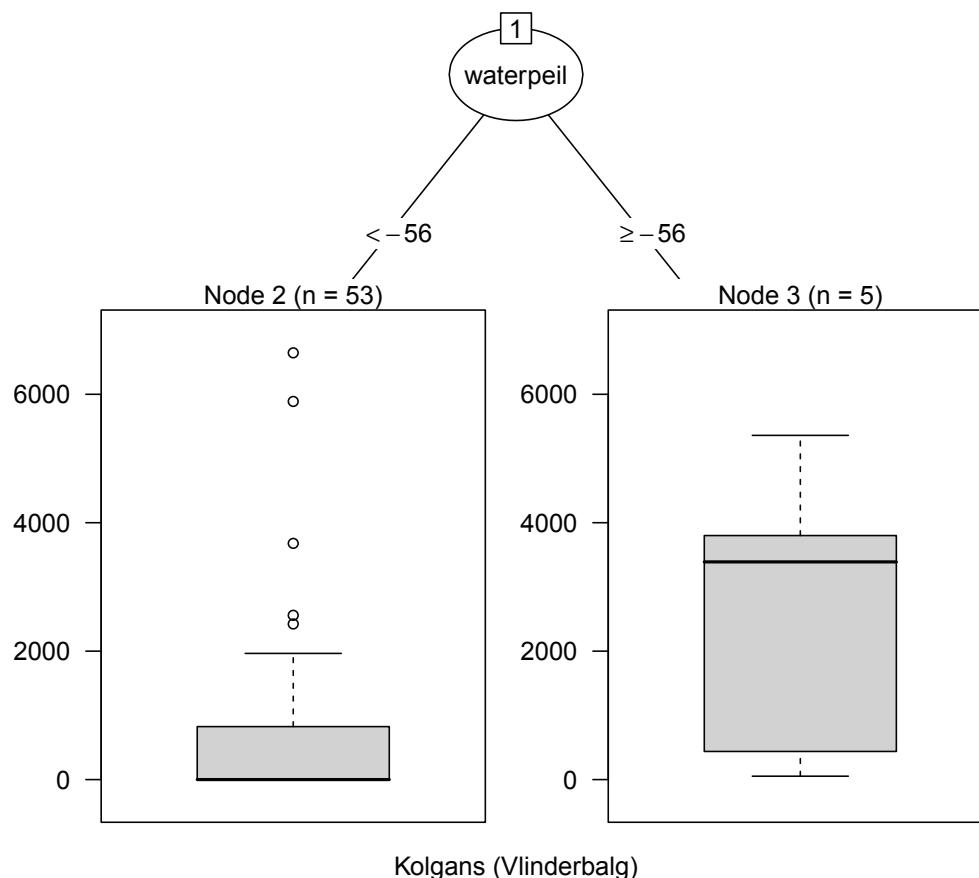
Kolgans (Lauwersmeer)



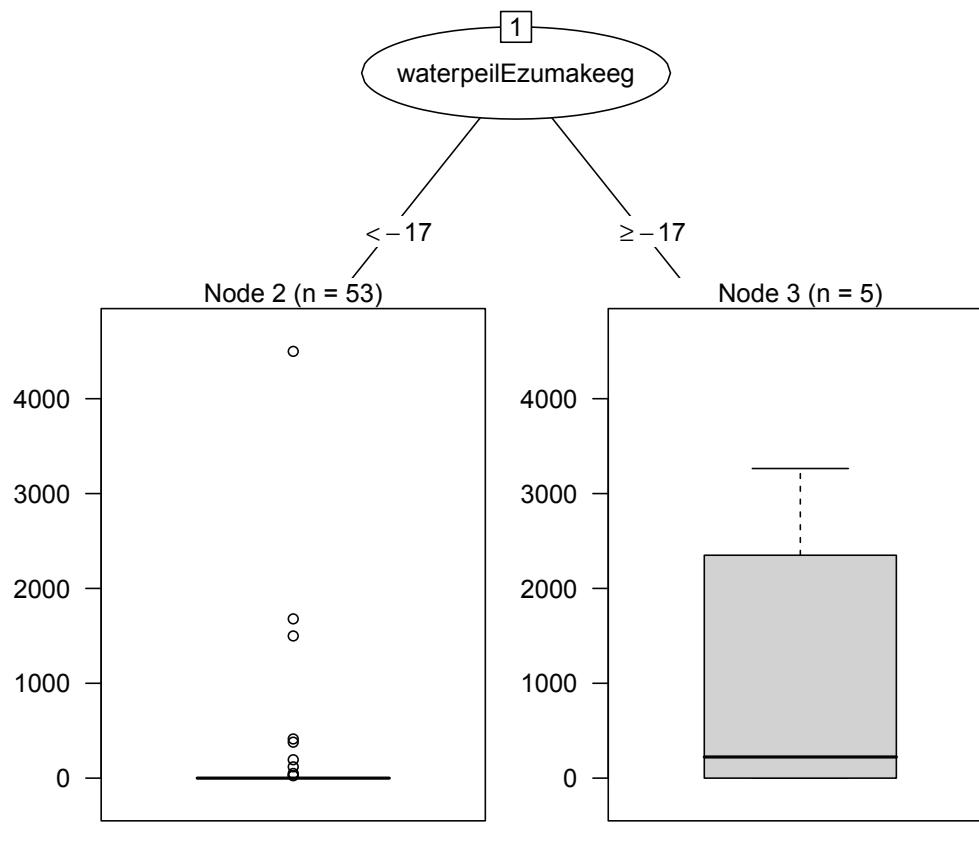
Kolgans (Nieuwe Robbengat)



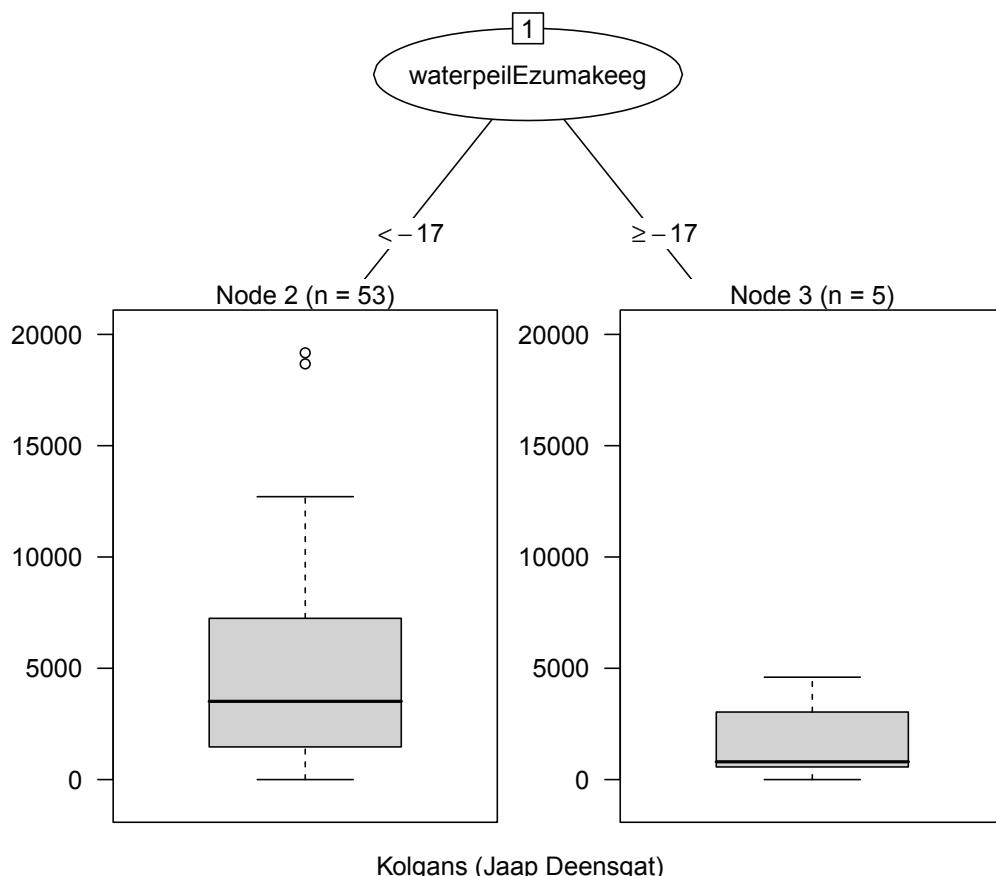
## Kolgans (Oude Robbengat)



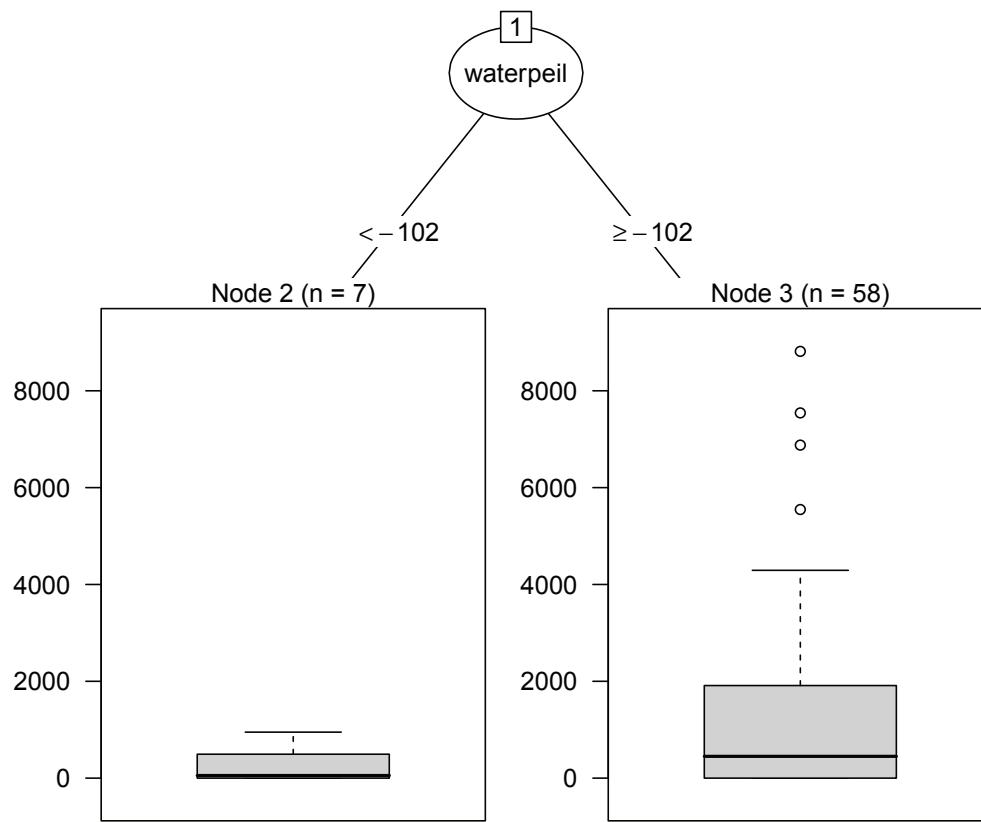
## Kolgans (Vlinderbalg)



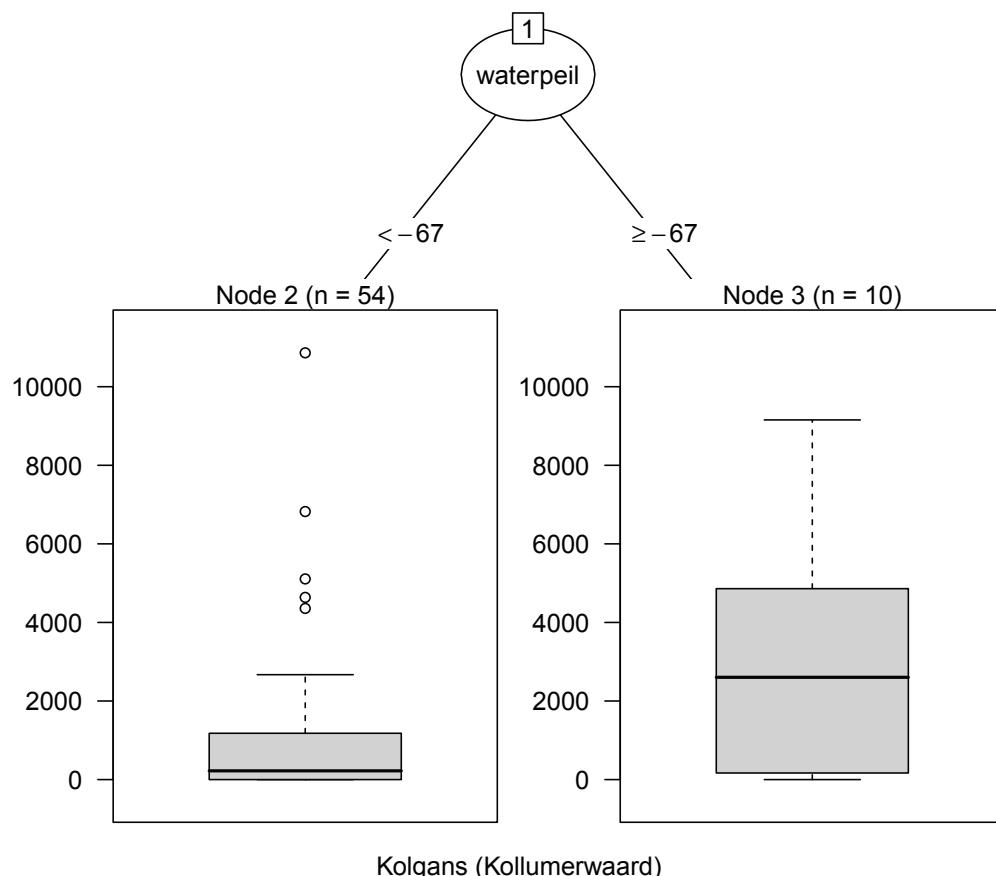
Kolgans (Ezumakeeg)



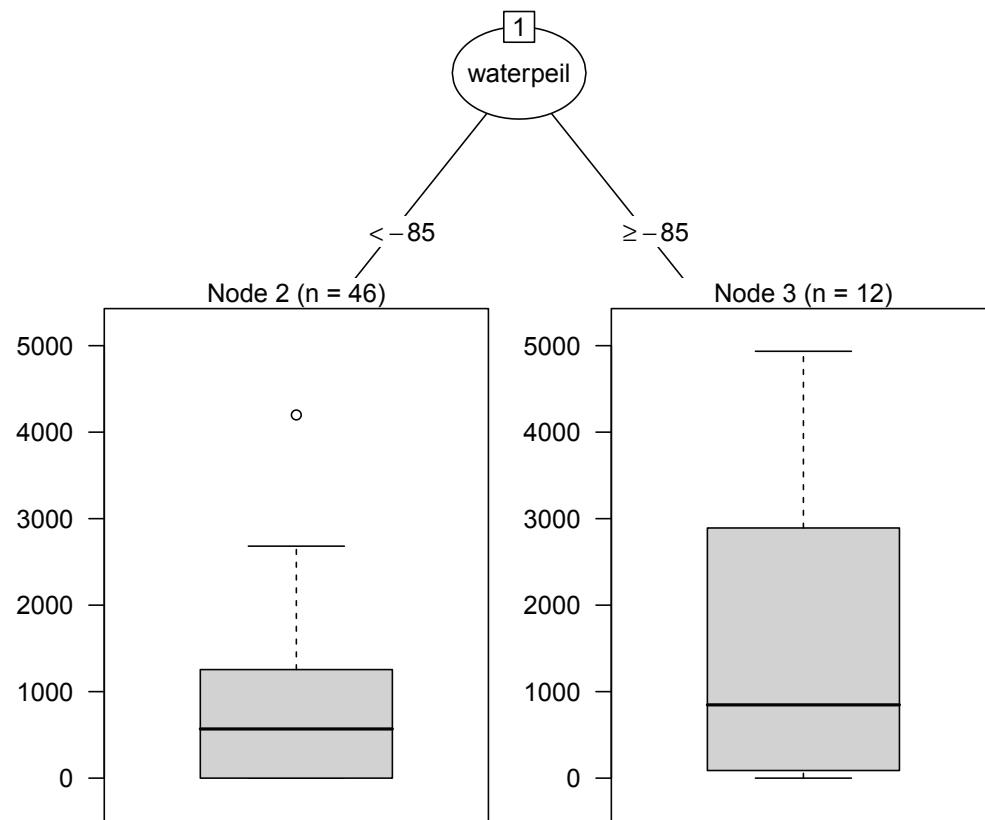
Kolgans (Jaap Deensgat)



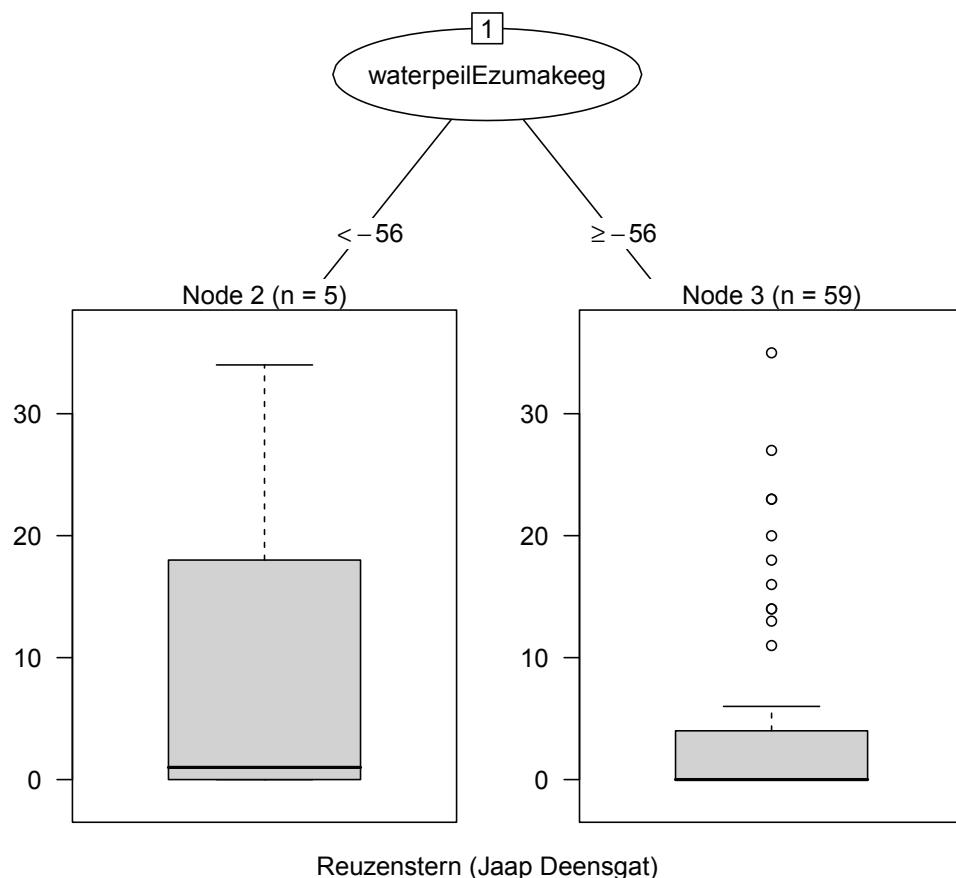
Kolgans (Achter de Zwartens)



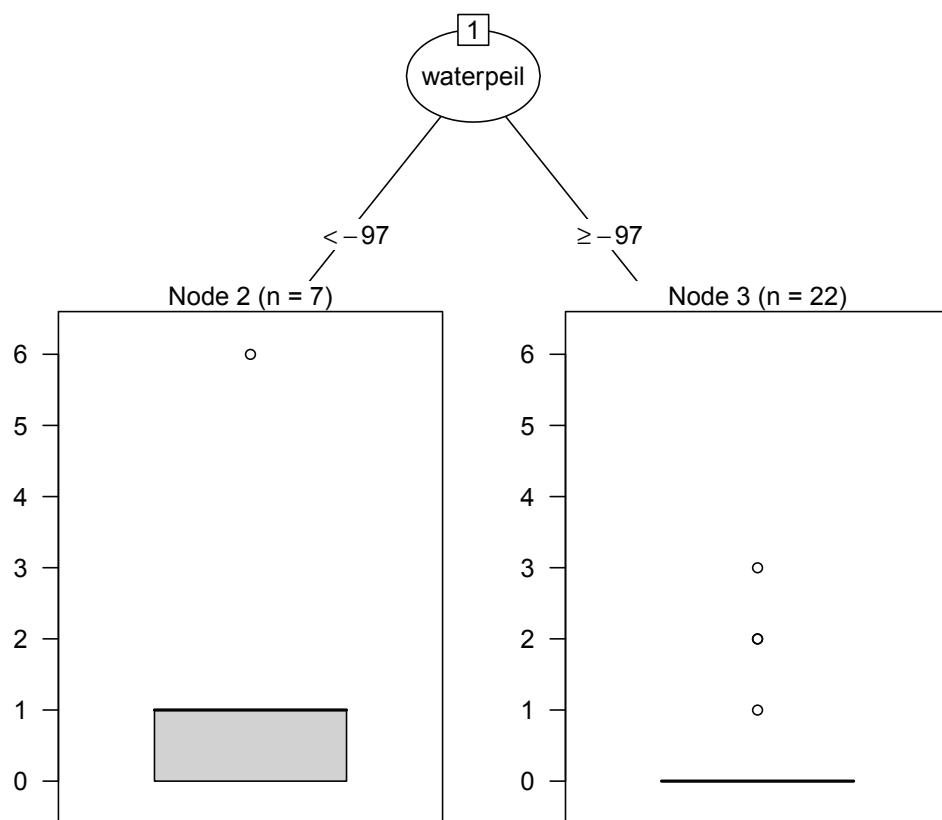
Kolgans (Kollumerwaard)



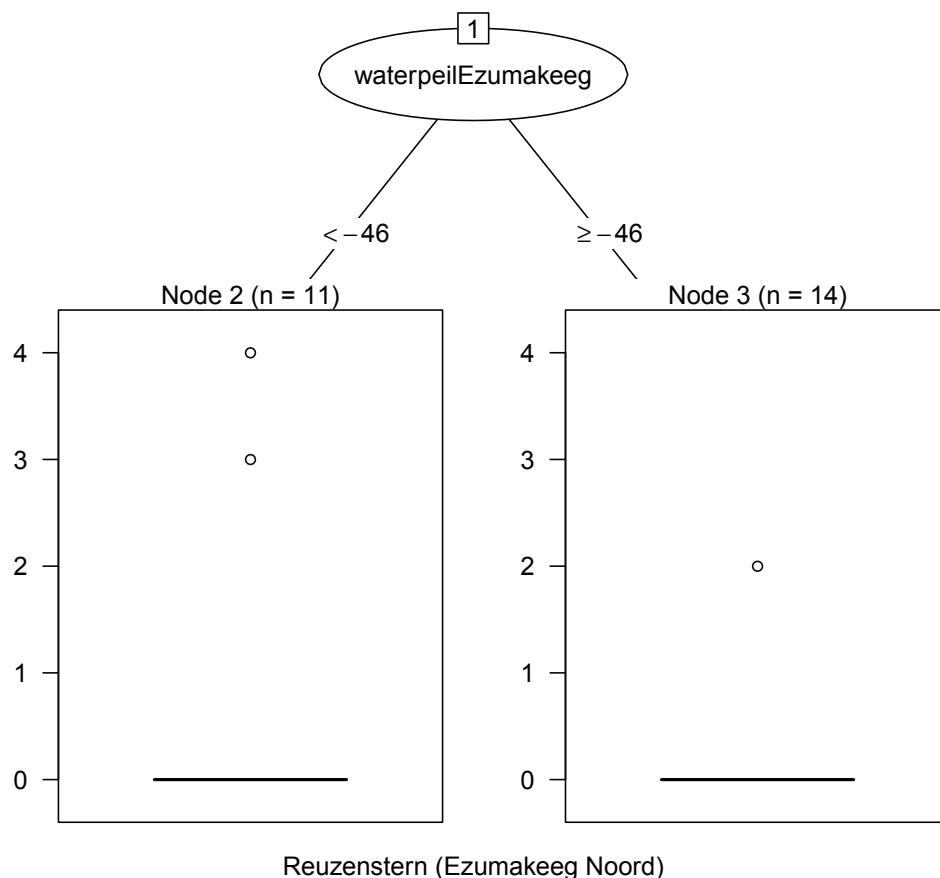
Reuzenstern (Lauwersmeer)



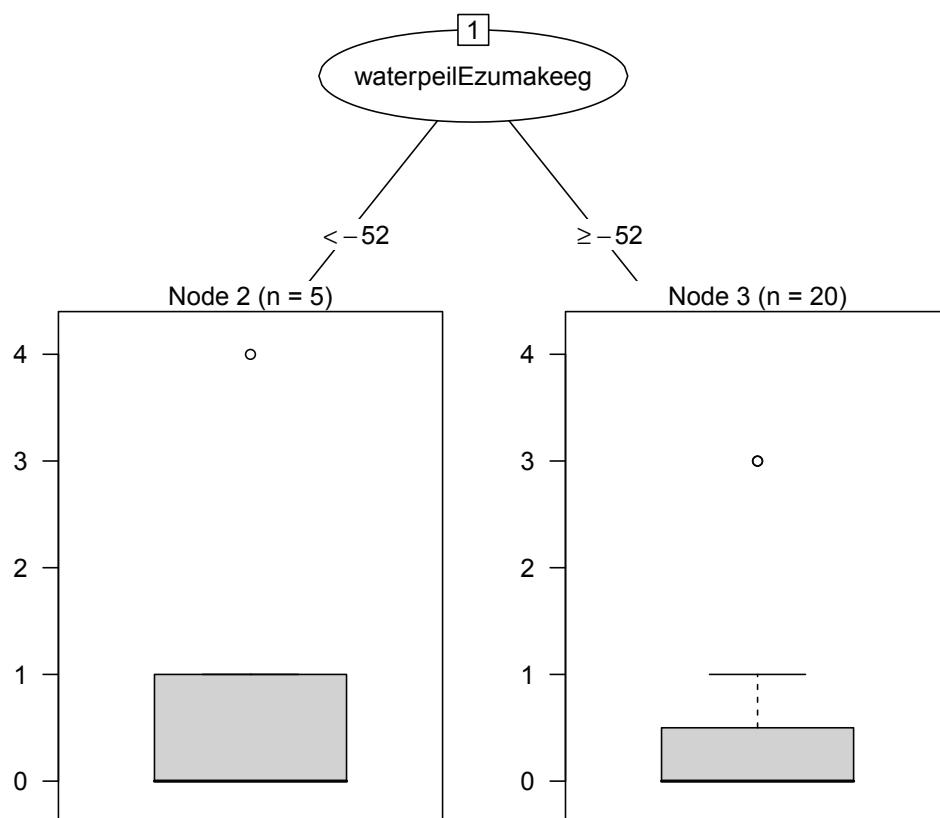
Reuzenstern (Jaap Deensgat)



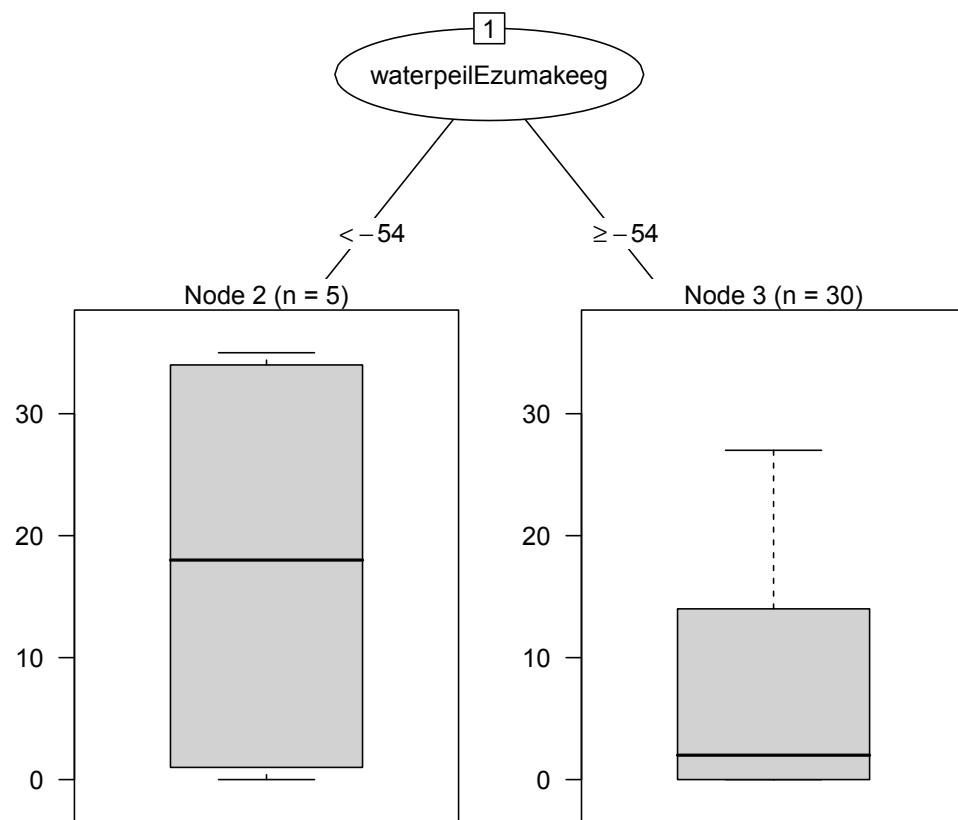
Reuzenstern (Ezumakeeg Zuid)



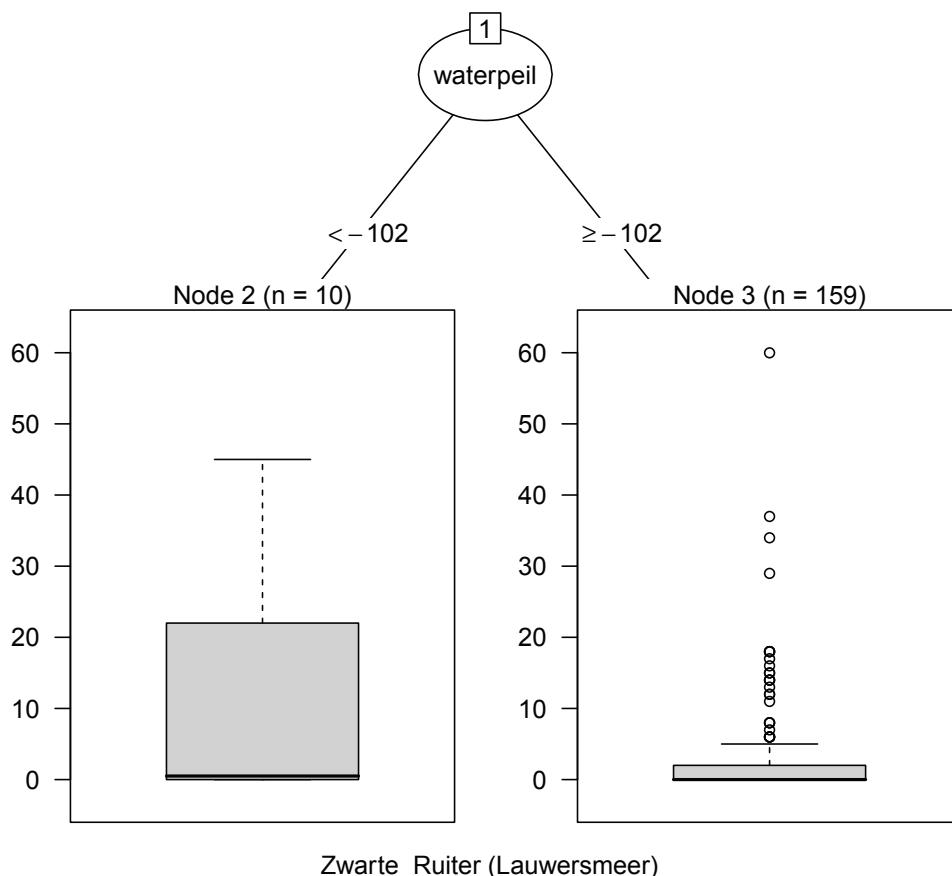
Reuzenstern (Ezumakeeg Noord)



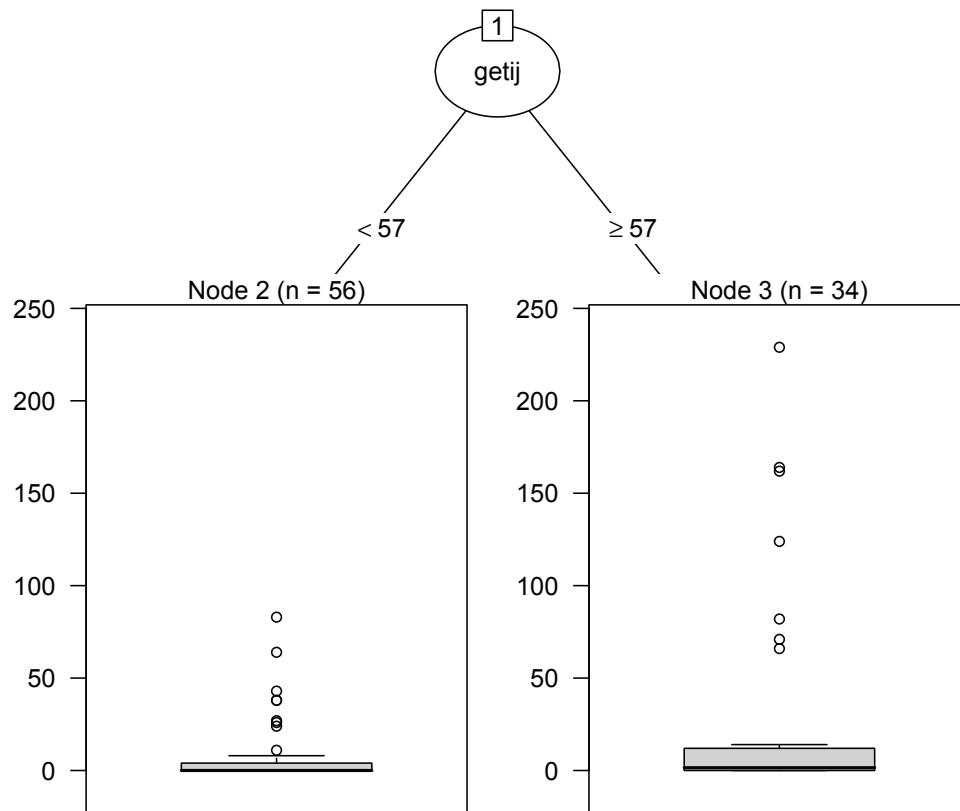
Reuzenstern (Achter de Zwarten)



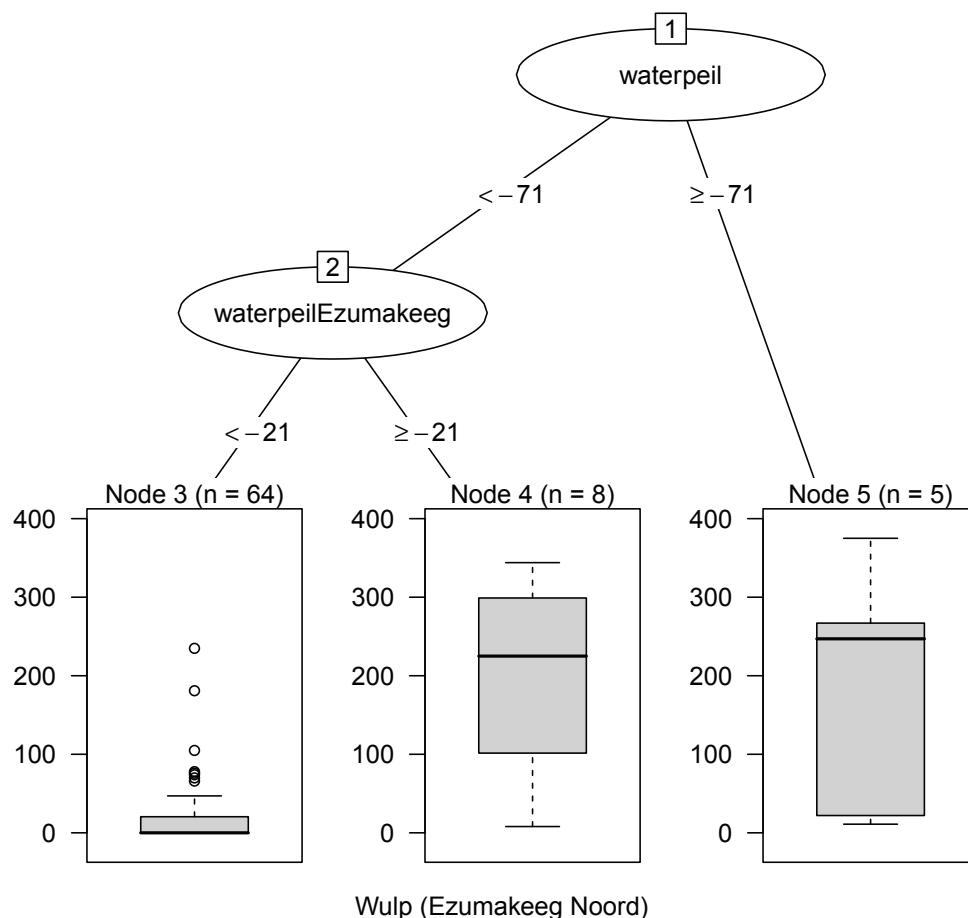
Wulp (Lauwersmeer)



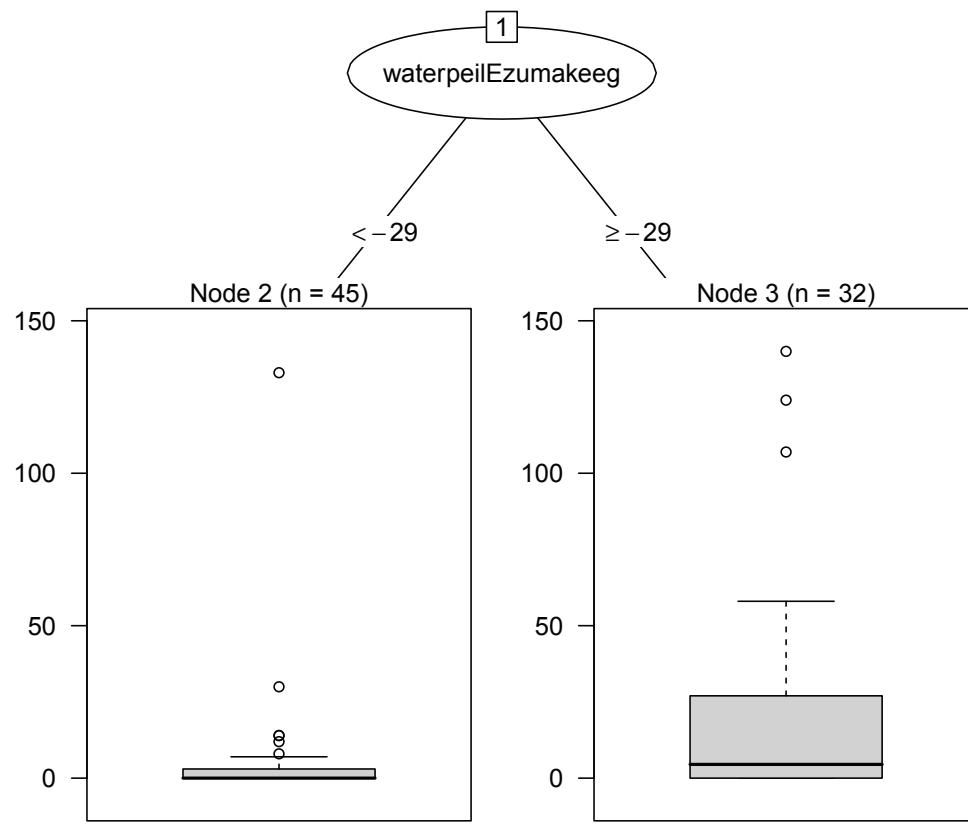
Zwarte\_Ruiter (Lauwersmeer)



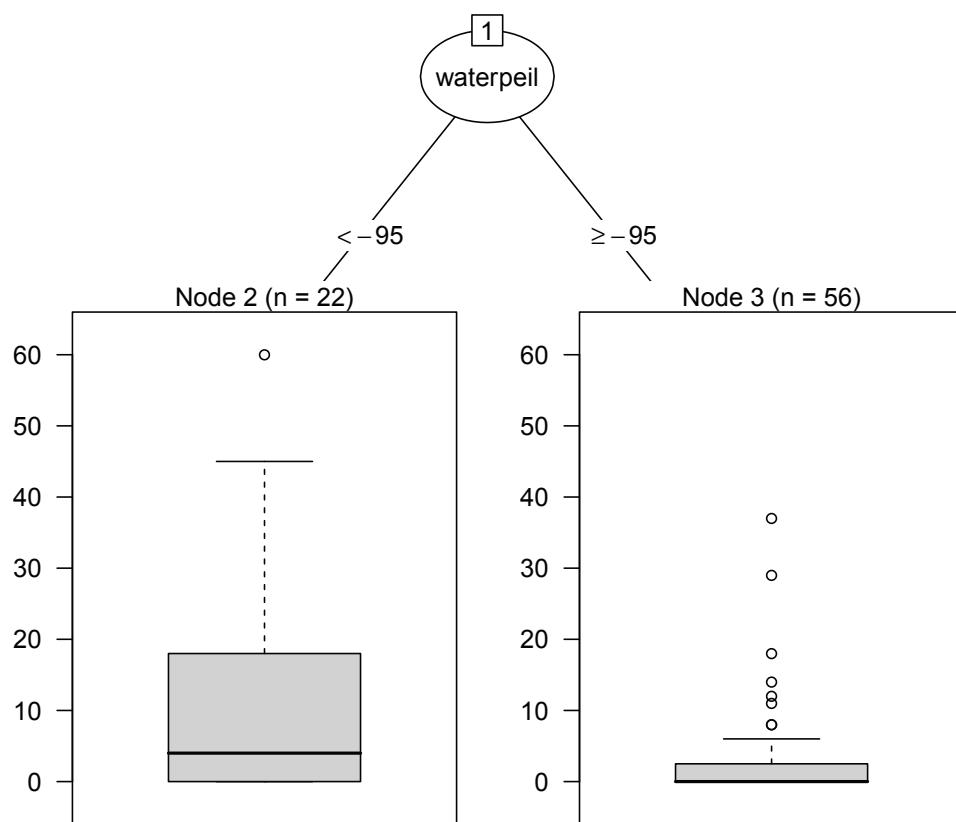
Wulp (Ezumakeeg Zuid)



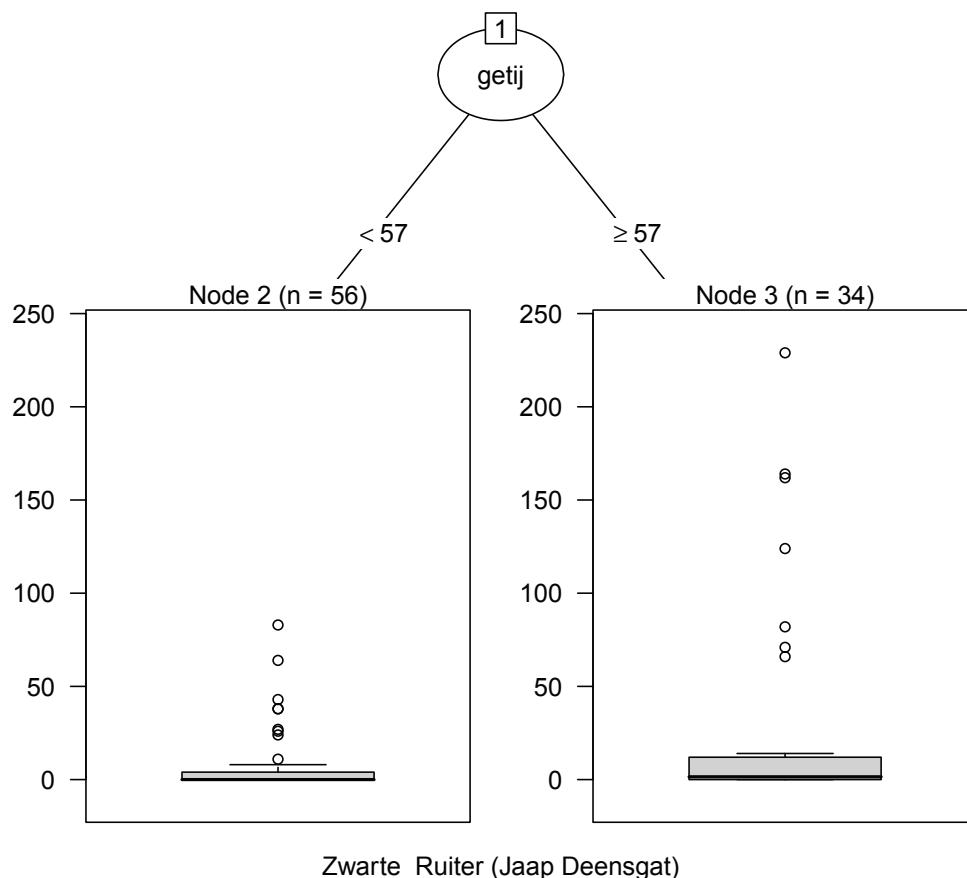
Wulp (Ezumakeeg Noord)



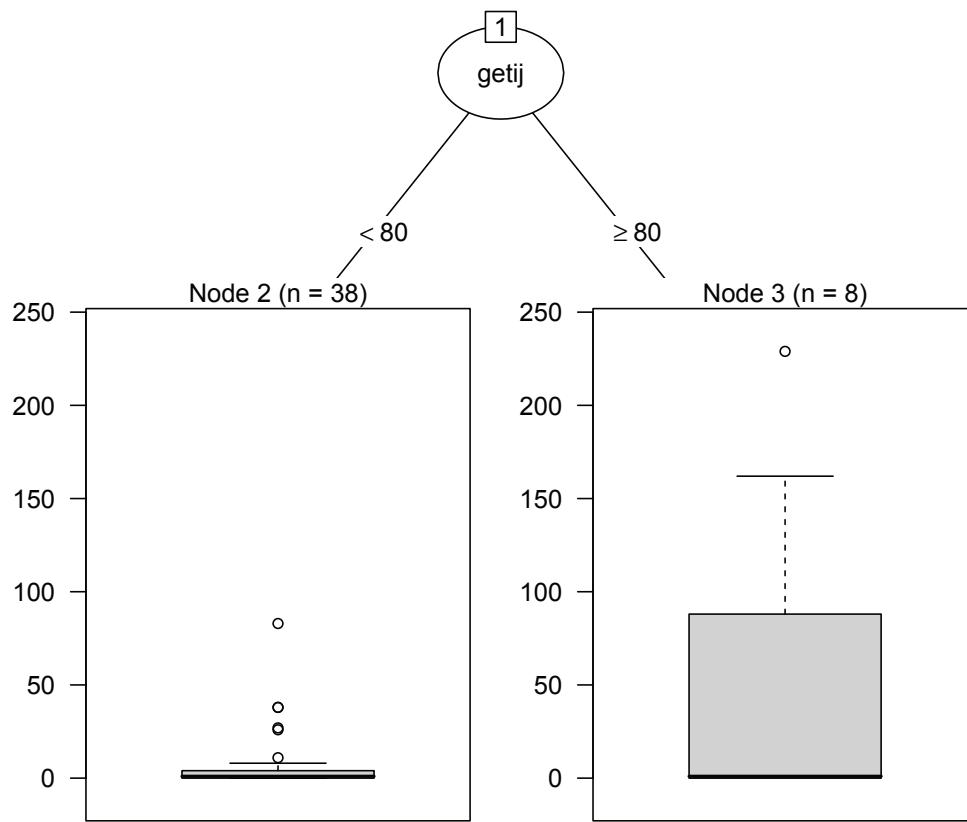
Wulp (Achter de Zwartens)



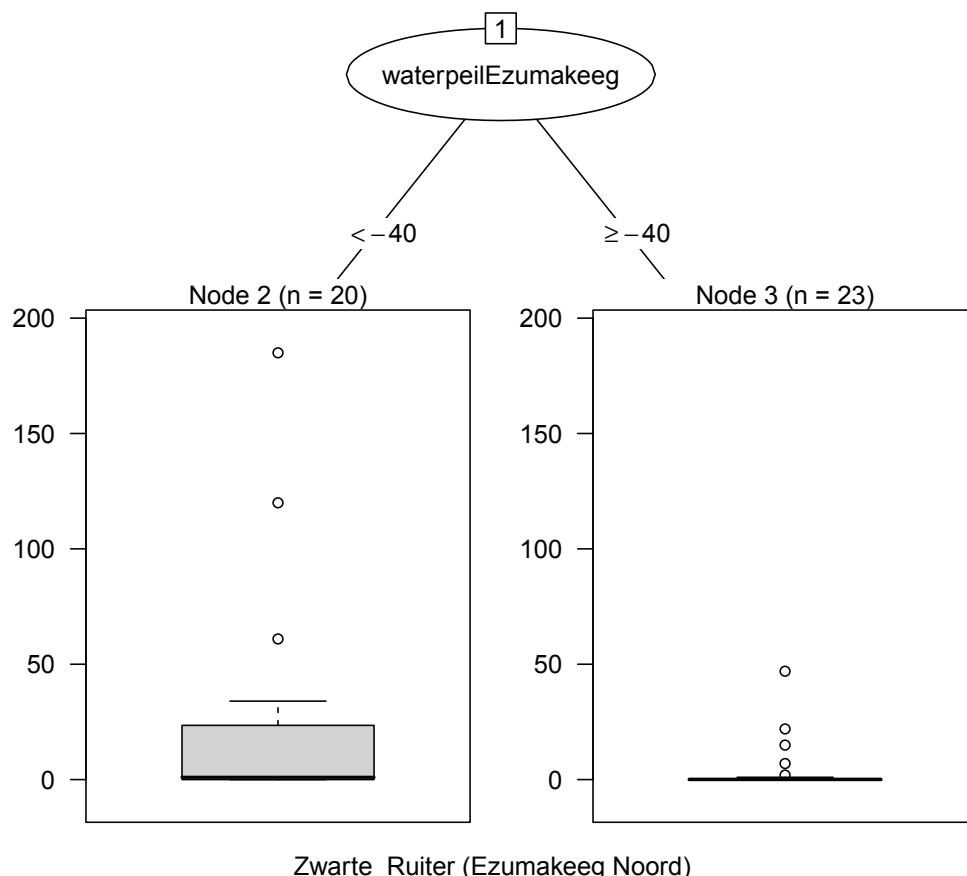
Zwarte\_Ruiter (Lauwersmeer)



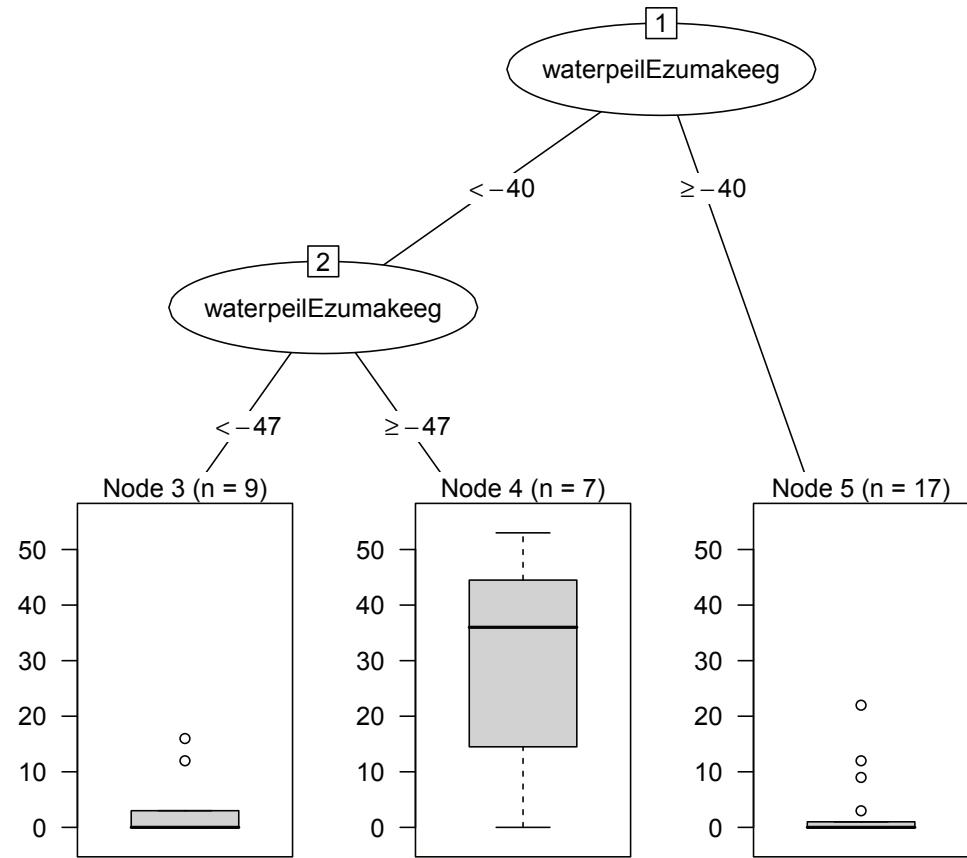
Zwarte\_Ruiter (Jaap Deensgat)



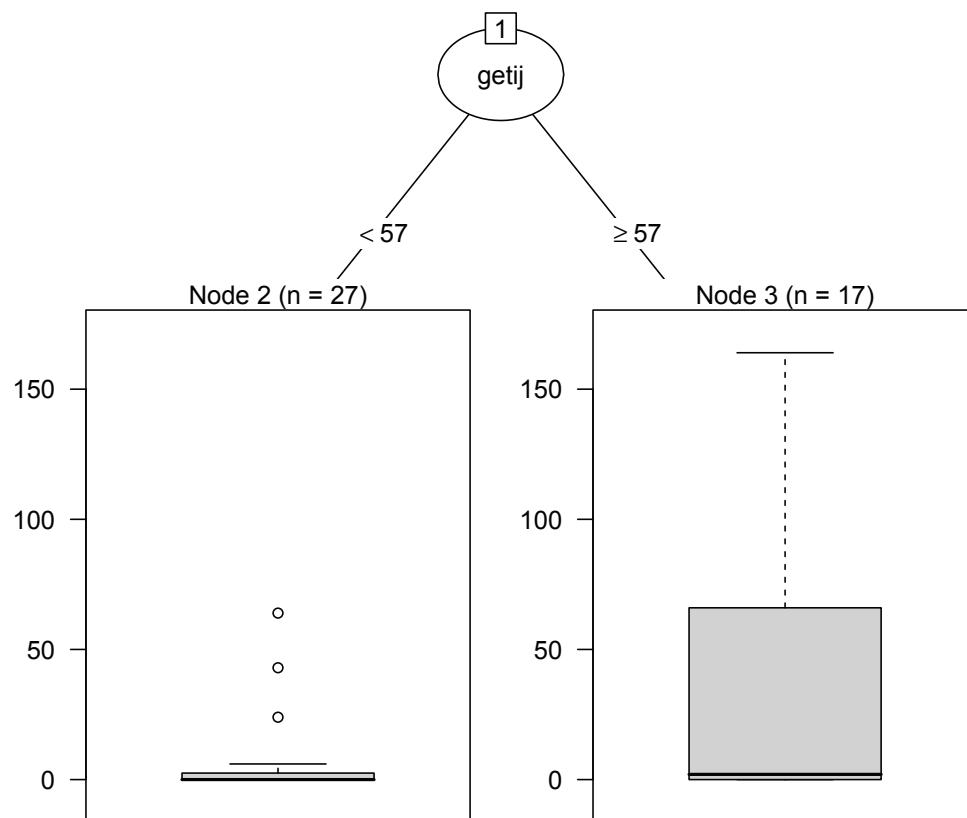
Zwarte\_Ruiter (Ezumakeeg Zuid)



Zwarte\_Ruiter (Ezumakeeg Noord)

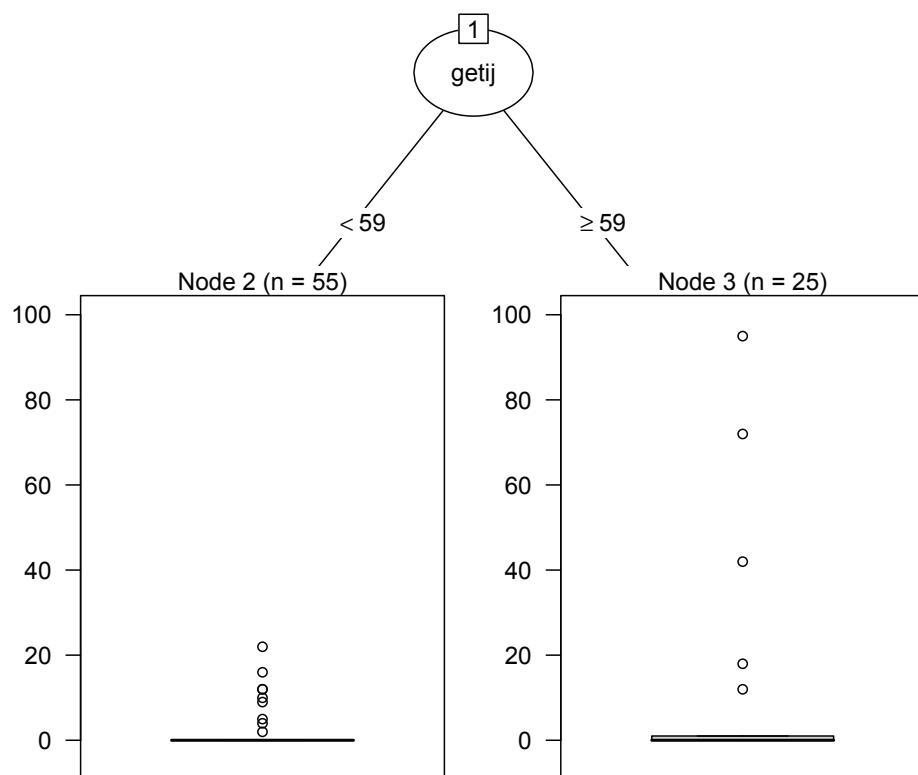
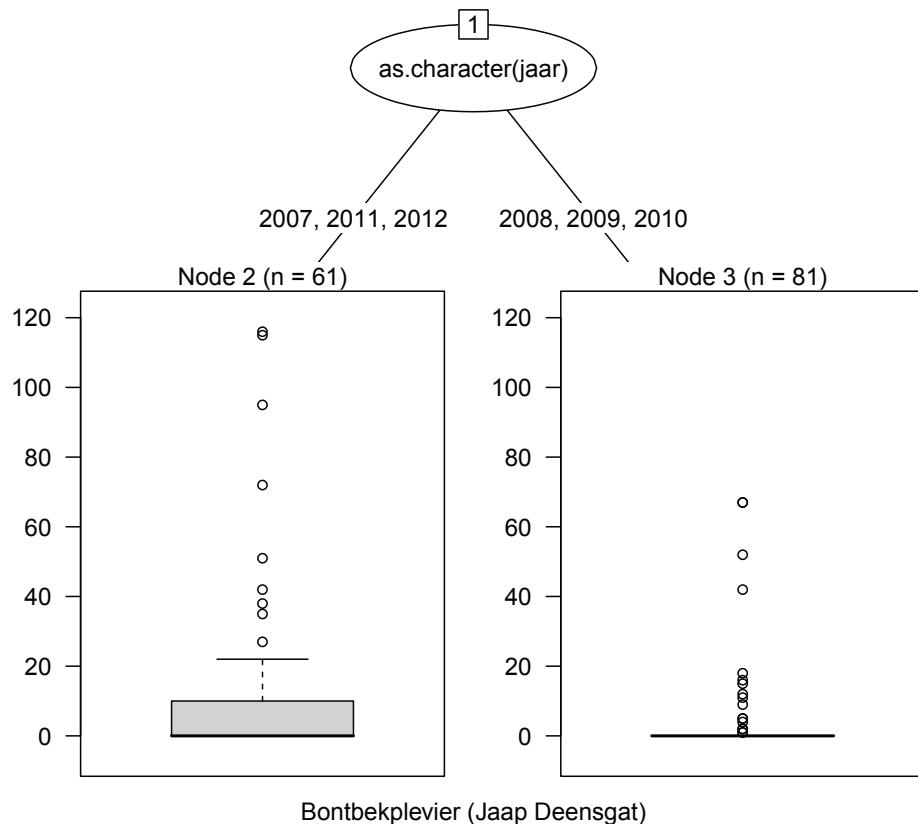


Zwarte\_Ruiter (Achter de Zwartens)

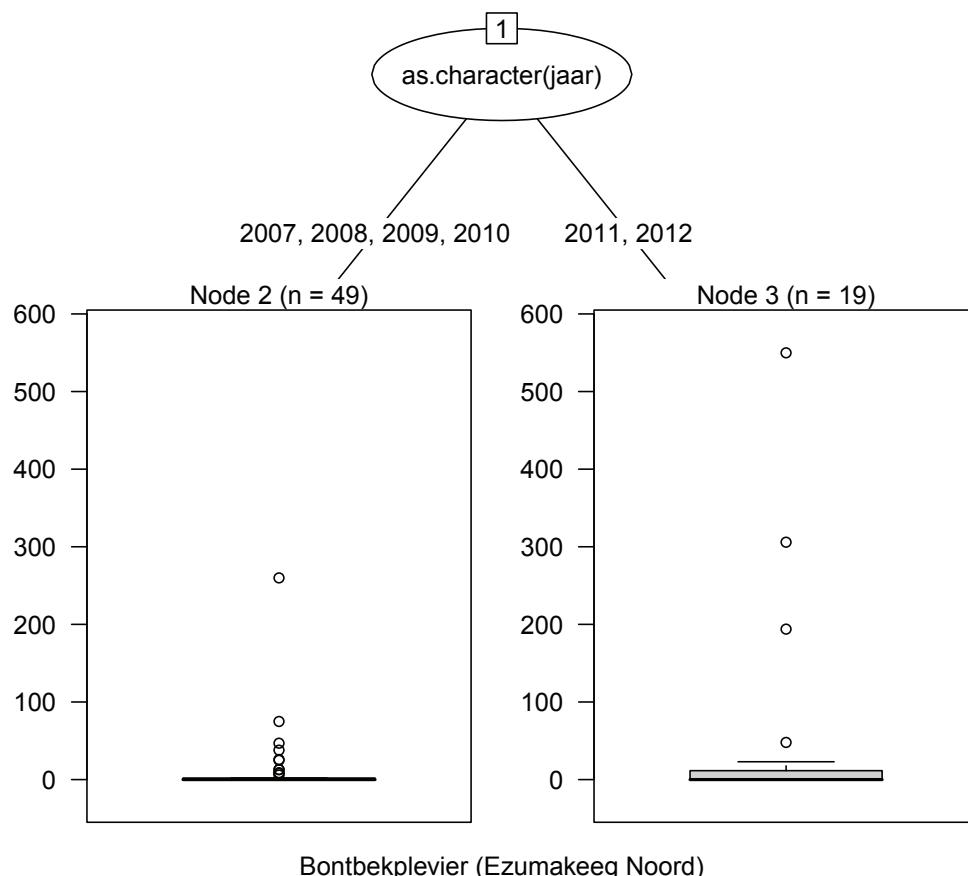


**Bijlage 13e. Regressiebomen voor 9 soorten op slaapplaatsen met naast de waterstanden van Lauwersmeer, Ezumakeeg en Waddenzee als verklarende variabelen ook jaar (voor steltlopers), seizoen (voor ganzen) en ijsbedekking (voor ganzen) als variabelen.**

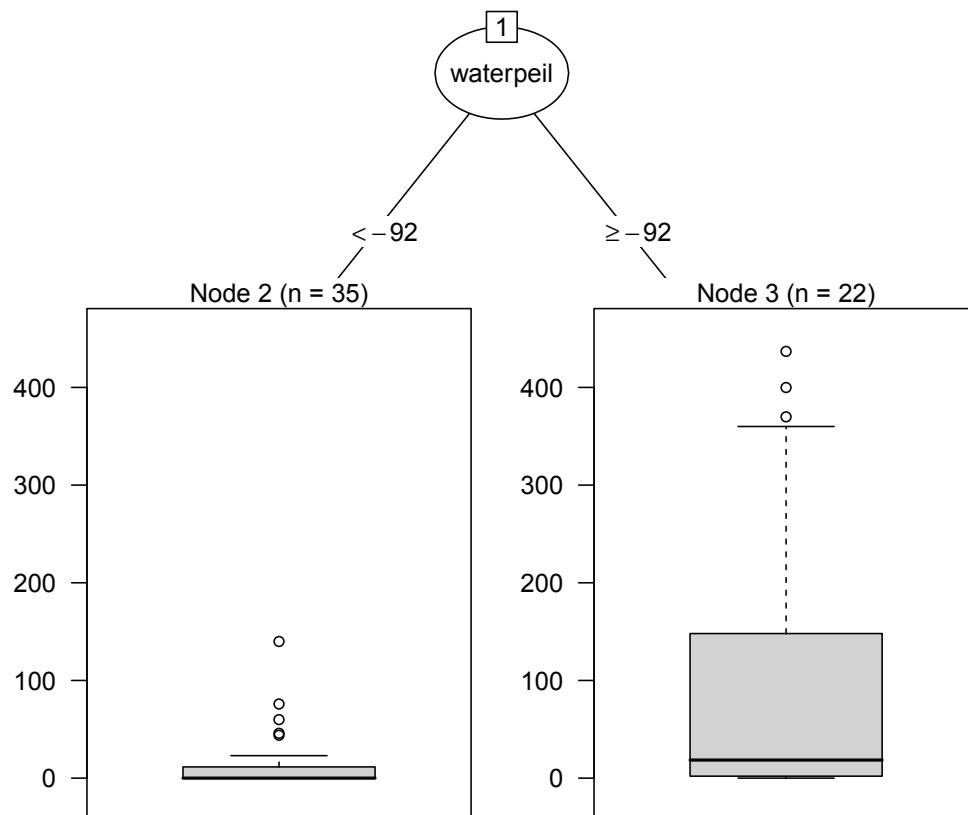
Bontbekplevier (Lauwersmeer)



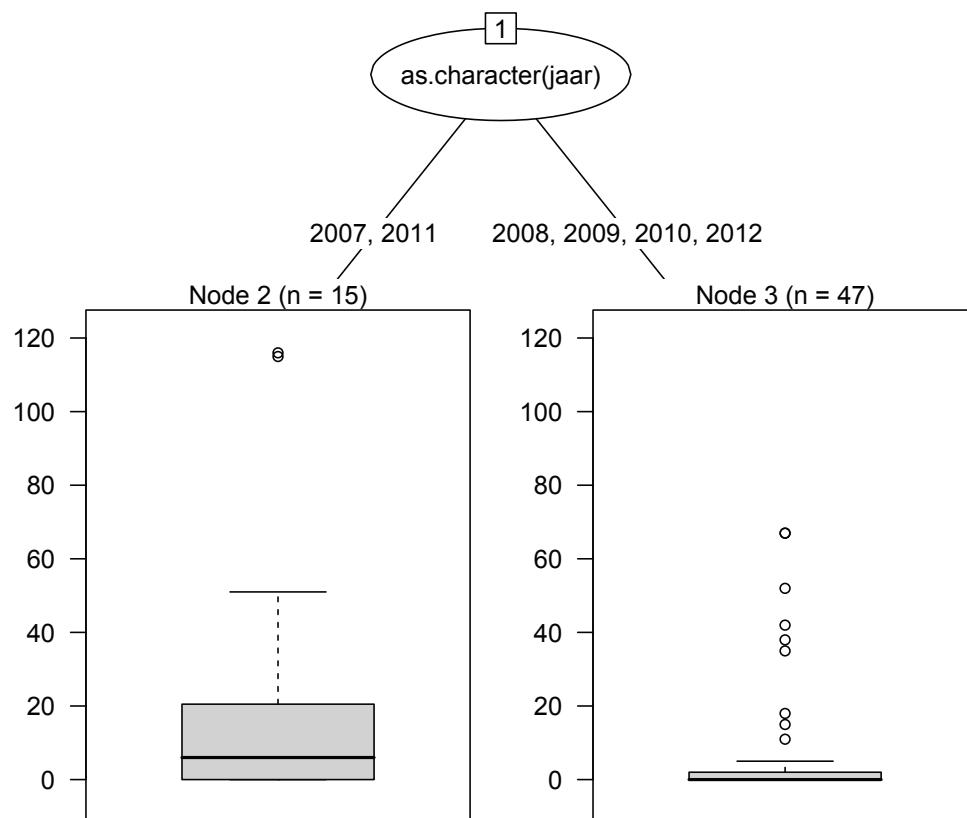
Bontbekplevier (Ezumakeeg Zuid)



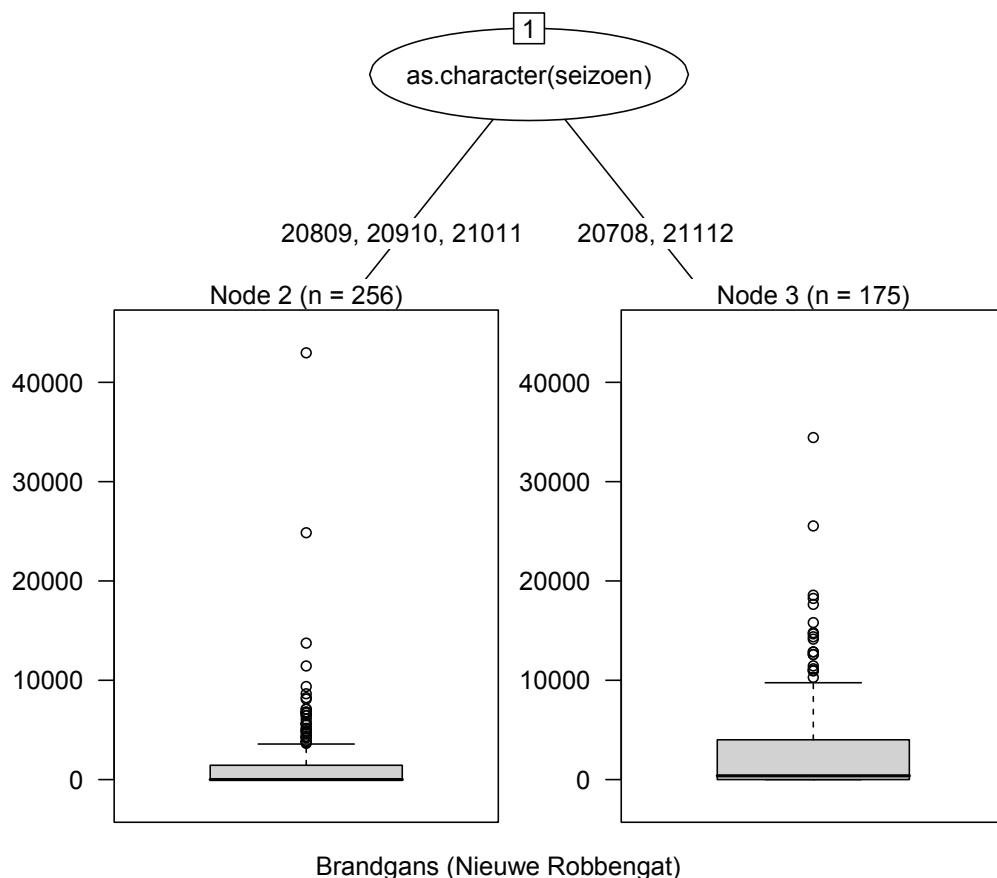
Bontbekplevier (Ezumakeeg Noord)



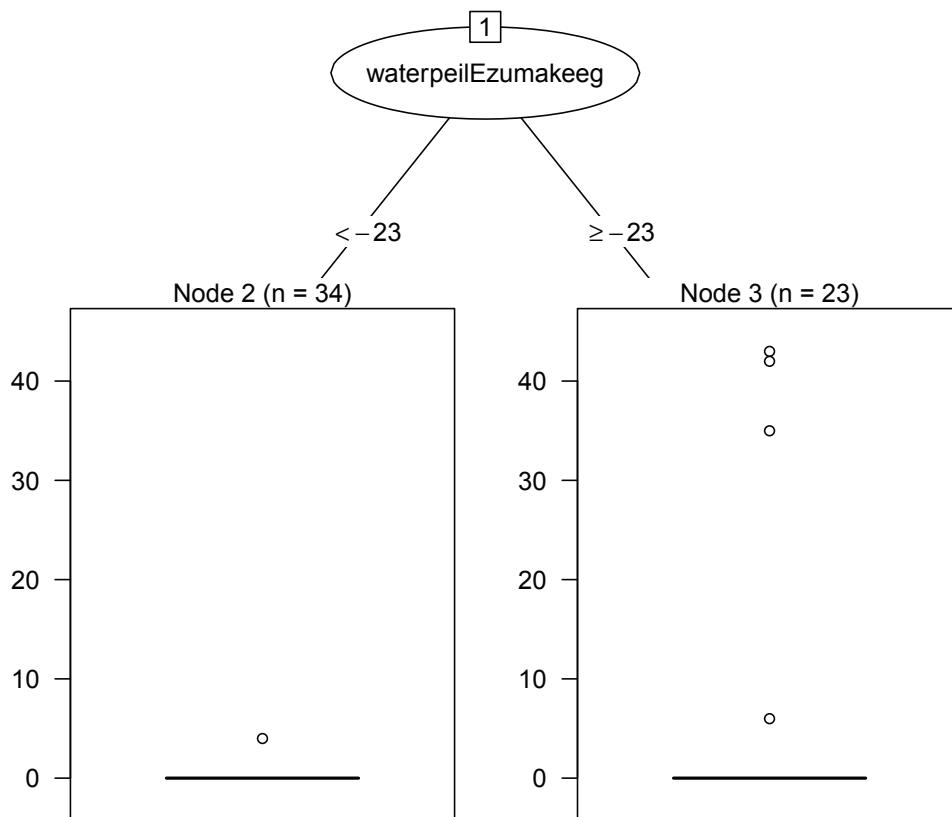
Bontbekplevier (Achter de Zwartens)



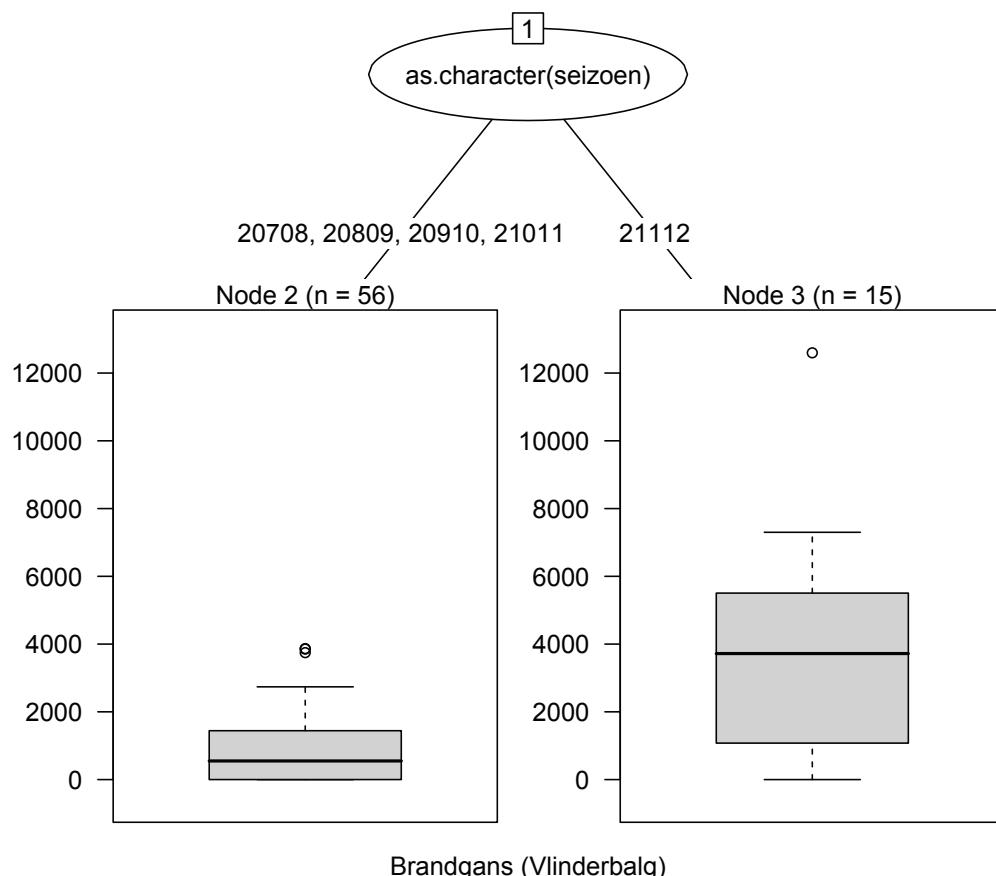
Brandgans (Lauwersmeer)



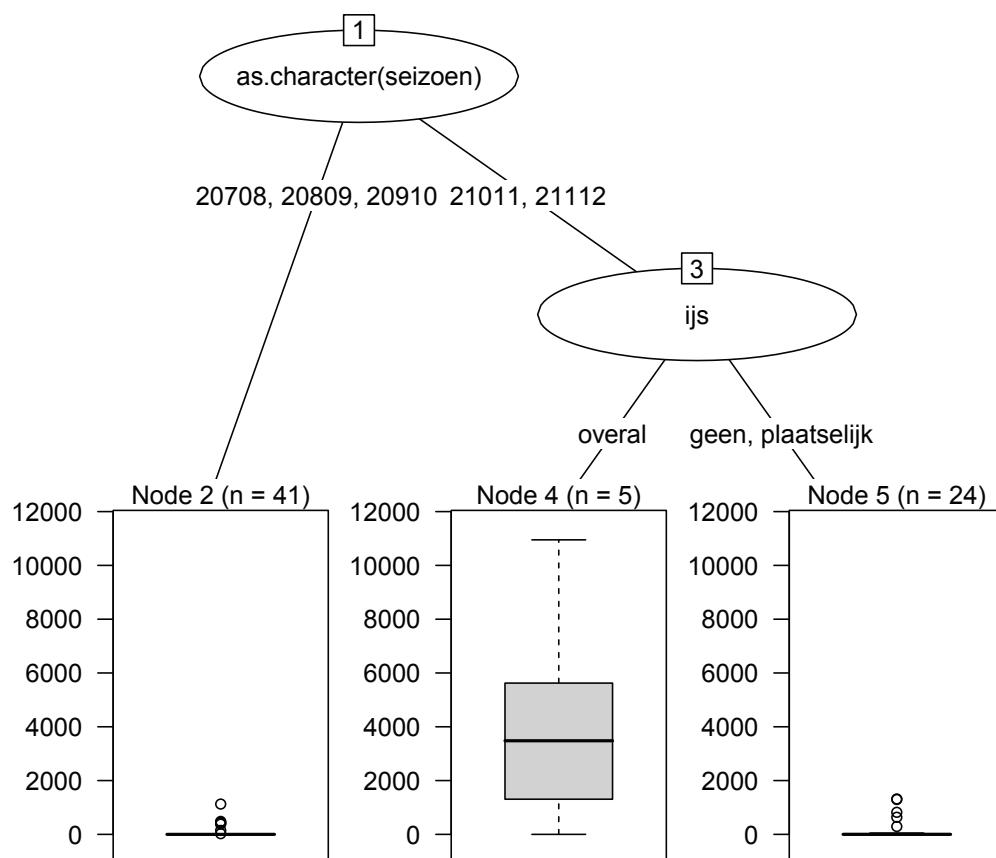
Brandgans (Nieuwe Robbengat)



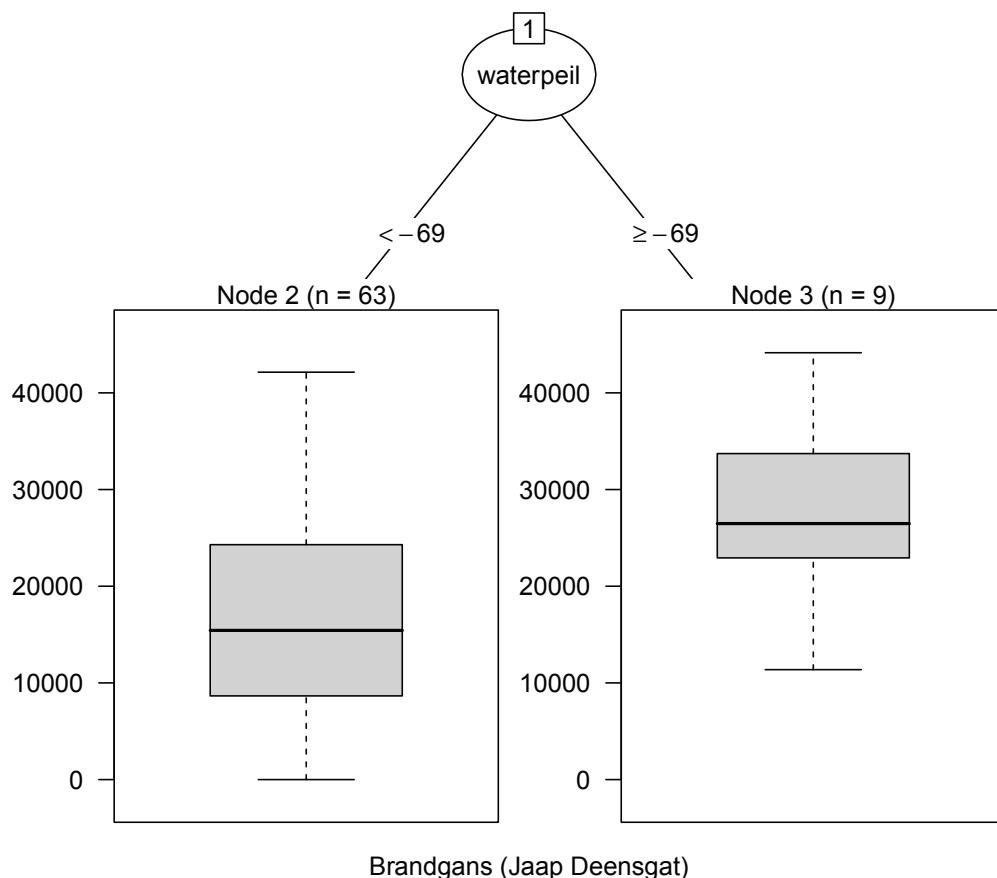
Brandgans (Oude Robbengat)



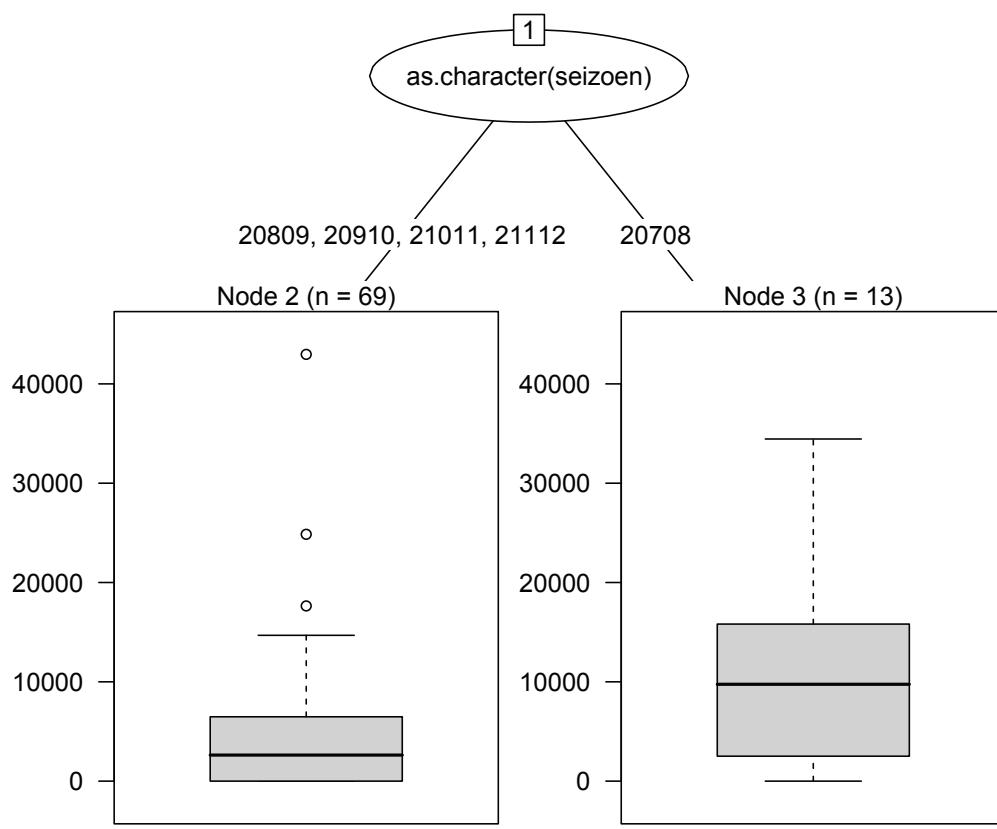
Brandgans (Vlinderbalg)



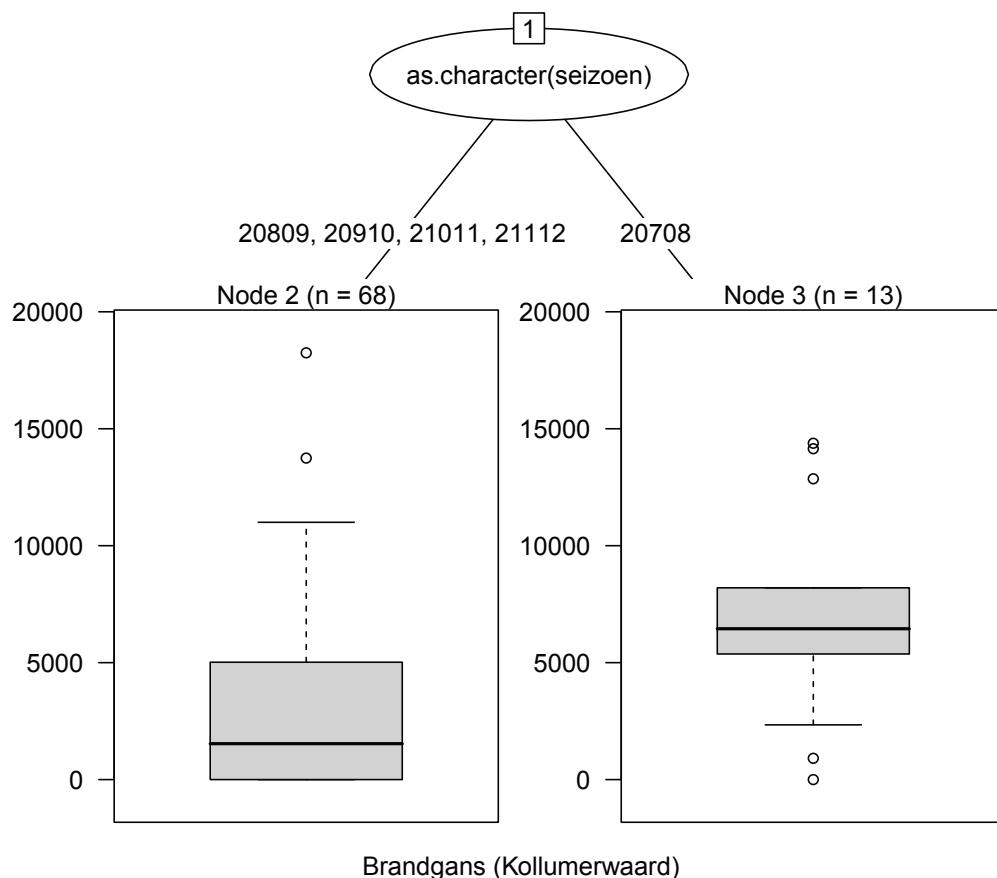
Brandgans (Ezumakeeg)



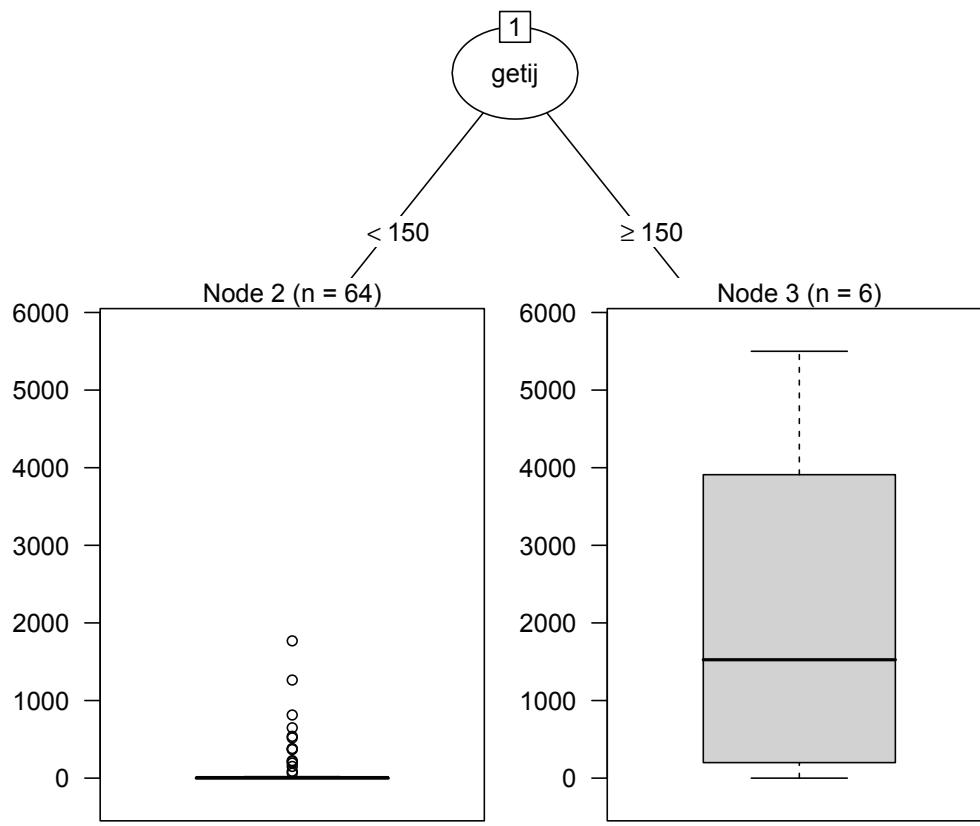
Brandgans (Jaap Deensgat)



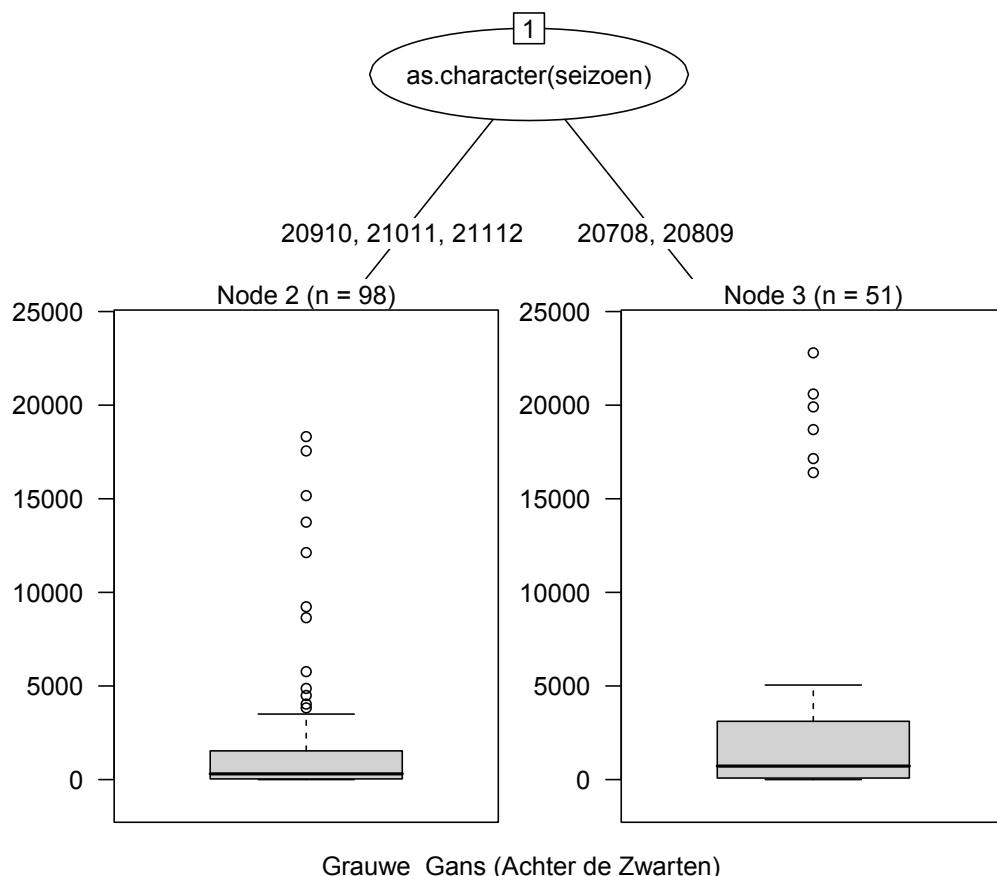
Brandgans (Achter de Zwartens)



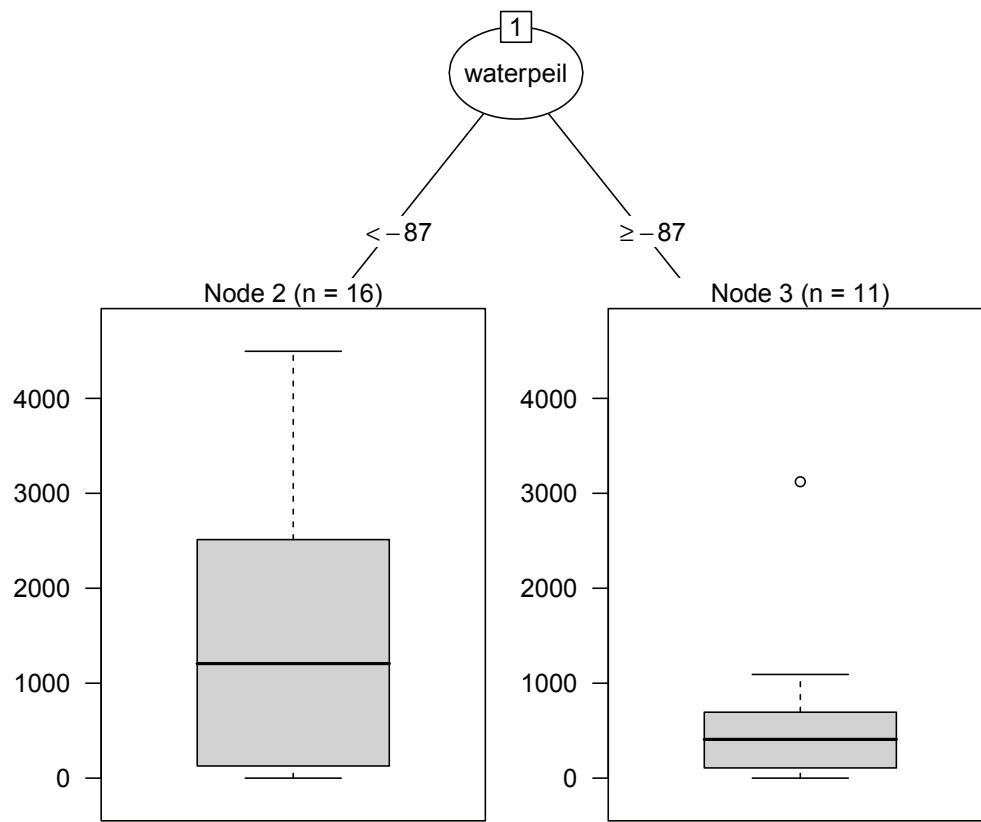
Brandgans (Kollumerwaard)



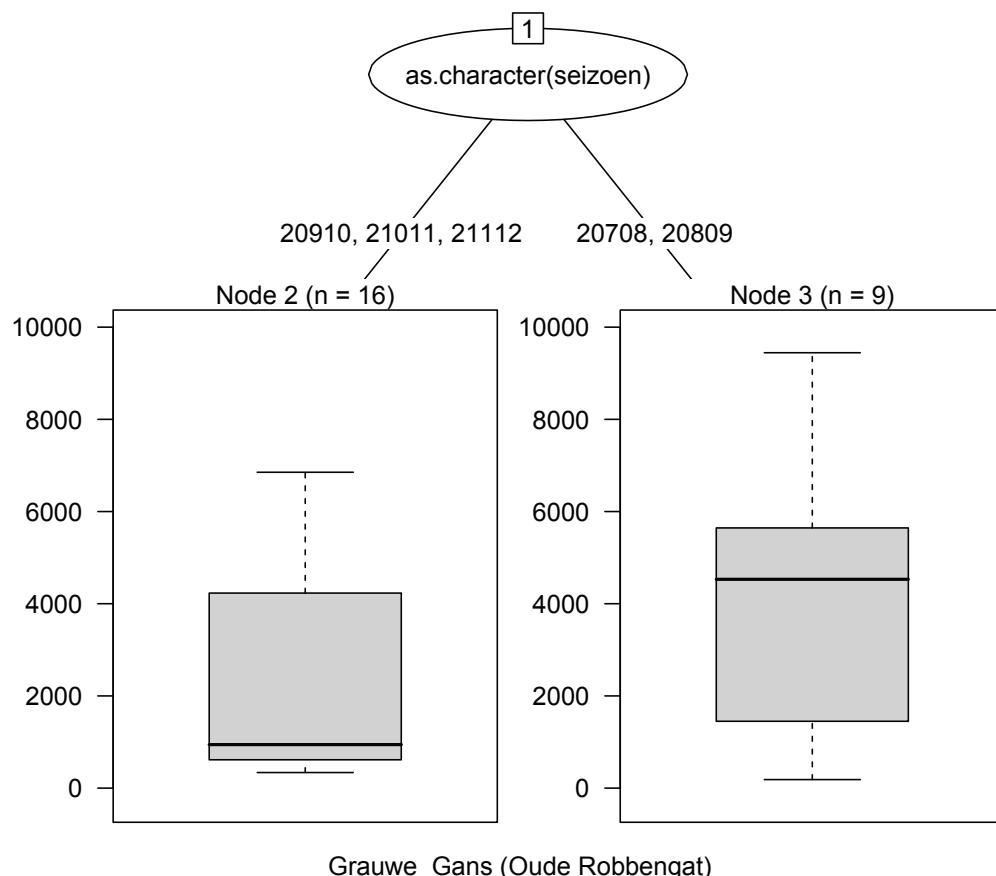
Grauwe\_Gans (Lauwersmeer)



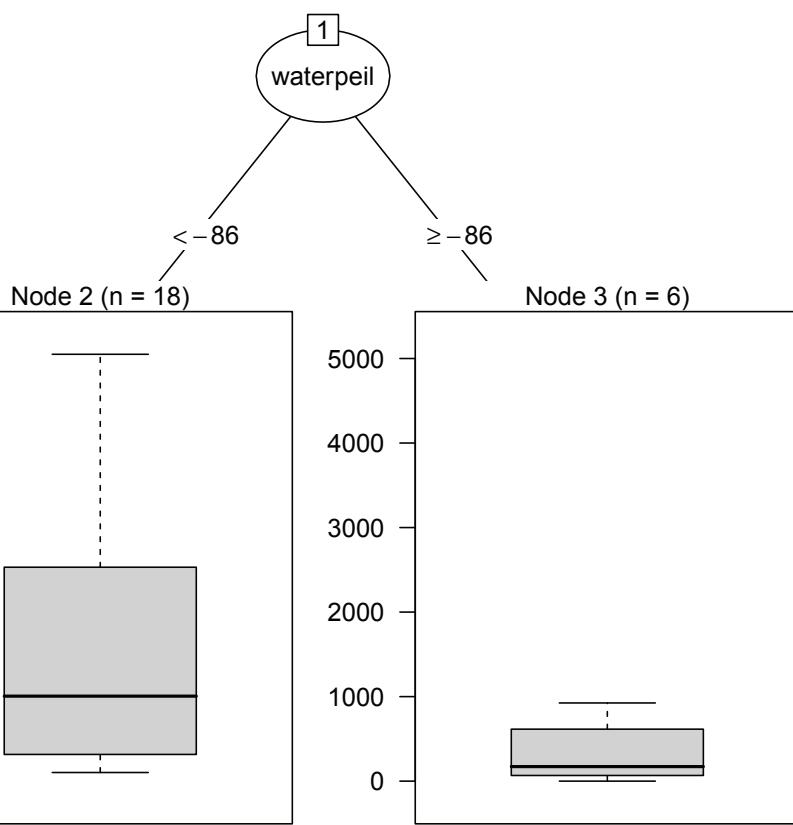
Grauwe\_Gans (Achter de Zwartens)



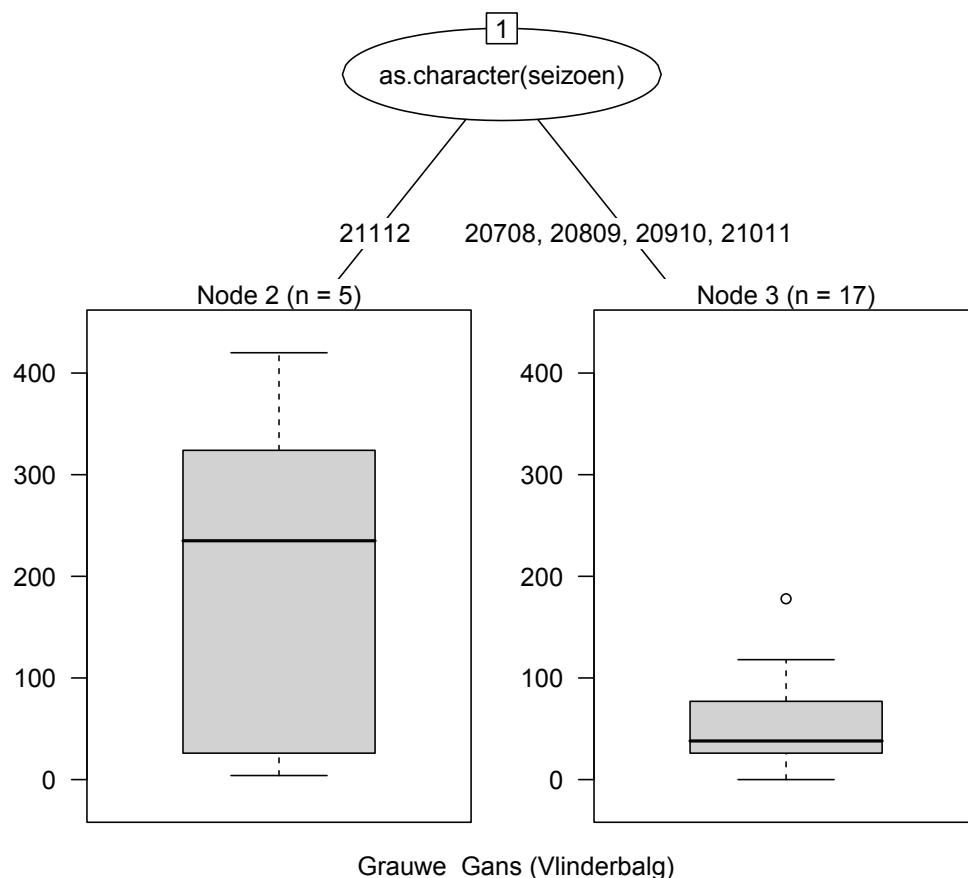
Grauwe\_Gans (Ezumakeeg)



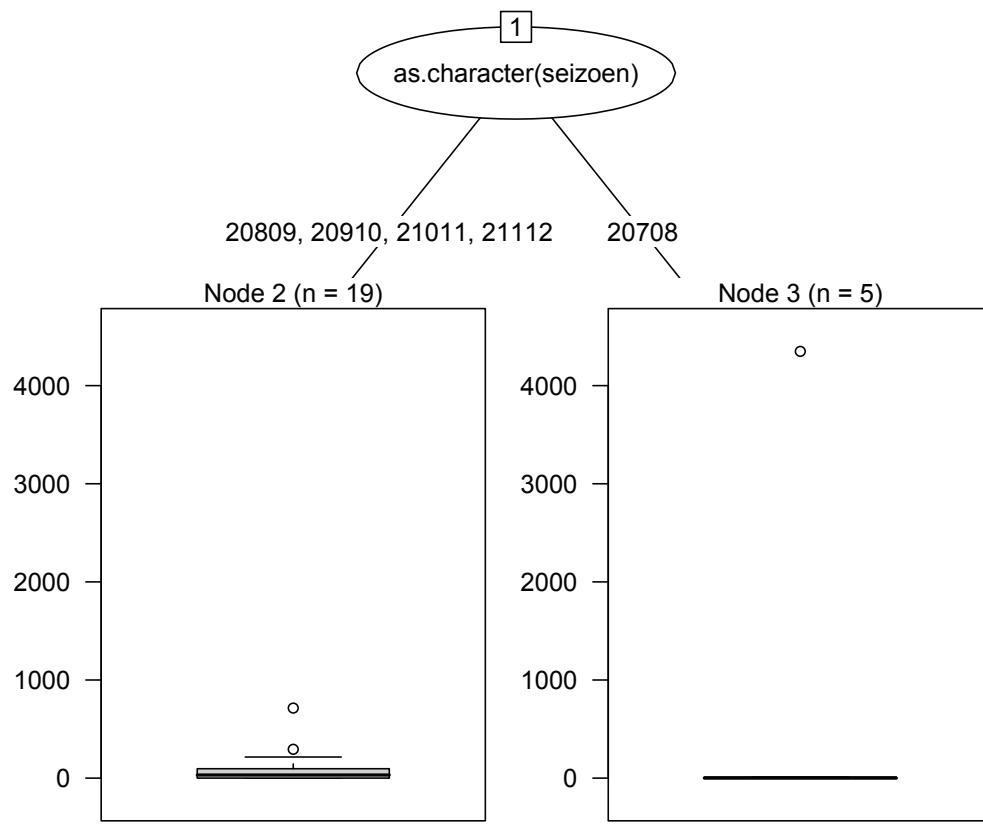
Grauwe\_Gans (Oude Robbengat)



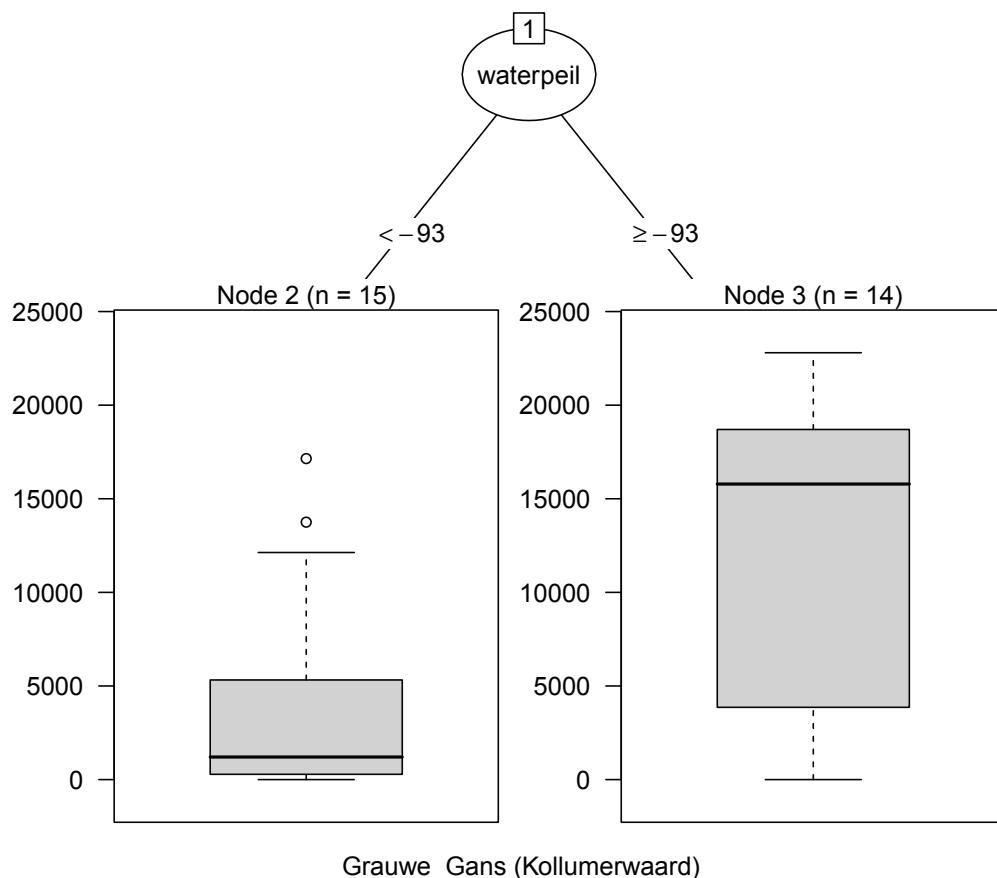
Grauwe\_Gans (Nieuwe Robbengat)



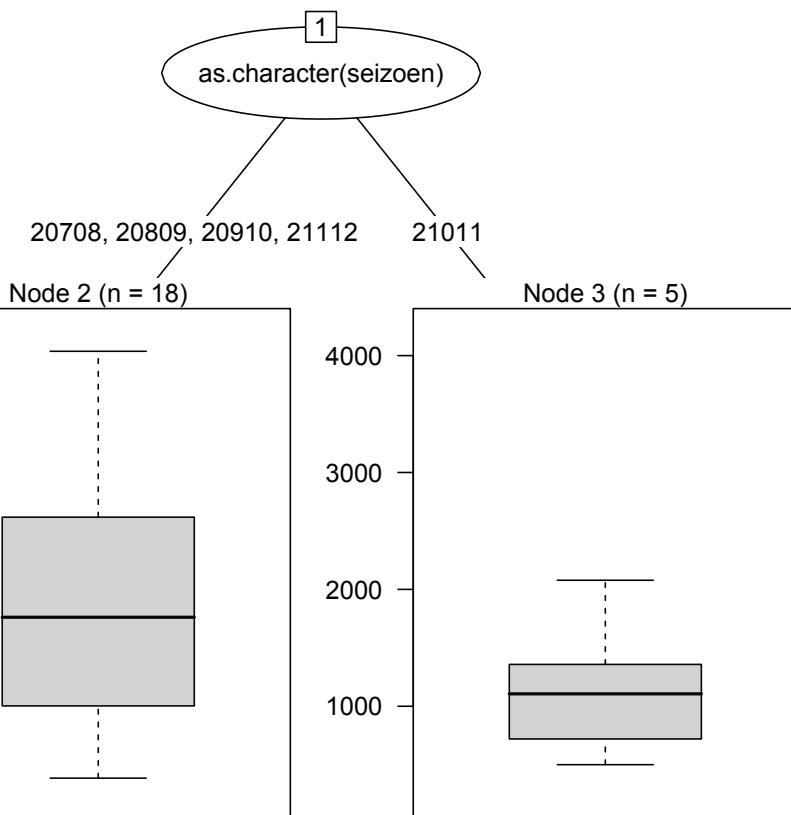
Grauwe\_Gans (Vlinderbalg)



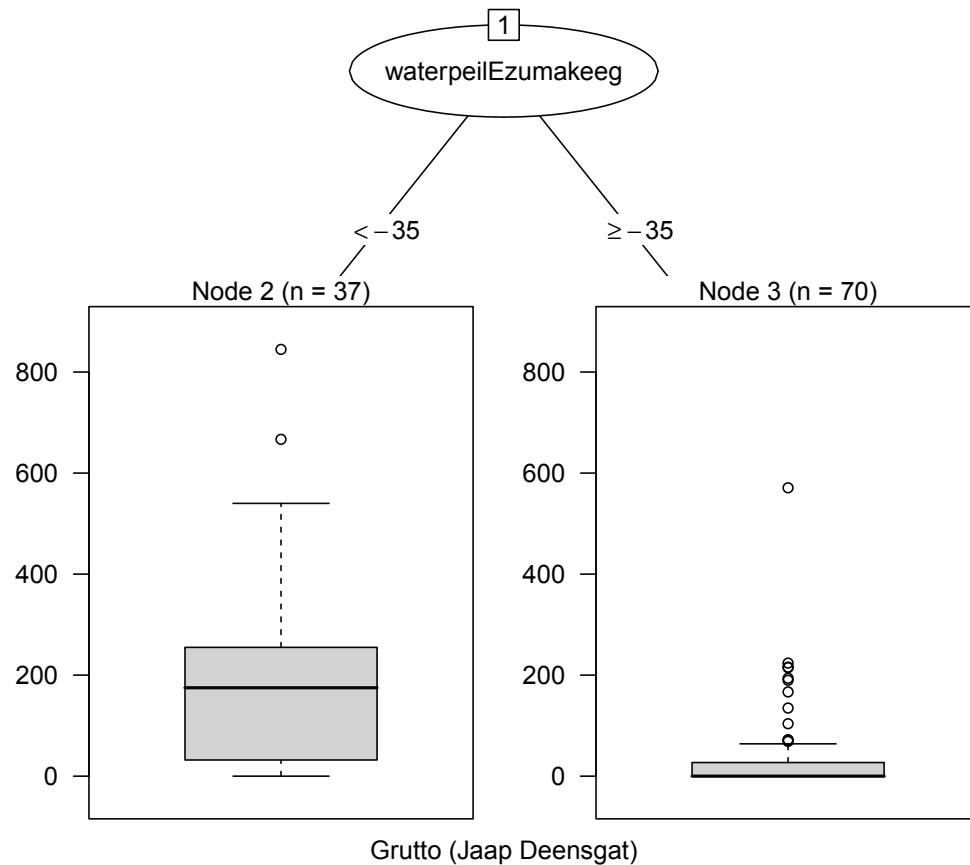
Grauwe\_Gans (Jaap Deensgat)



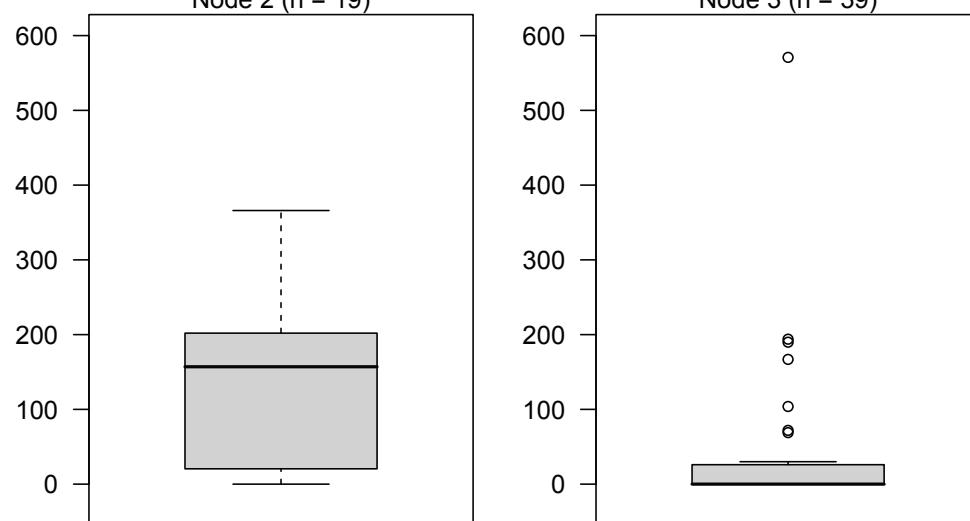
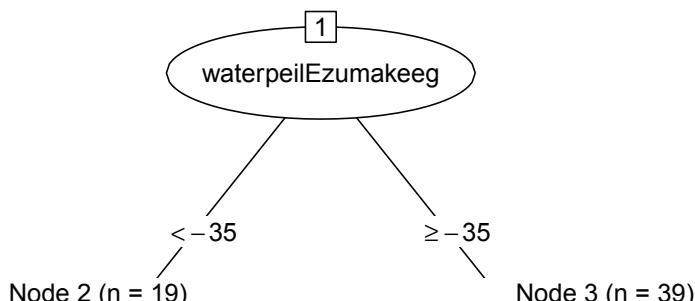
Grauwe\_Gans (Kollumerwaard)



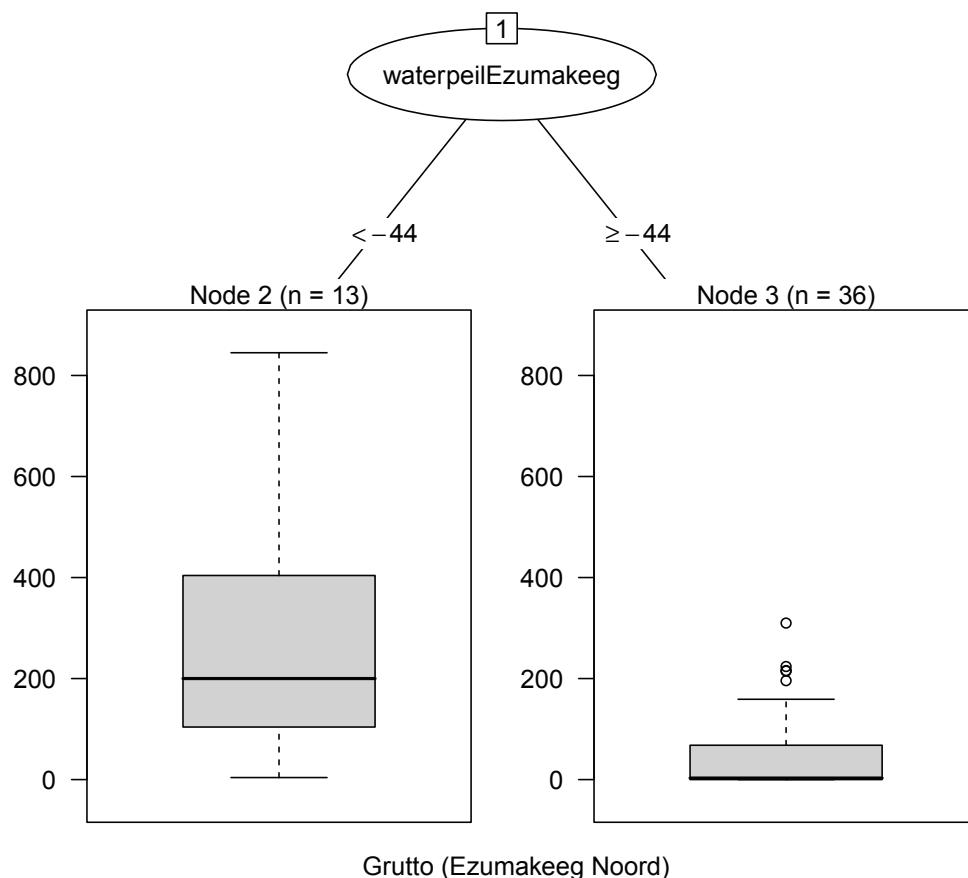
Grutto (Lauwersmeer)



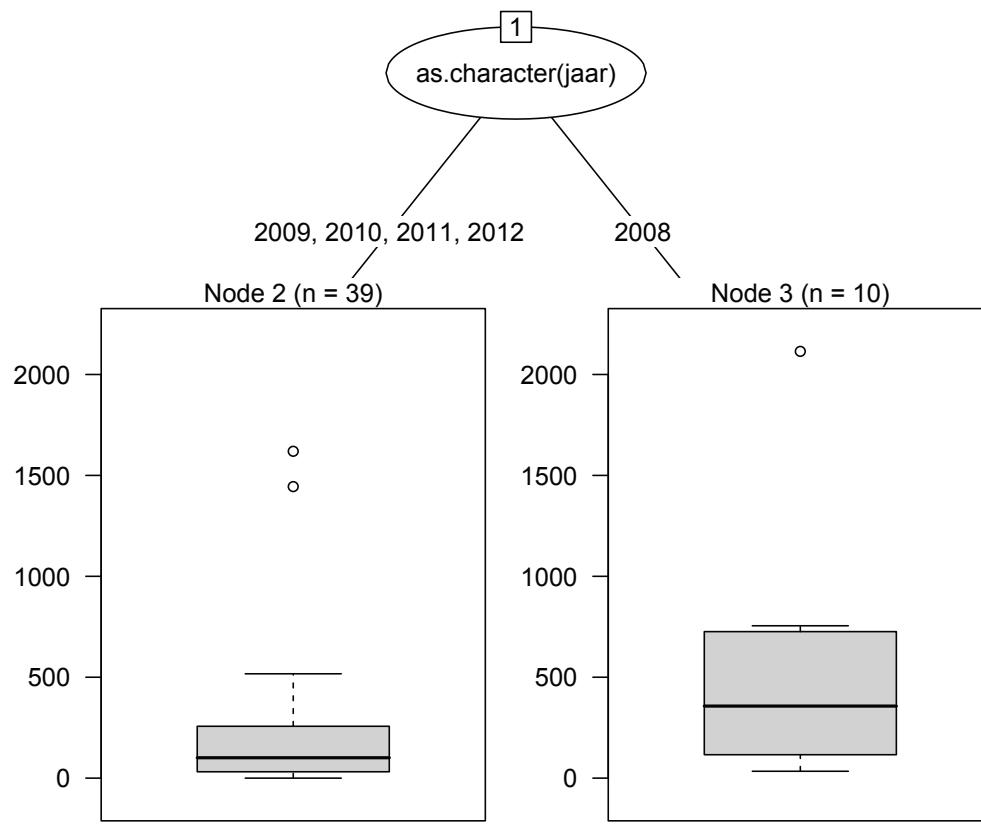
Grutto (Jaap Deensgat)



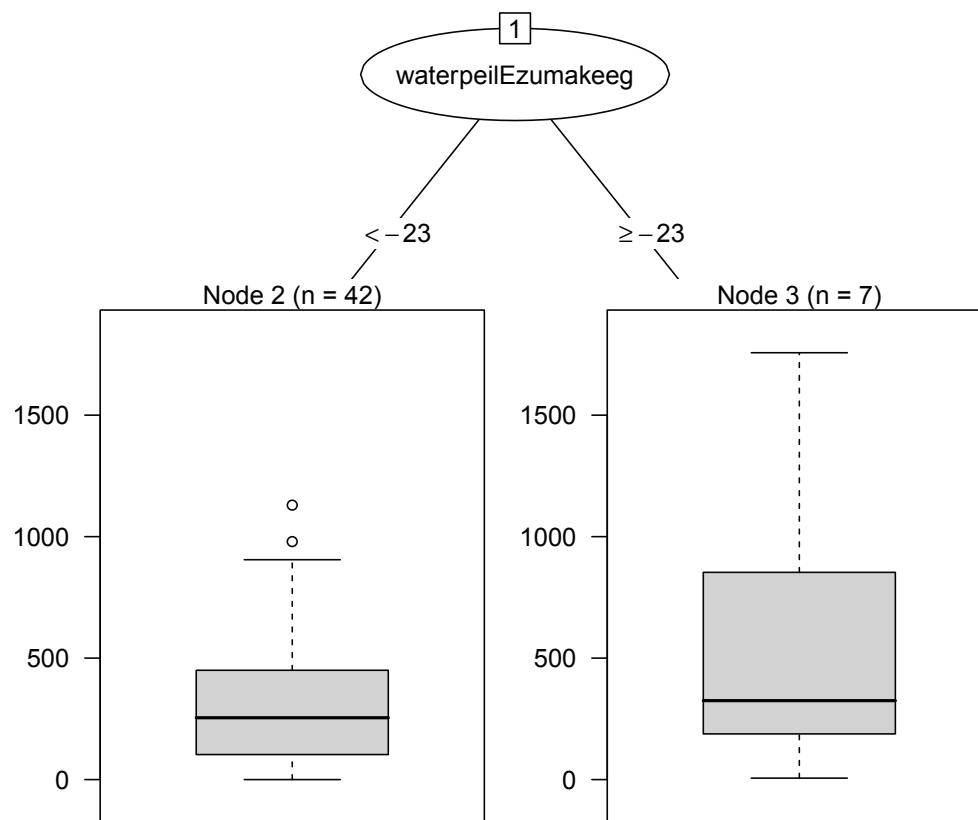
Grutto (Achter de Zwartens)



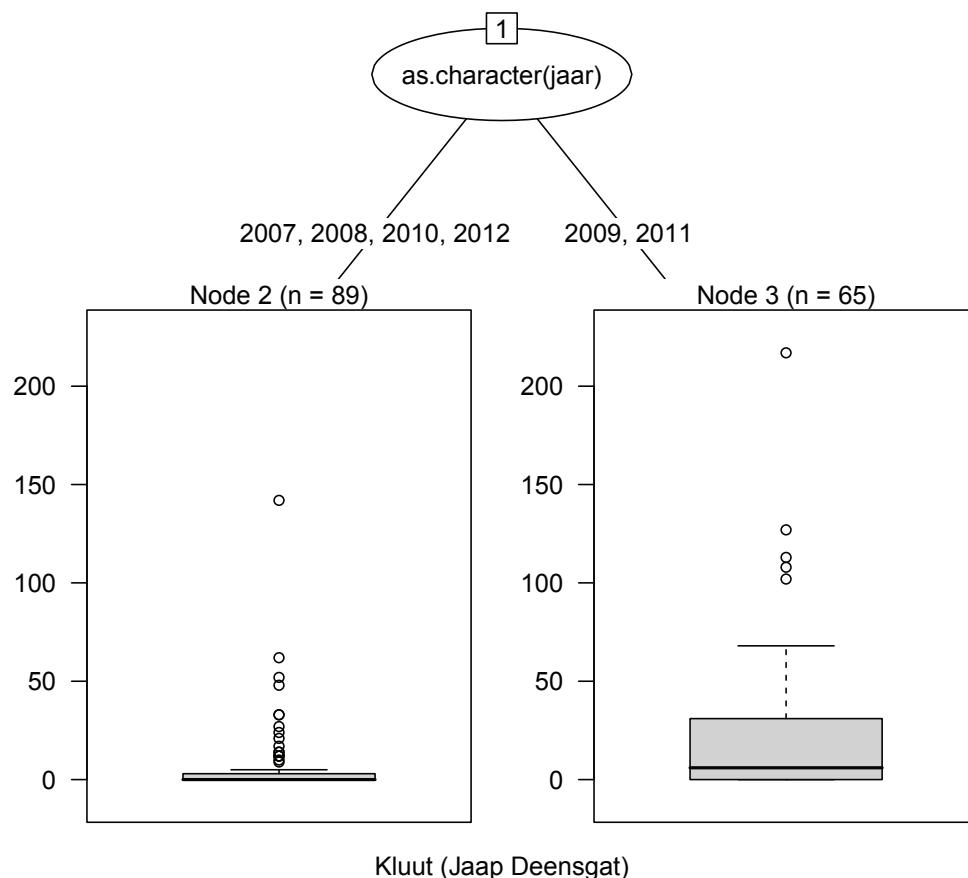
Grutto (Ezumakeeg Noord)



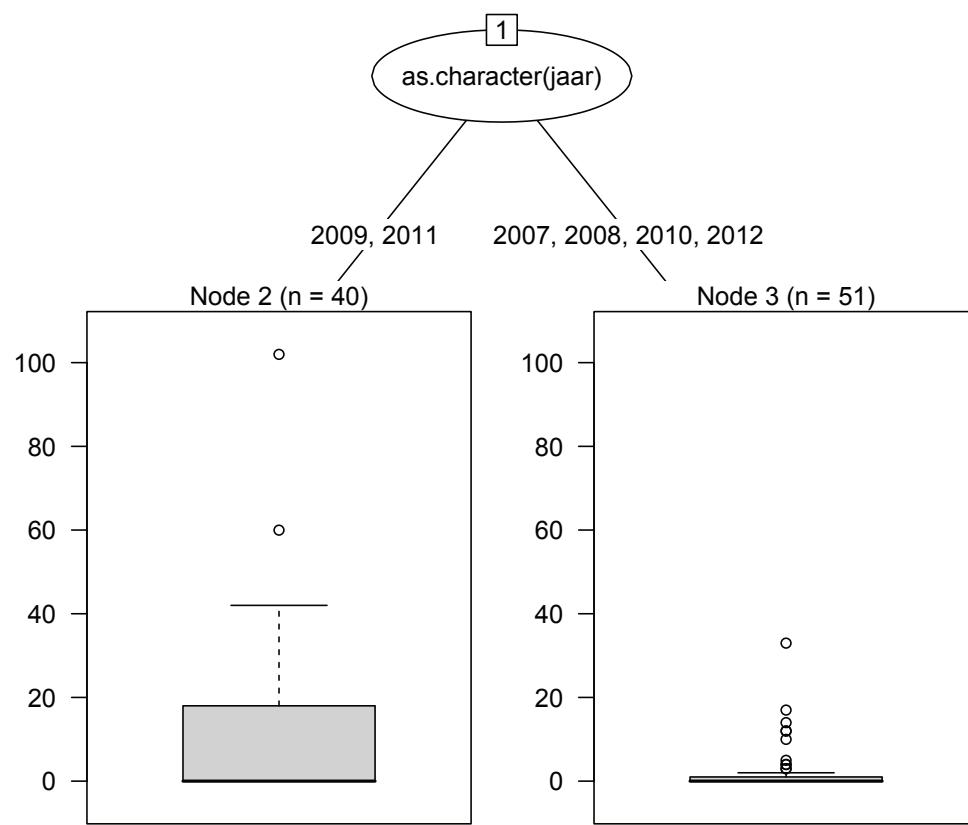
Grutto (Ezumakeeg Zuid)



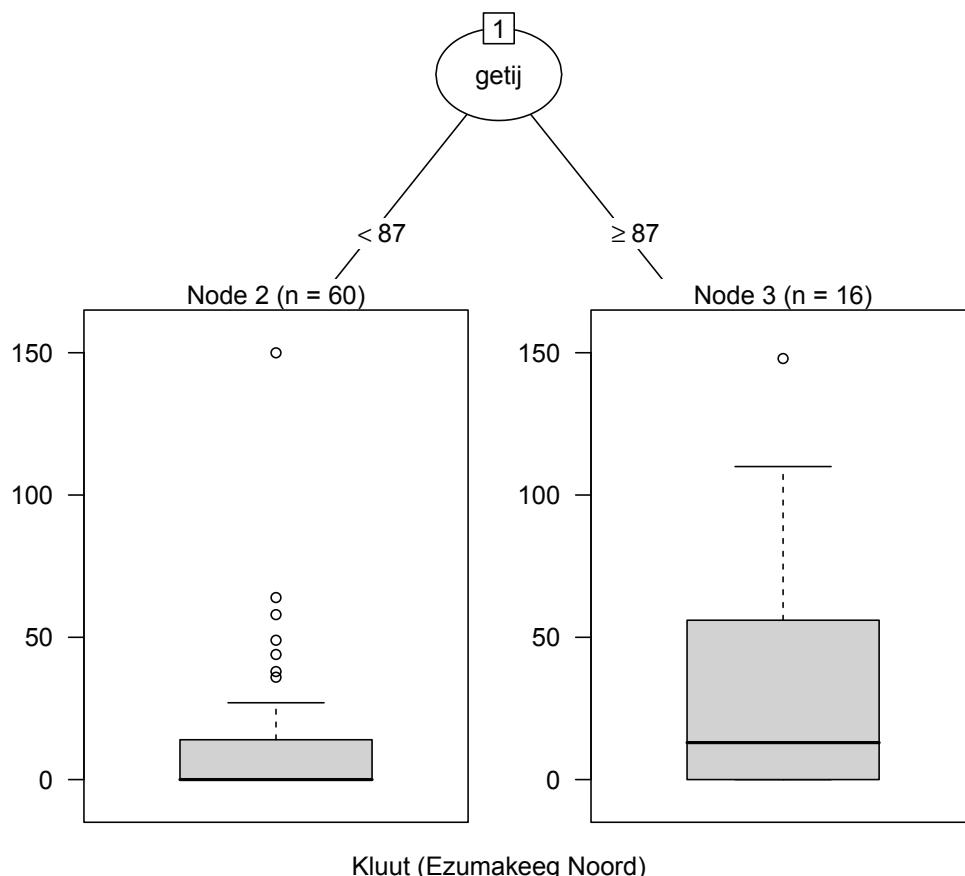
Kluut (Lauwersmeer)



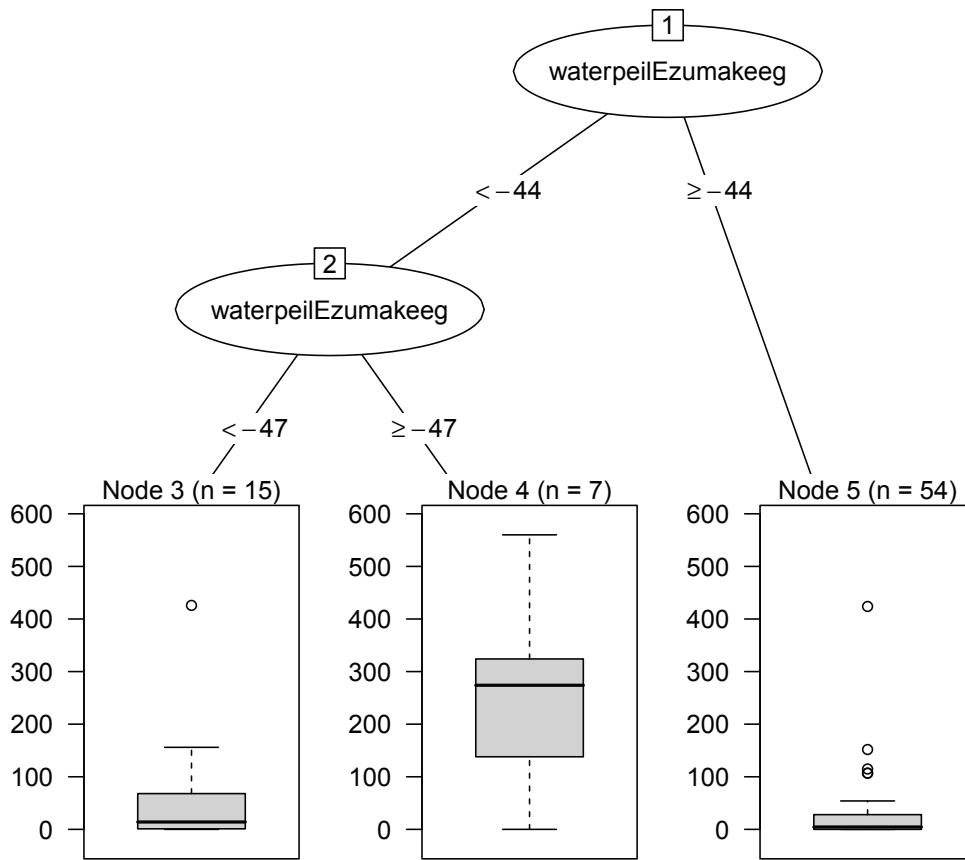
Kluut (Jaap Deensgat)



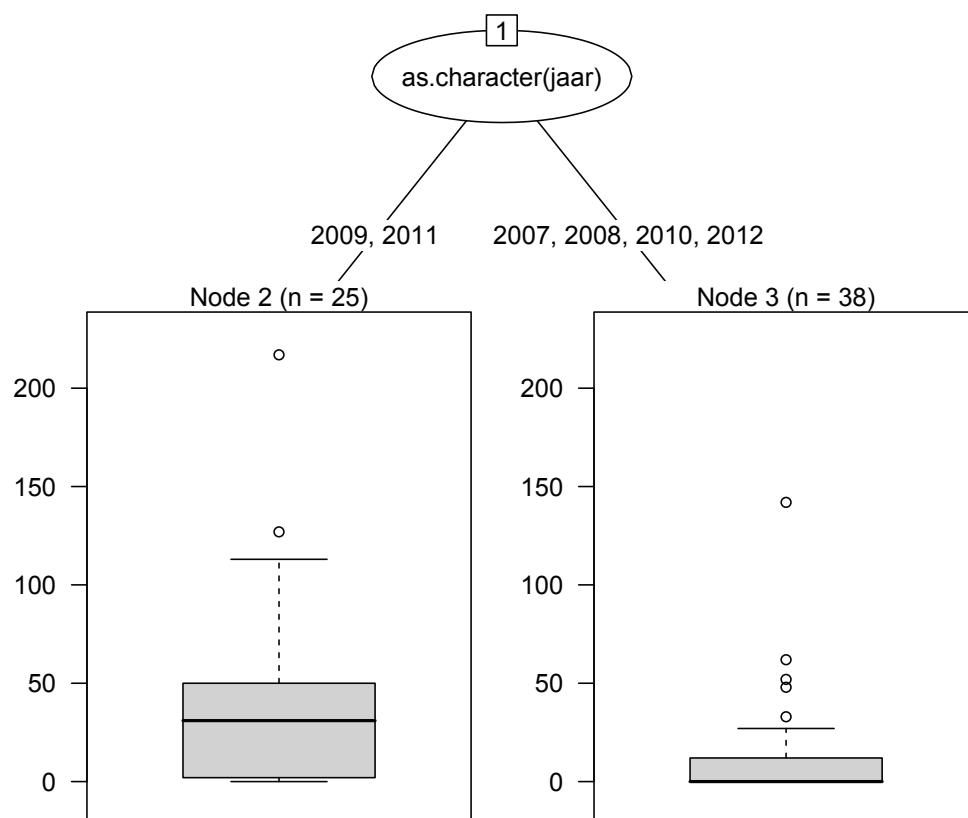
Kluut (Ezumakeeg Zuid)



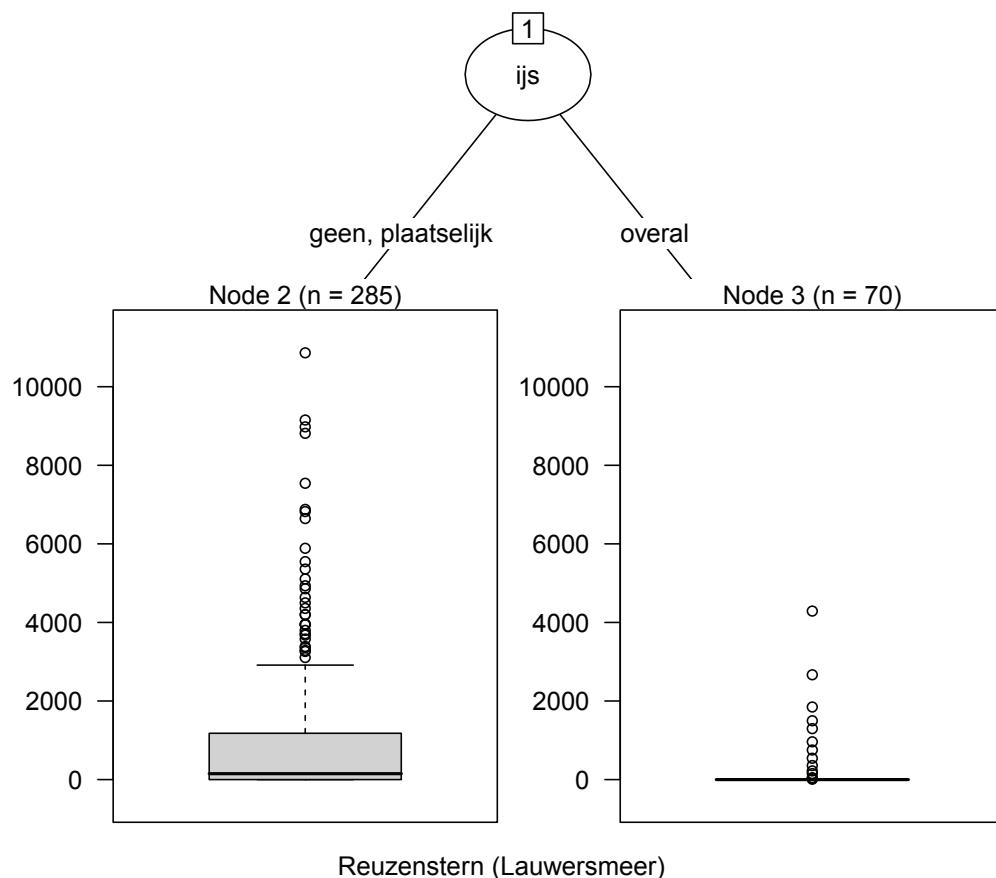
Kluut (Ezumakeeg Noord)



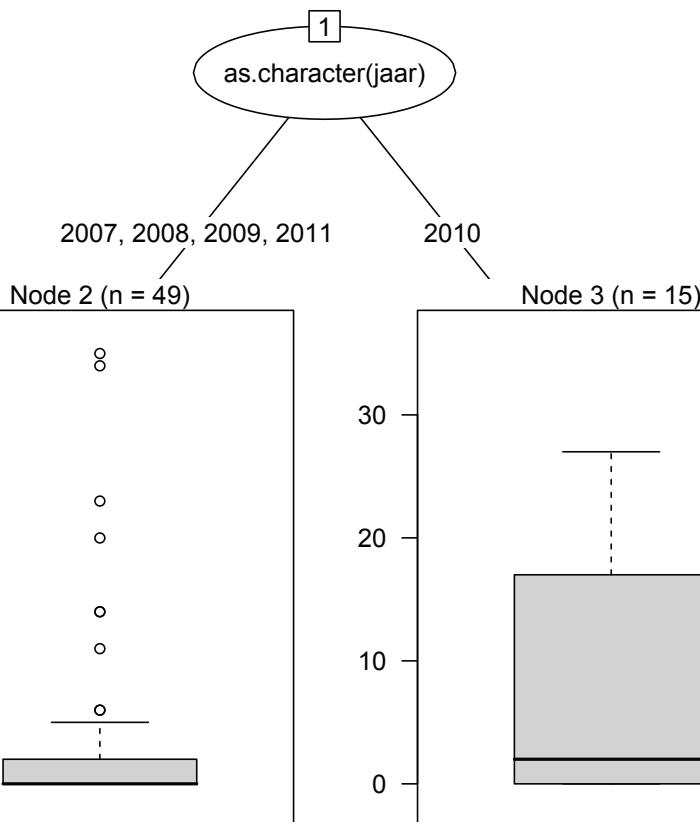
Kluut (Achter de Zwartens)



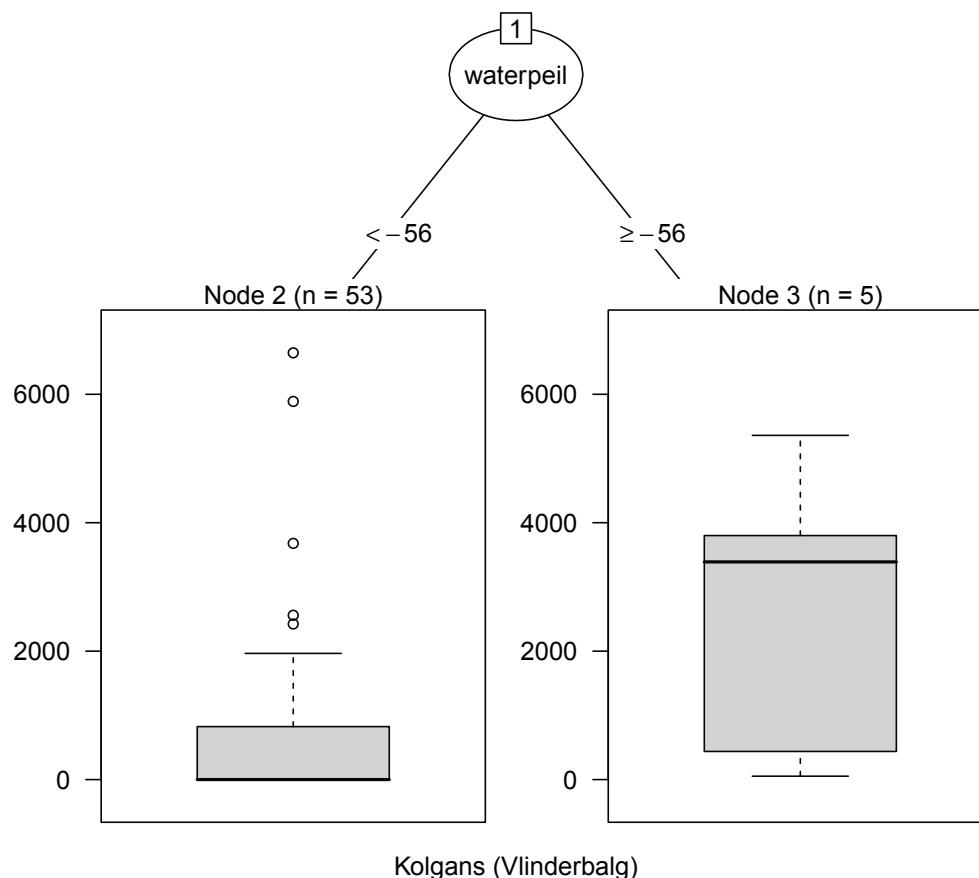
Kolgans (Lauwersmeer)



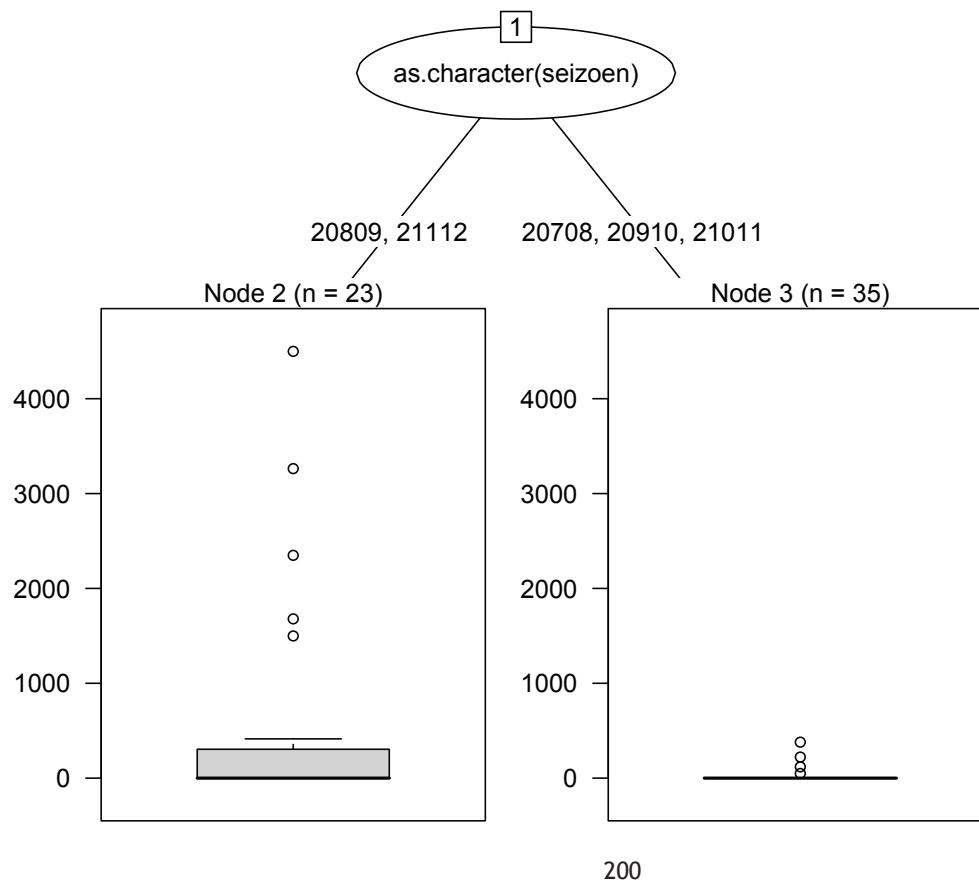
Reuzenstern (Lauwersmeer)



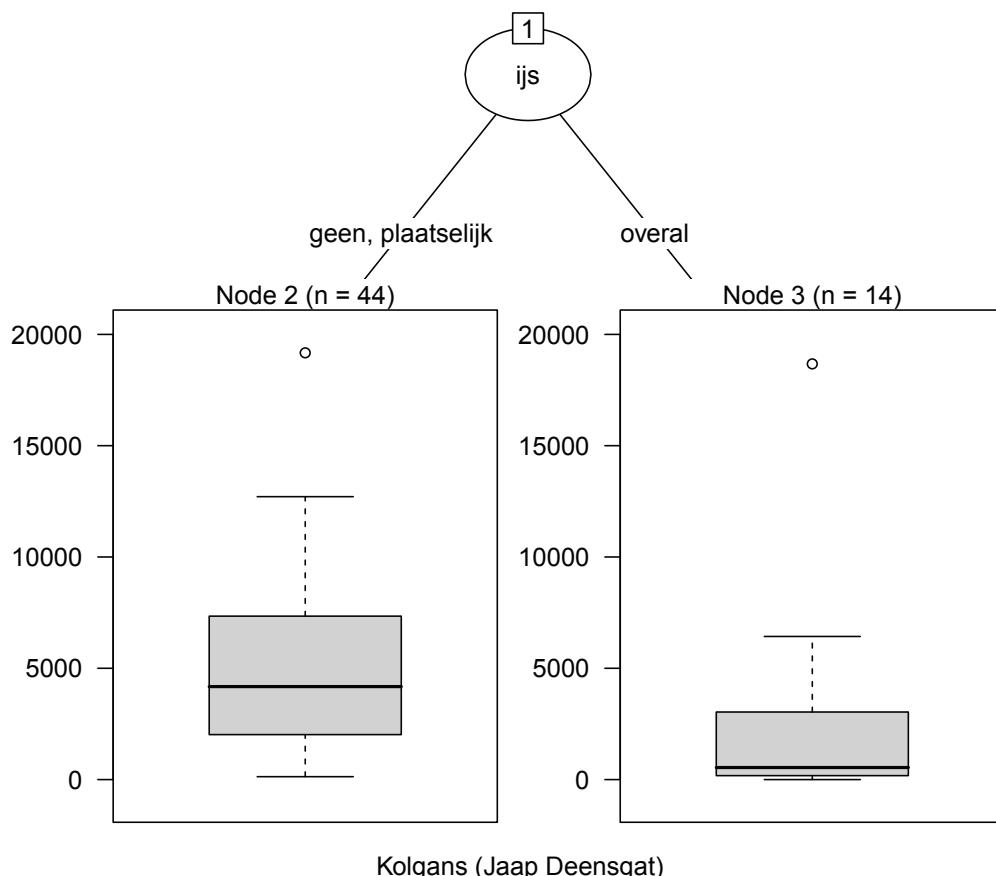
## Kolgans (Oude Robbengat)



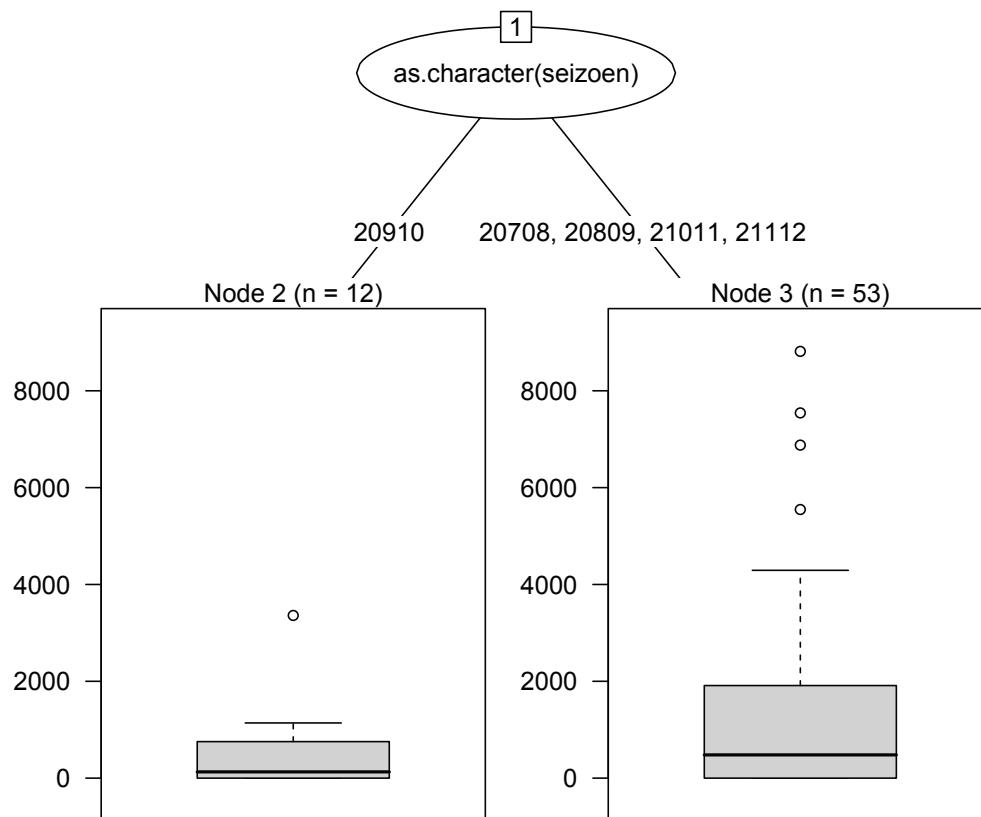
## Kolgans (Vlinderbalg)



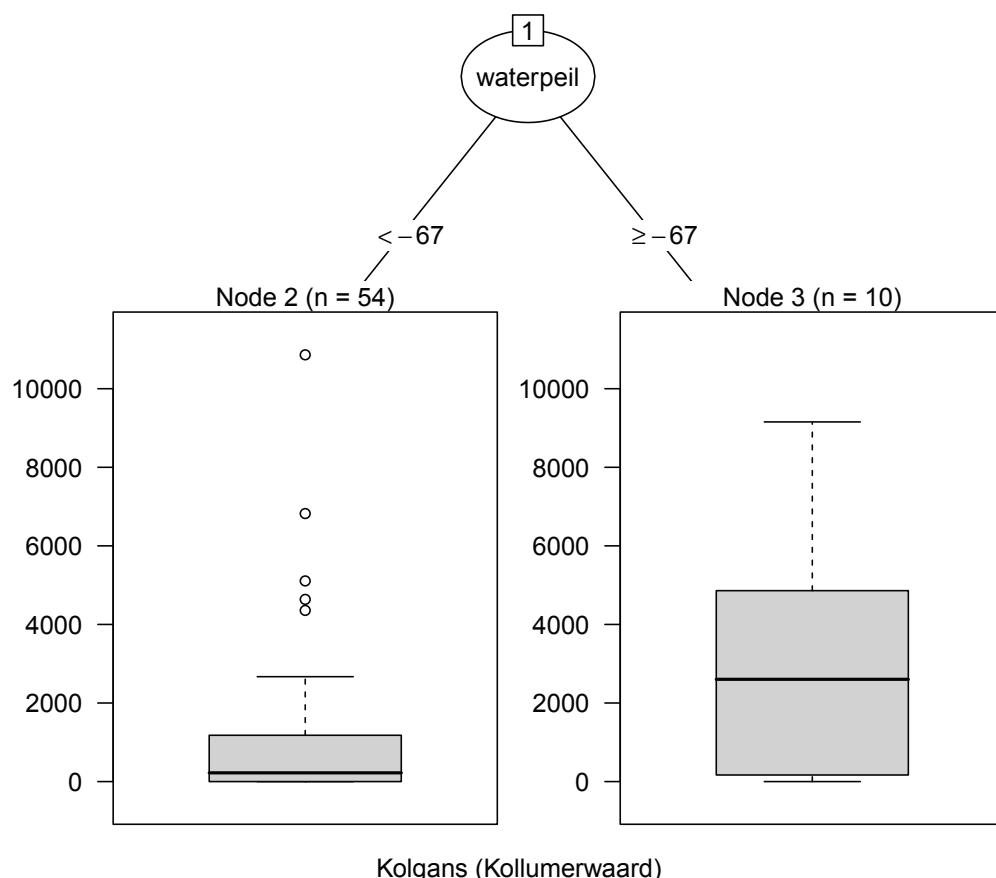
Kolgans (Ezumakeeg)



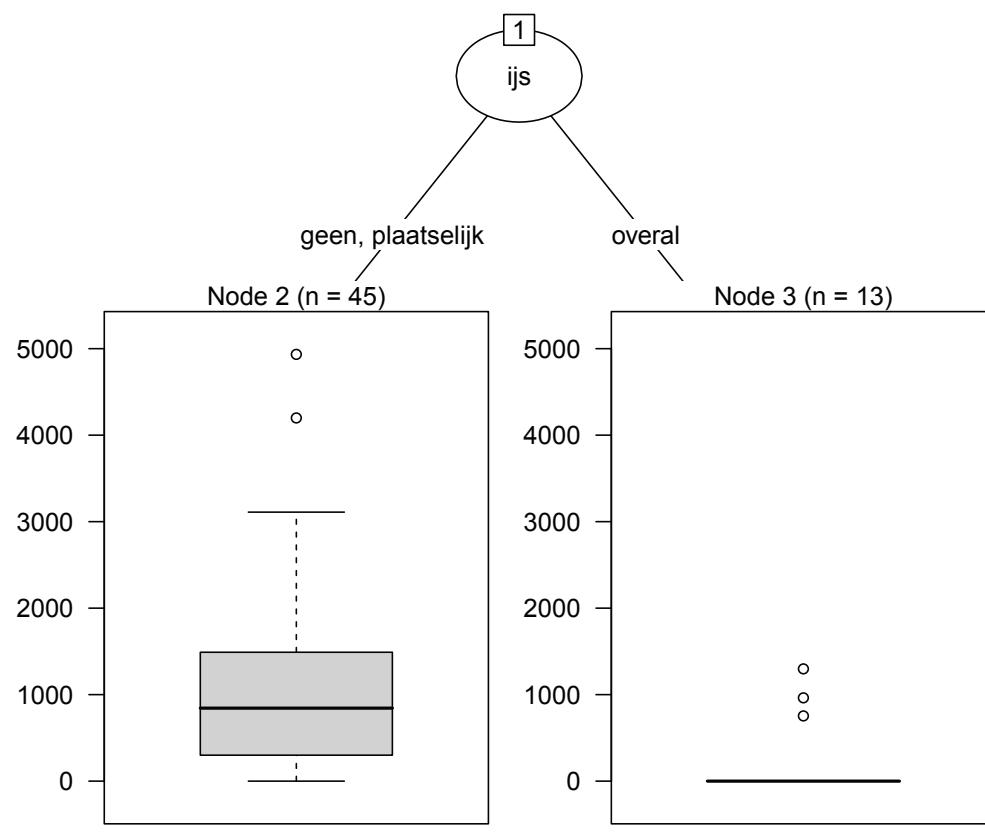
Kolgans (Jaap Deensgat)



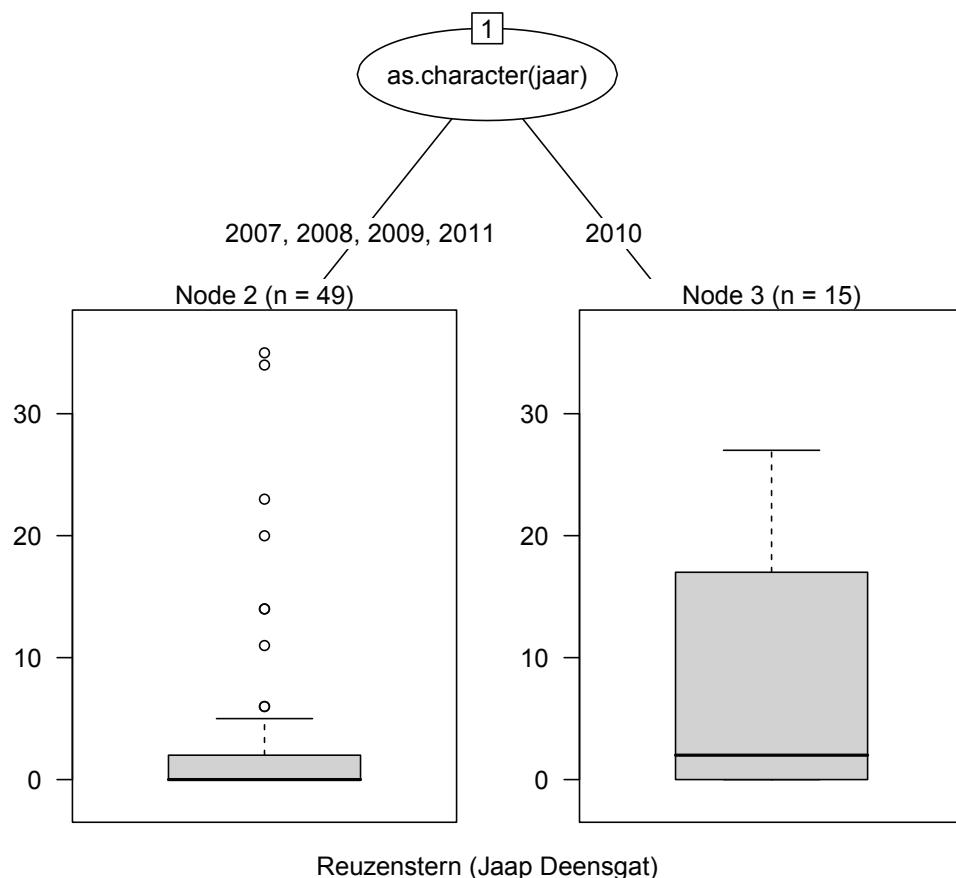
Kolgans (Achter de Zwartens)



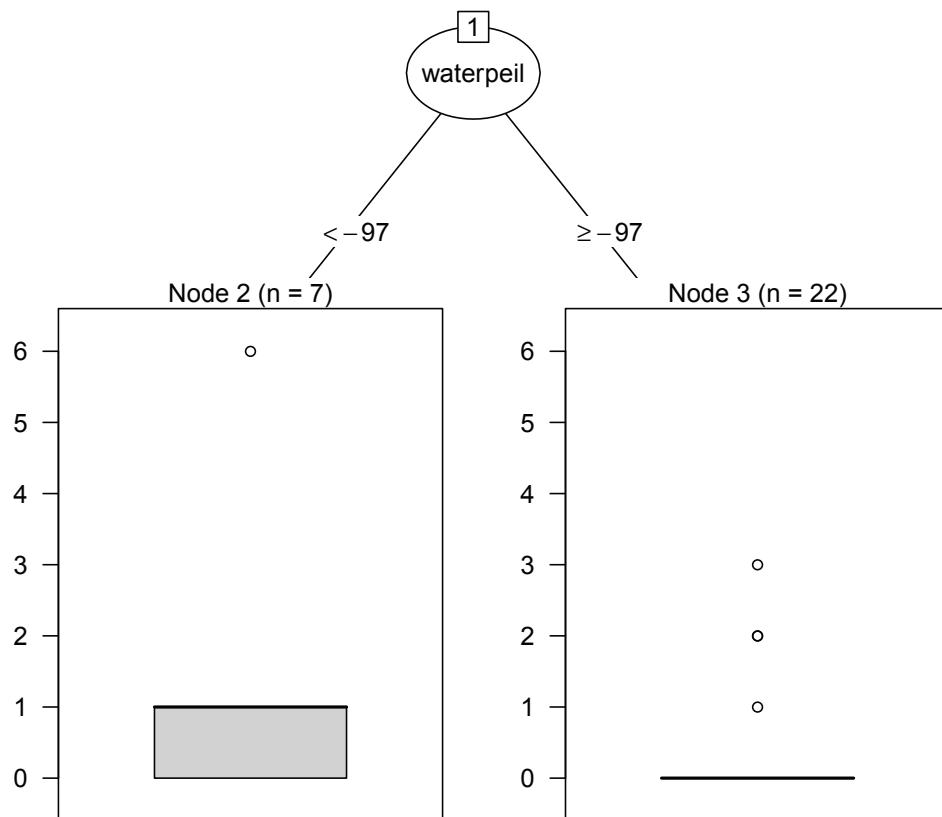
Kolgans (Kollumerwaard)



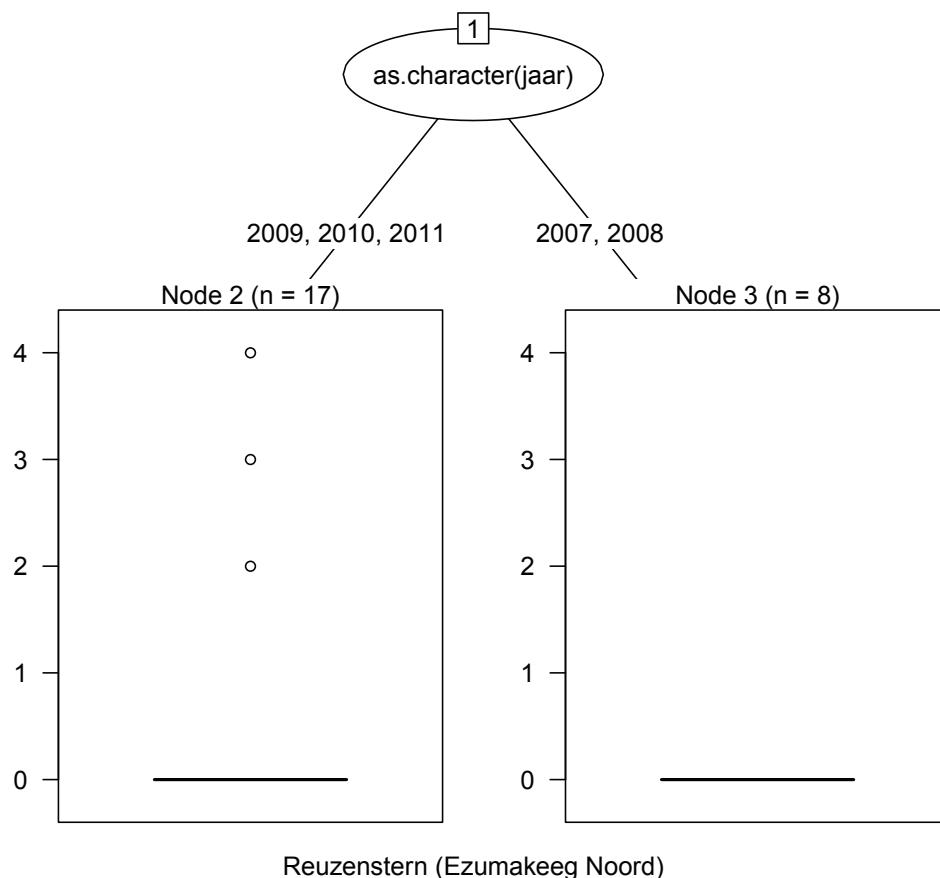
Reuzenstern (Lauwersmeer)



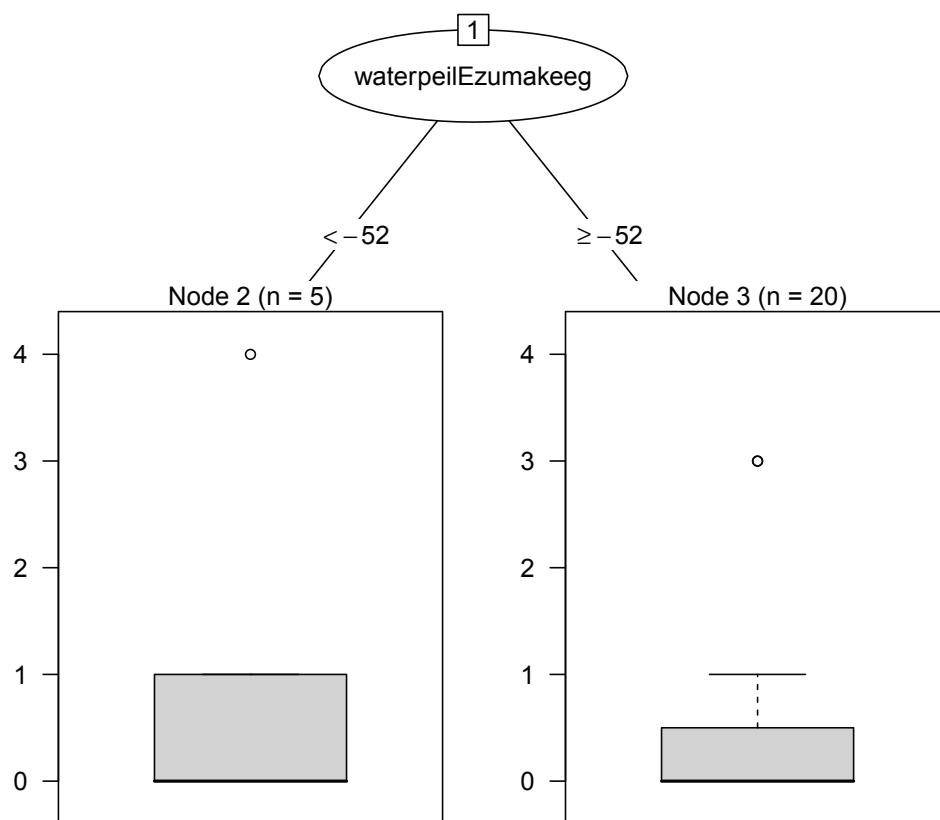
Reuzenstern (Jaap Deensgat)



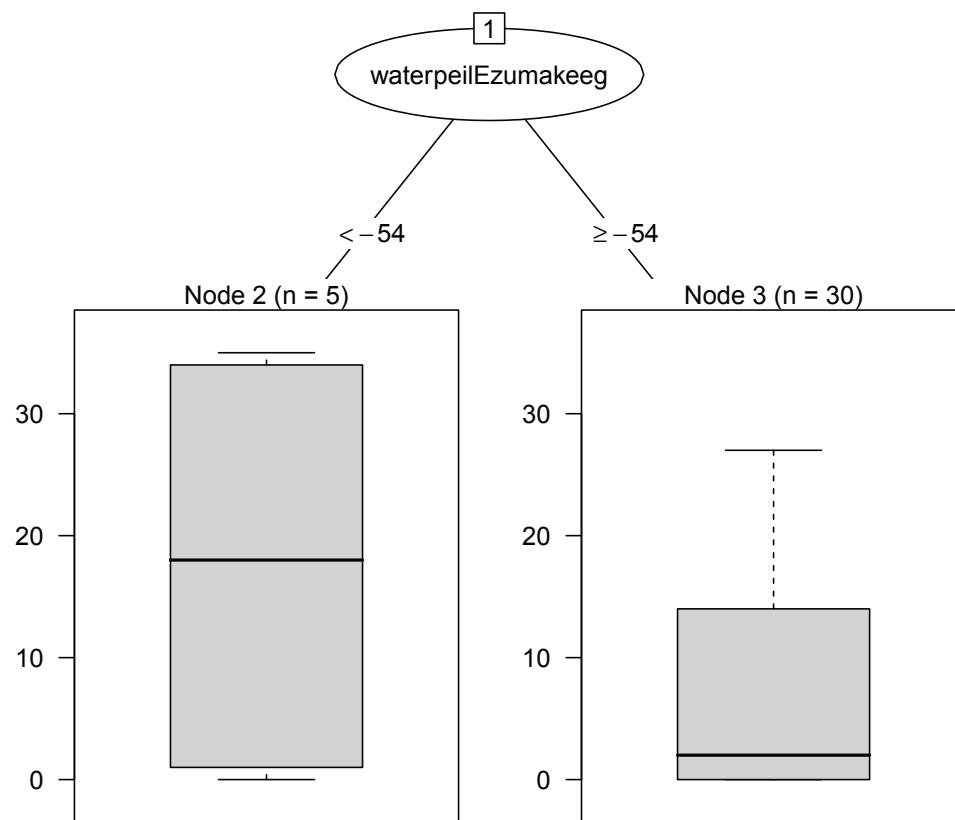
Reuzenstern (Ezumakeeg Zuid)



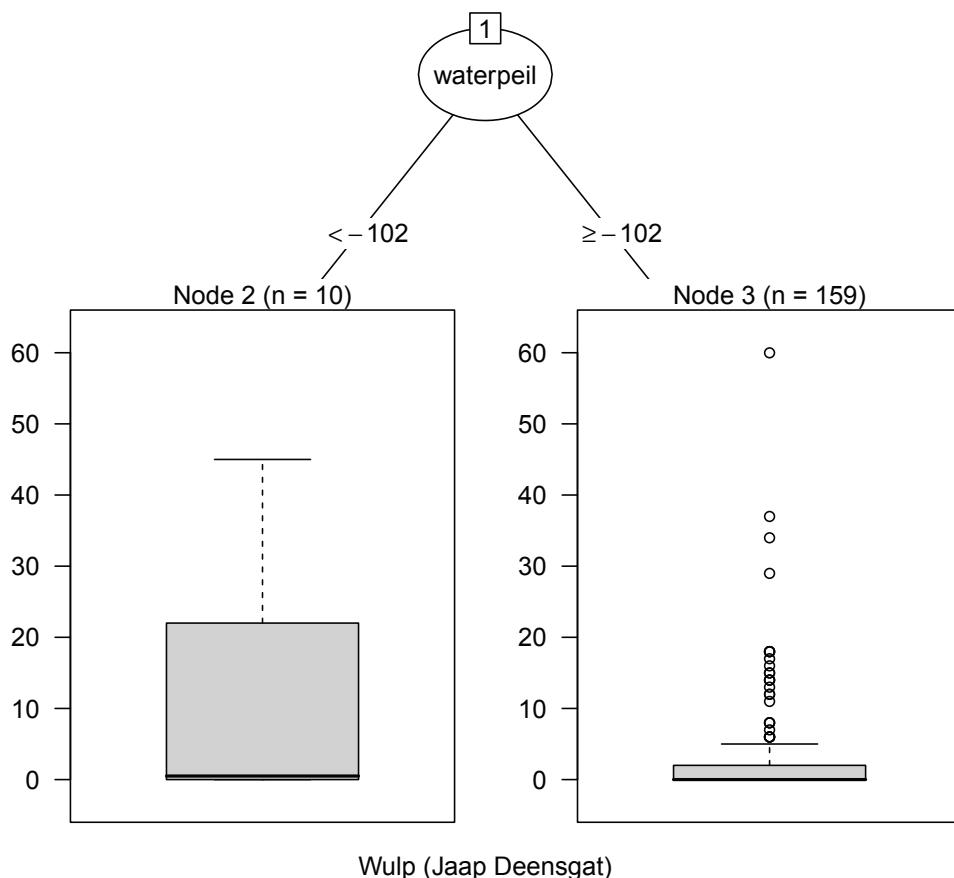
Reuzenstern (Ezumakeeg Noord)



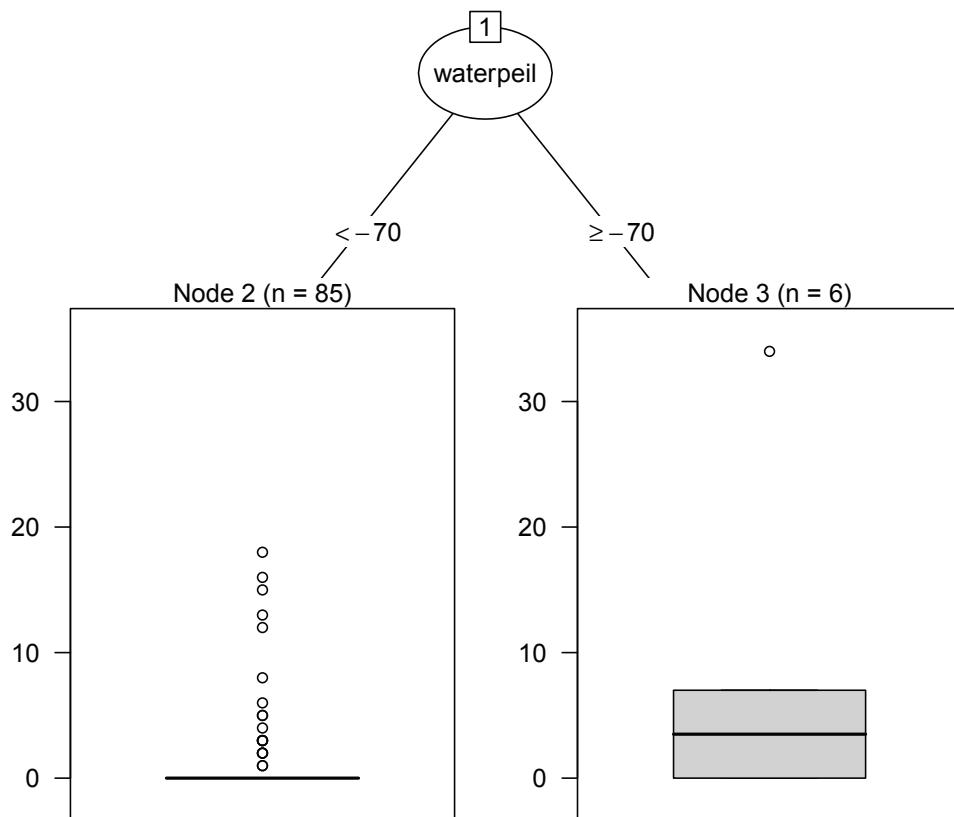
Reuzenstern (Achter de Zwarten)



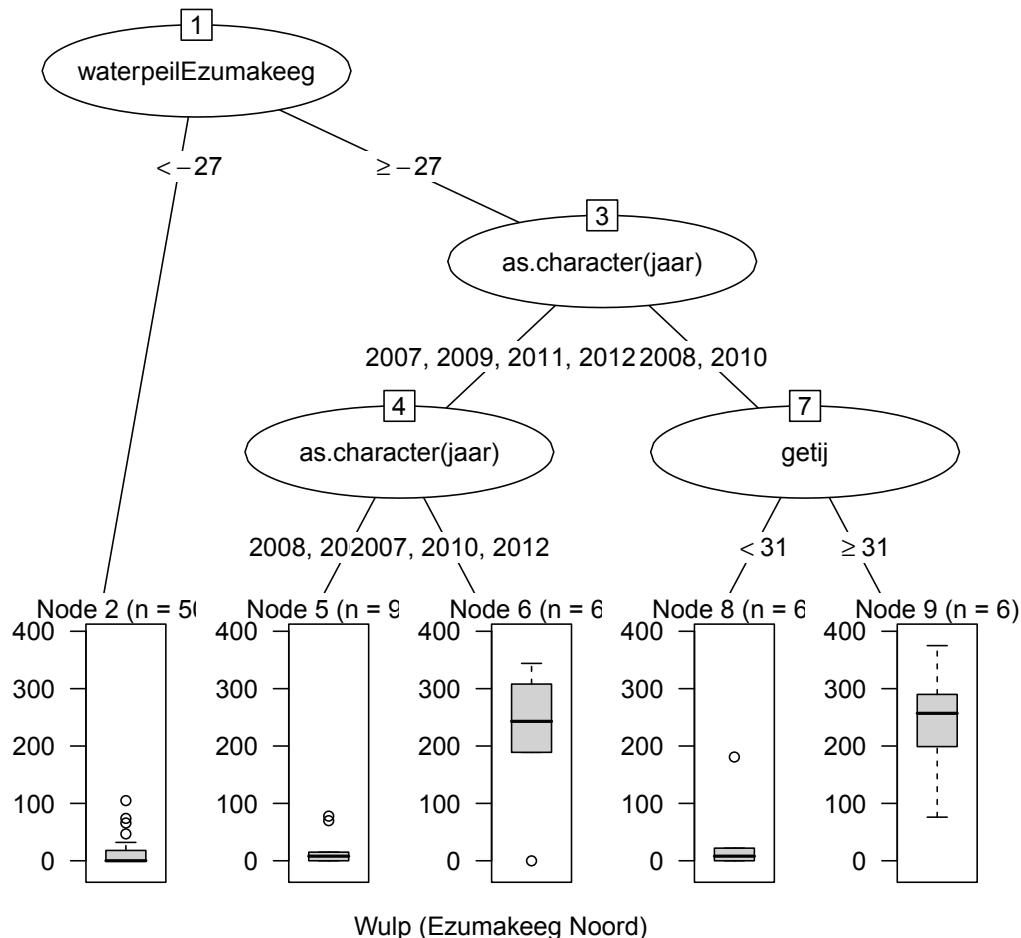
Wulp (Lauwersmeer)



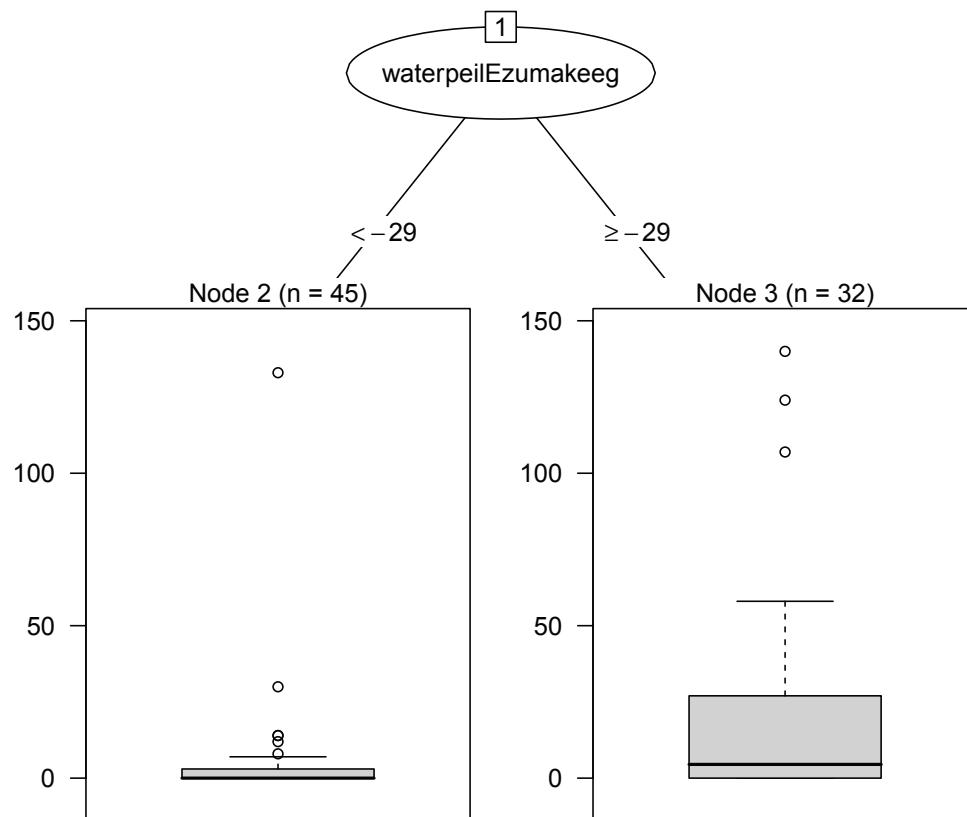
Wulp (Jaap Deensgat)



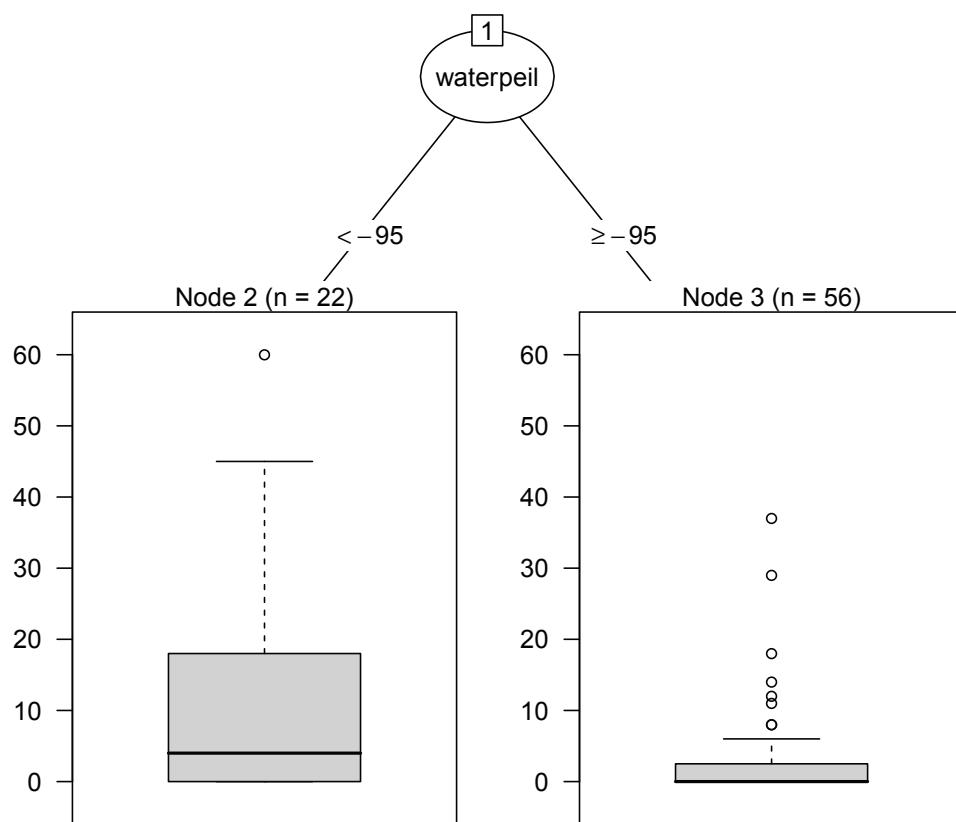
Wulp (Ezumakeeg Zuid)



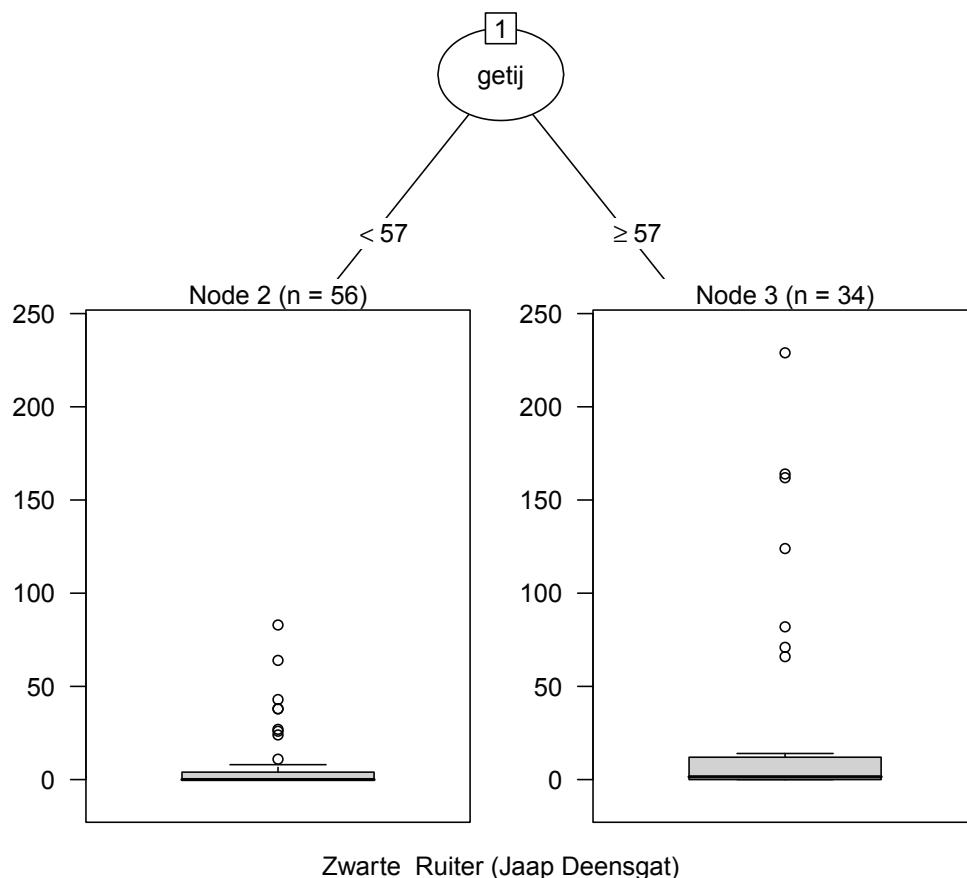
Wulp (Ezumakeeg Noord)



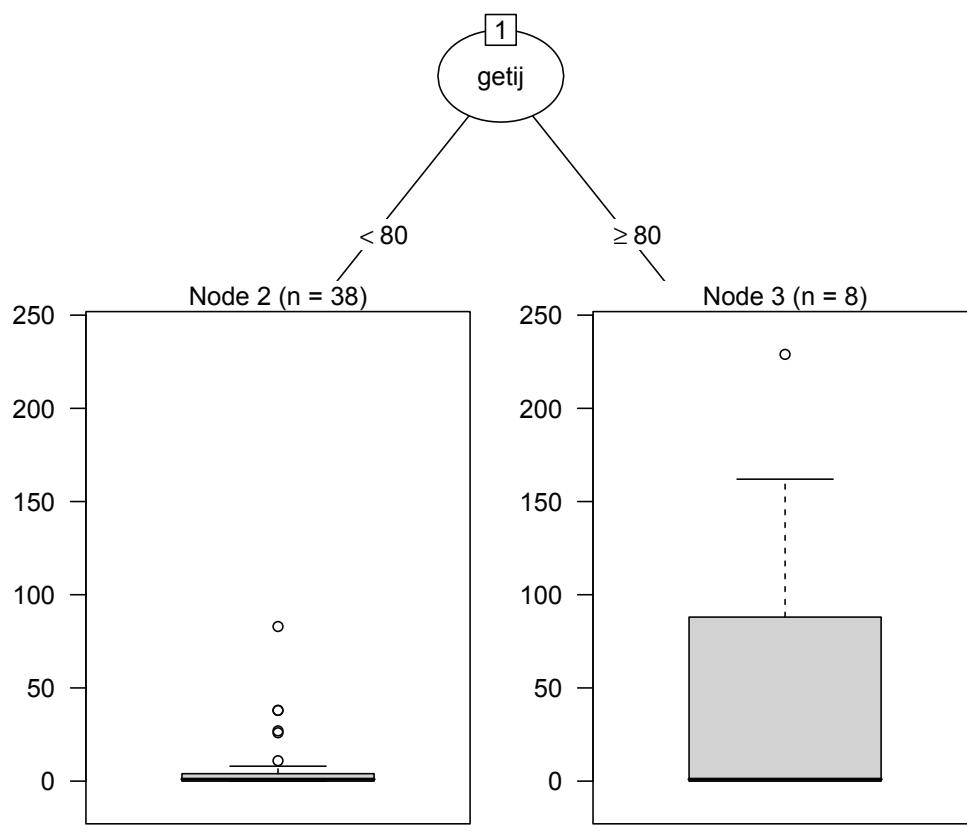
Wulp (Achter de Zwartens)



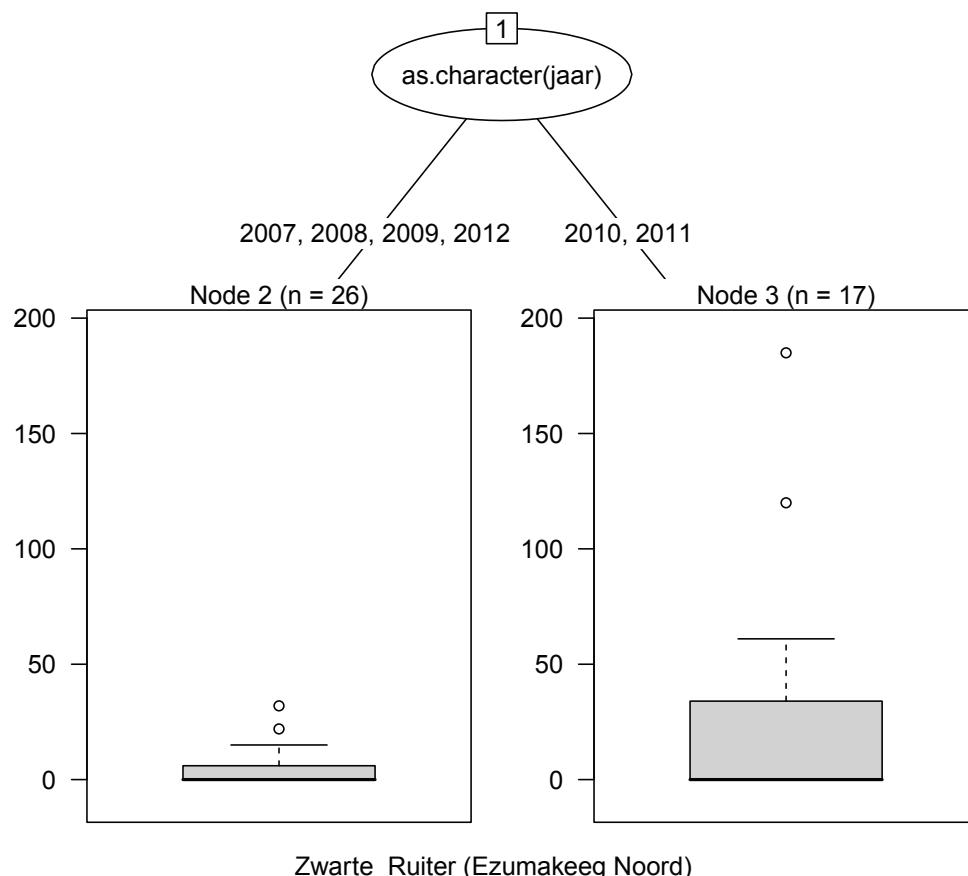
Zwarte\_Ruiter (Lauwersmeer)



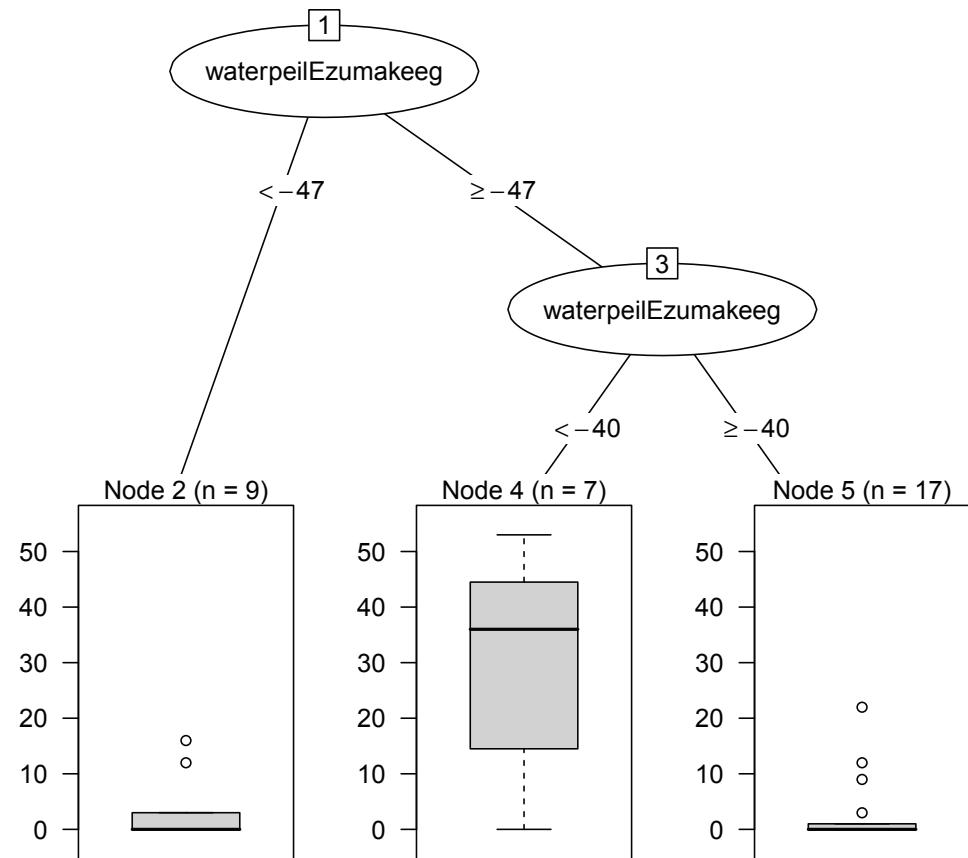
Zwarte\_Ruiter (Jaap Deensgat)



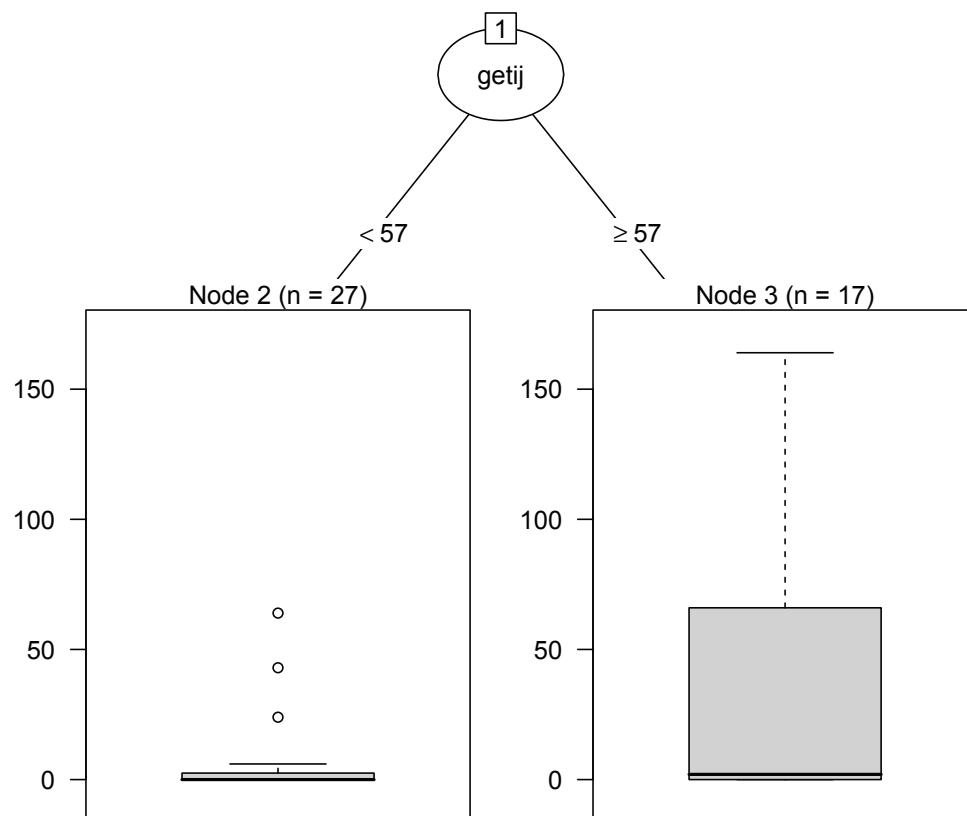
Zwarte\_Ruiter (Ezumakeeg Zuid)



Zwarte\_Ruiter (Ezumakeeg Noord)



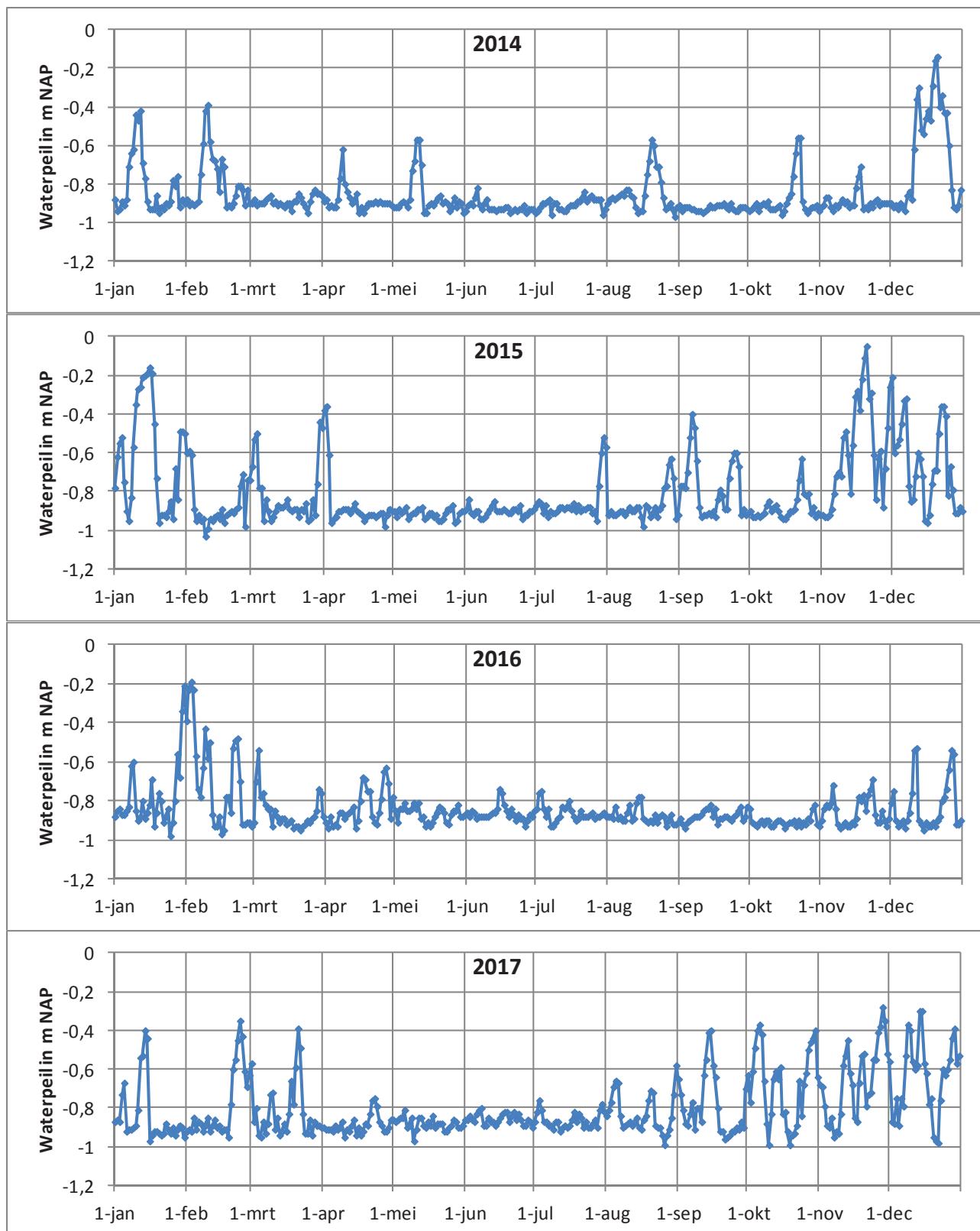
Zwarte\_Ruiter (Achter de Zwartens)



## Bijlagen hoofdstuk 9

**Bijlage 14. Waterpeilverloop Lauwersmeer 2014-2017**

Waterpeilverloop in de boezem van het Lauwersmeer in 2014-2017. Locatie: R.J. Cleveringhsluizen Lauwersoog. Weergegeven is het maximum waterpeil per dag, gebaseerd op metingen om het kwartier.



## **Bijlage 15. Waterpeilen Lauwersmeer op teldagen van roofvogels in 2017**

*Weergegeven is het waterpeil in het Lauwersmeer op de teldag zelf en het maximum waterpeil in de periode vanaf 1 juli tot aan de teldag. Locatie: R.J. Cleverighsluizen Lauwersoog.*

Teldag per maand in 2016	Waterpeil op de teldag (in m NAP)	Maximum waterpeil in periode vanaf 1 juli tot aan de teldag (in m NAP)
16-jan	-0,97	-0,40
20-feb	-0,78	-0,40
20-mrt	-0,59	-0,35
18-apr	-0,92	-0,35
15-meい	-0,90	-0,35
19-jun	-0,82	-0,35
17-jul	-0,86	-0,76
14-aug	-0,85	-0,66
25-sep	-0,92	-0,40
23-okt	-0,66	-0,37
27-nov	-0,38	-0,37
24-dec	-0,60	-0,28

## Bijlage 16. Resultaten muizencensus 2017

Overzicht van het totaal aantal gevangen muizen per soort per muizenaai in het Lauwersmeer in oktober 2017. Voor de ligging van de muizenaaien zie figuur 9.3.

Muizenaai	Vangsten totaal 2017							Totaal
	Veld-muis	Aard-muis	Bosspits-muis	Waterspits-muis	Dwergspits-muis	Bos-muis	Dwerg-muis	
Pampusplaat 1	0	0	0	0	0	0	0	4
Pampusplaat 2	4	0	0	0	0	0	0	0
Schildhoek 1	0	16	6	0	2	0	1	25
Schildhoek 2	1	33	0	0	0	0	0	34
Z.Ballastplaat 1	11	0	1	0	0	0	0	12
Z. Ballastplaat 2	19	0	0	0	0	0	0	19
Zuidelijke lob 1	12	0	8	0	0	0	2	22
Zuidelijke lob 2	29	0	0	0	0	0	0	29
Rug 1	2	0	1	0	0	0	4	7
Rug 2	4	0	1	0	0	0	7	12
Totaal	82	49	17	0	2	0	14	164

Overzicht van het aantal individuele vangsten van woelmuisen (Veldmuis, Aardmuis, totaal) en de muizenindex (Veldmuis, Aardmuis, totaal) per muizenaai in het Lauwersmeer in oktober 2016. Voor de ligging van de muizenaaien zie figuur 9.3.

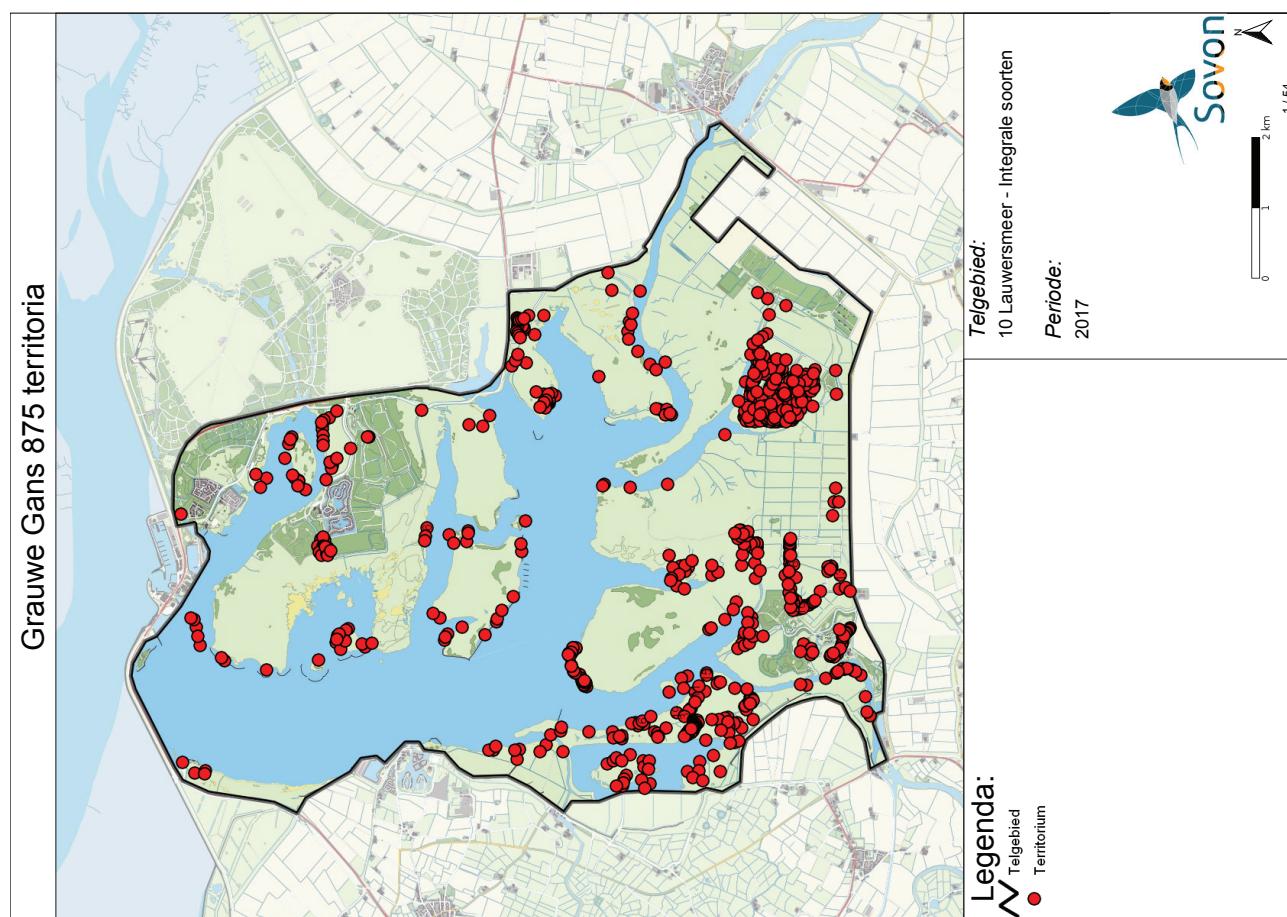
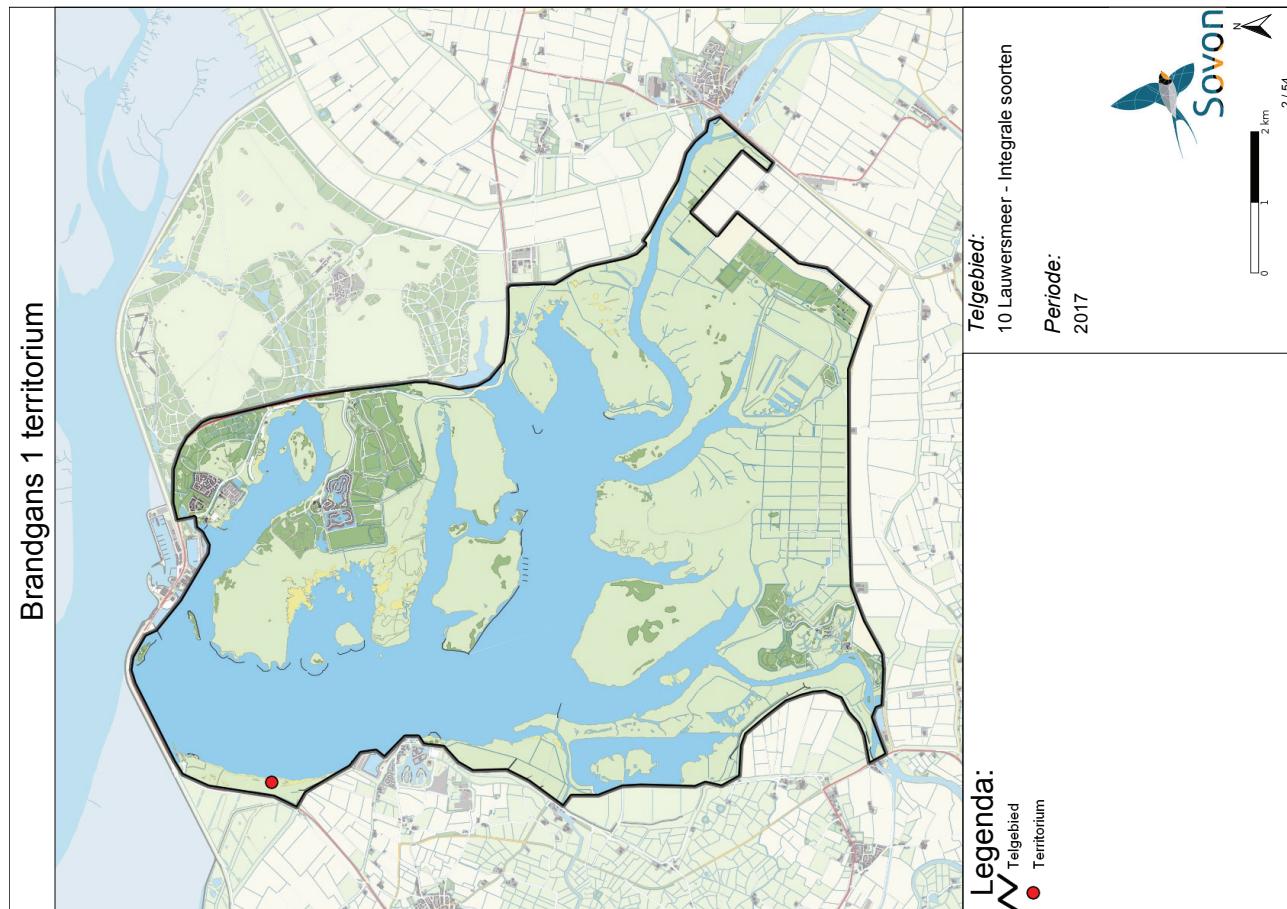
Muizenaai	Individuele vangsten totaal 2017			Muizenindex		
	Woelmuis			Woelmuis		
	Veldmuis	Aardmuis	totaal	Veldmuis	Aardmuis	totaal
Pampusplaat 1	0	0	0	0,0	0,0	0,0
Pampusplaat 2	2	0	2	3,3	0,0	3,3
Schildhoek 1	0	13	13	0,0	21,7	21,7
Schildhoek 2	1	27	28	1,7	45,0	46,7
Z.Ballastplaat 1	8	0	8	13,3	0,0	13,3
Z. Ballastplaat 2	8	0	8	13,3	0,0	13,3
Zuidelijke lob 1	8	0	8	13,3	0,0	13,3
Zuidelijke lob 2	16	0	16	26,7	0,0	26,7
Rug 1	2	0	2	3,3	0,0	3,3
Rug 2	4	0	4	6,7	0,0	6,7
Totaal	49	40	89	8,2	6,7	14,8

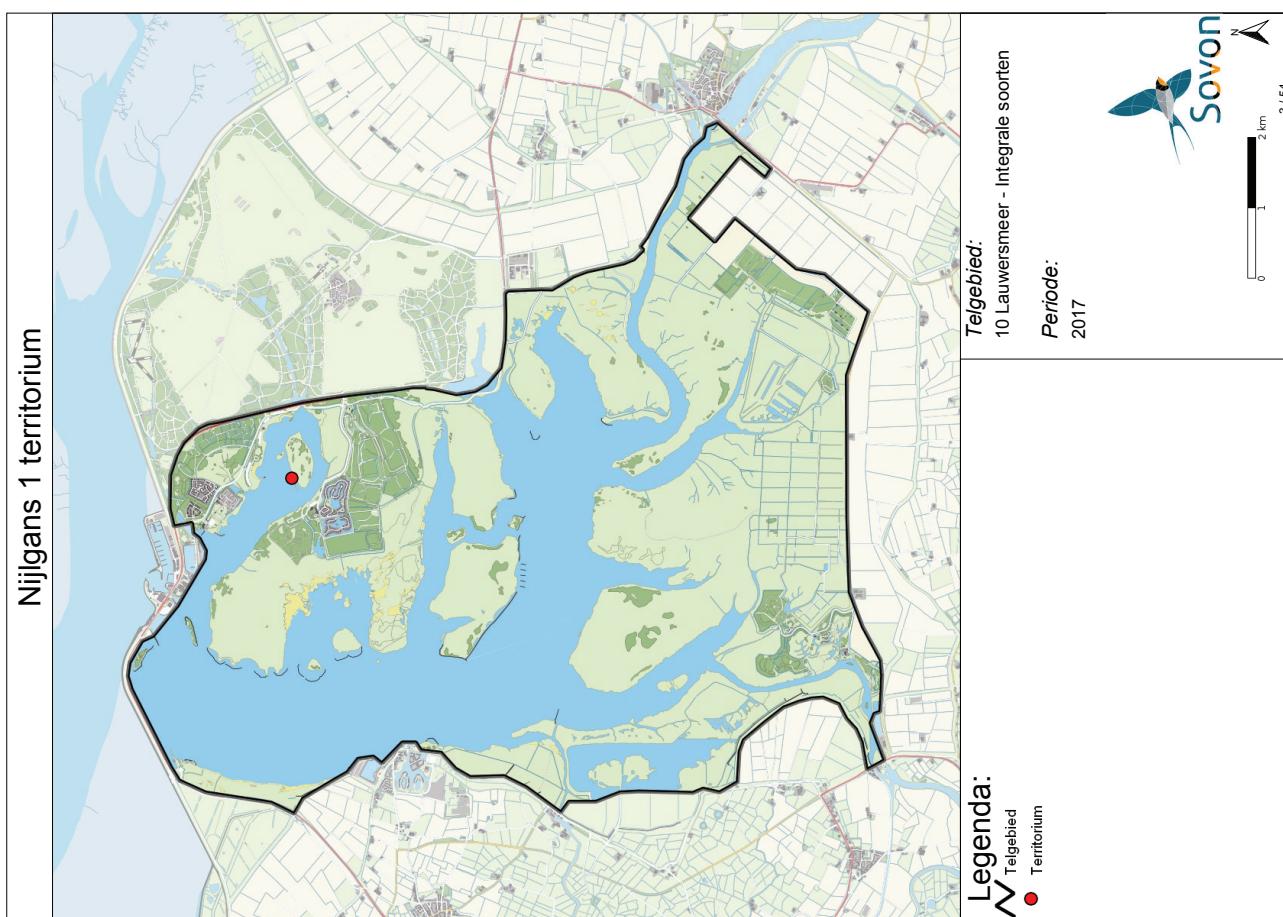
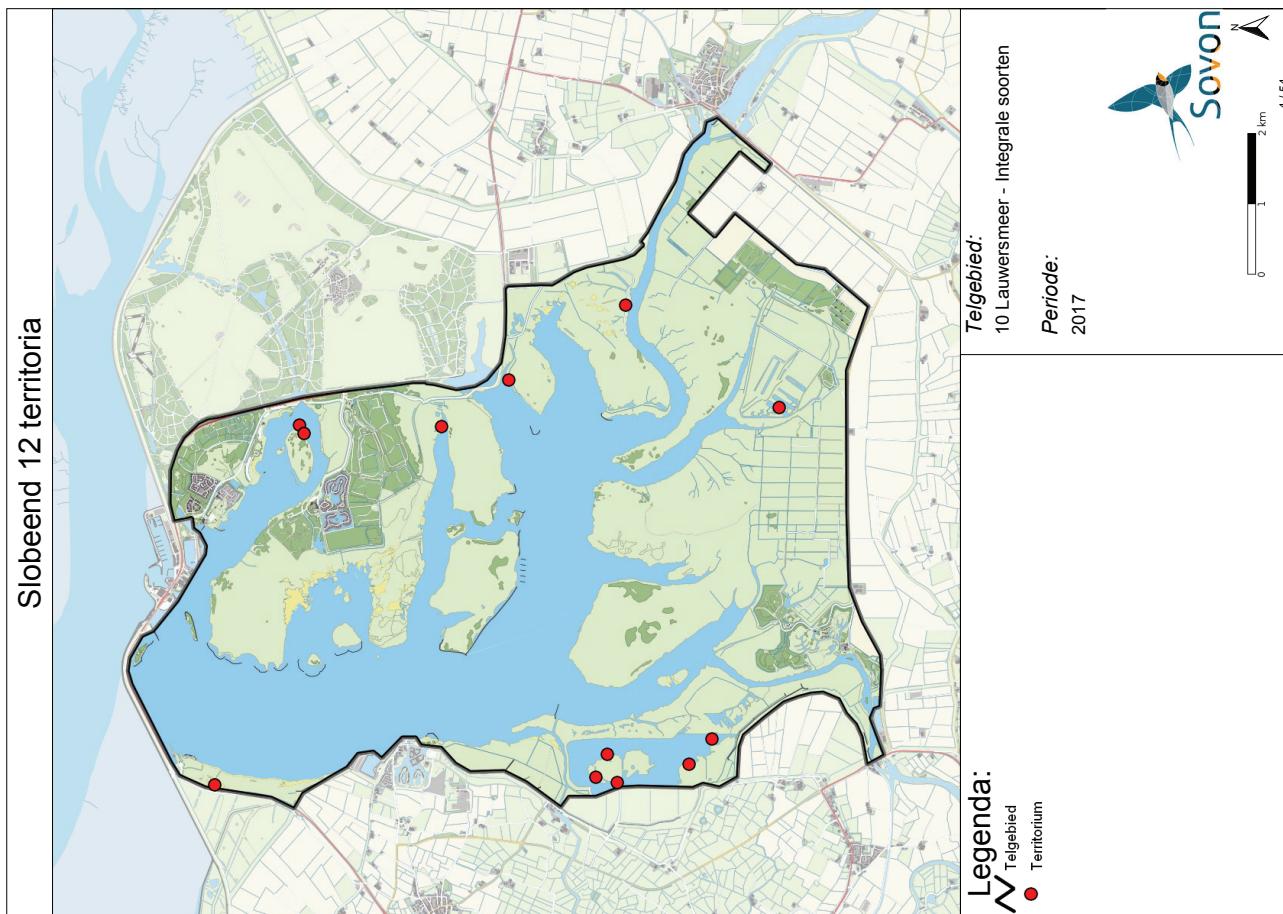
## **Bijlage 17. Maaiveldhoogte volgens AHN2 en vegetatie in muizenraaien in 2017**

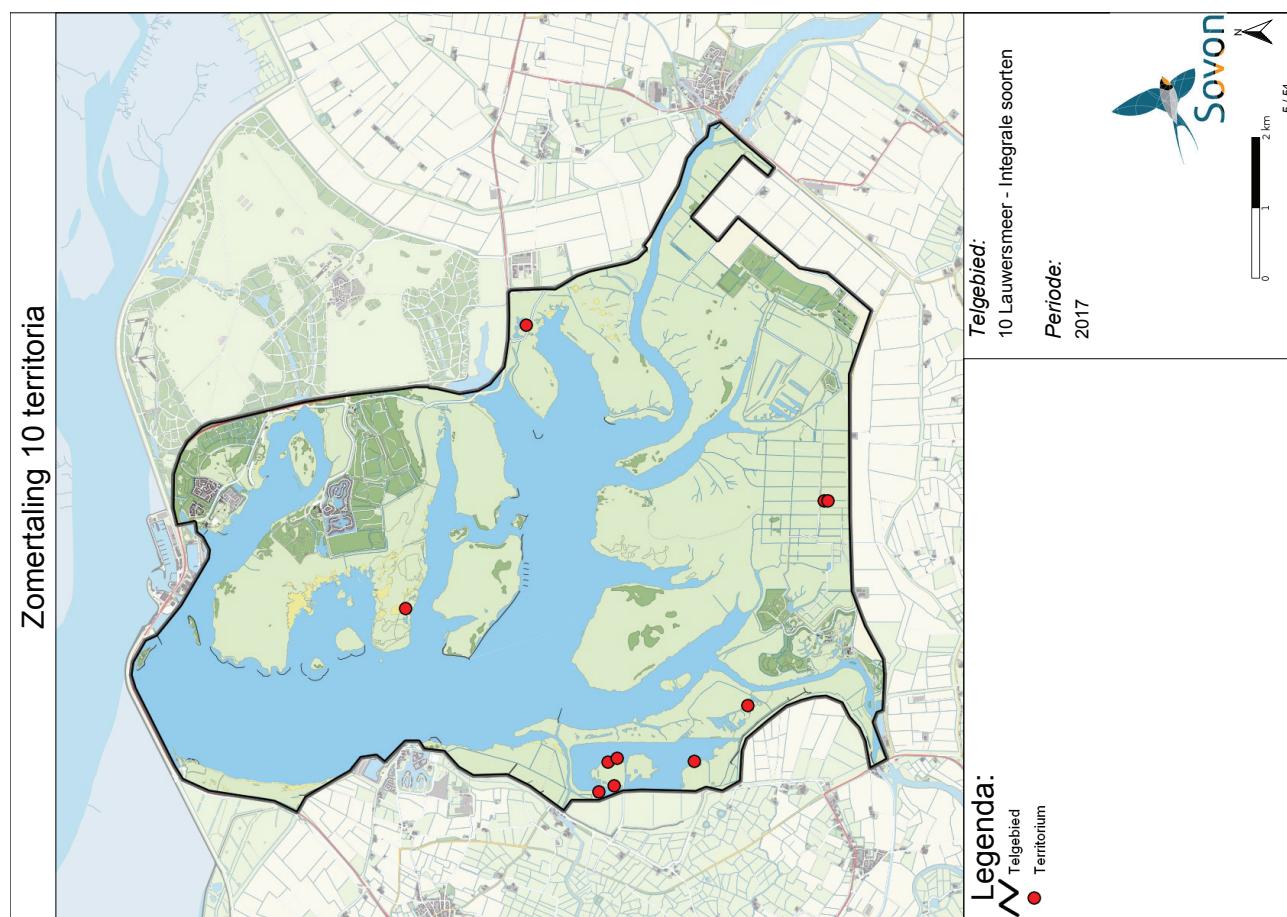
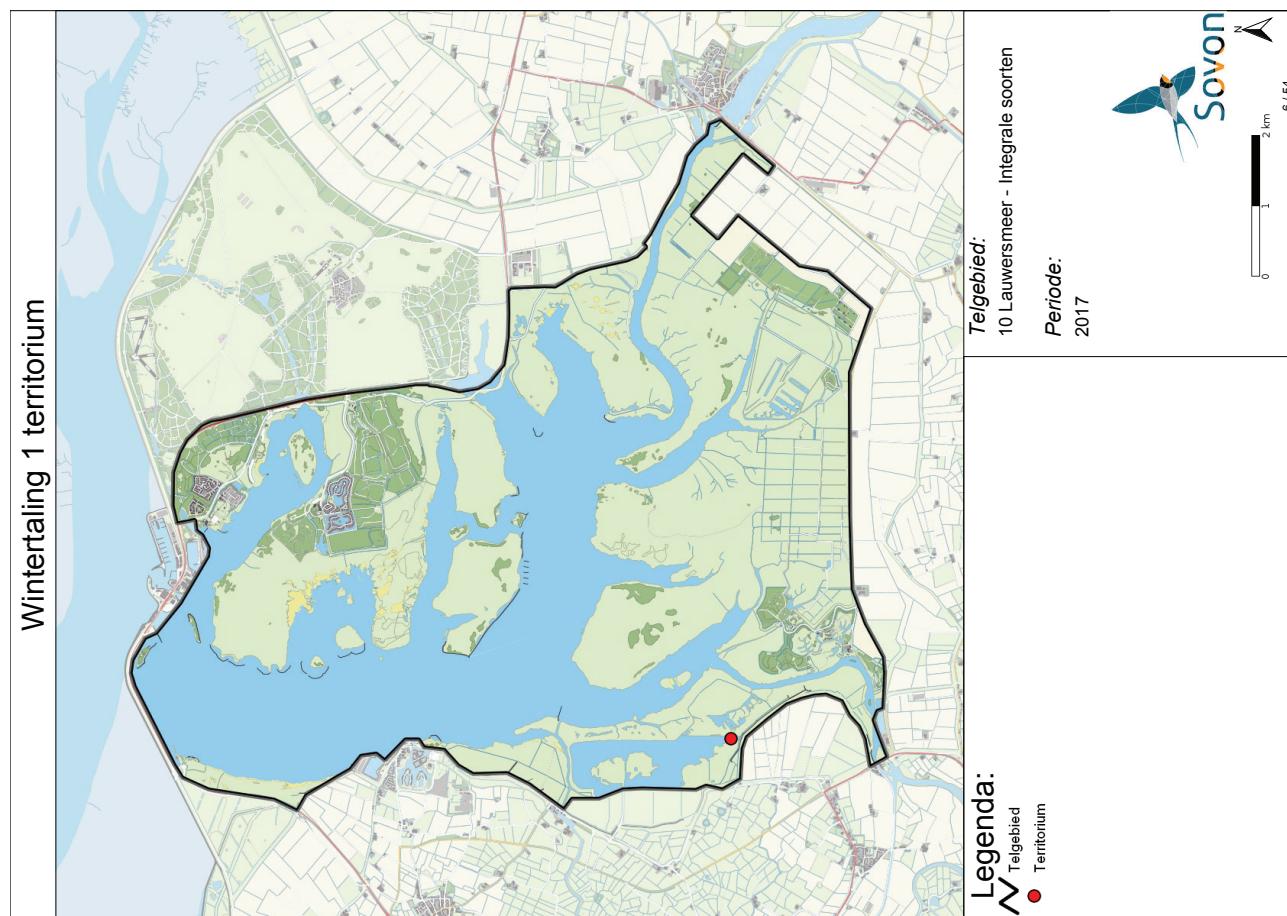
*Samenvatting van vegetatiemetingen (gemiddeldes) in de muizenraaien in oktober 2016.*

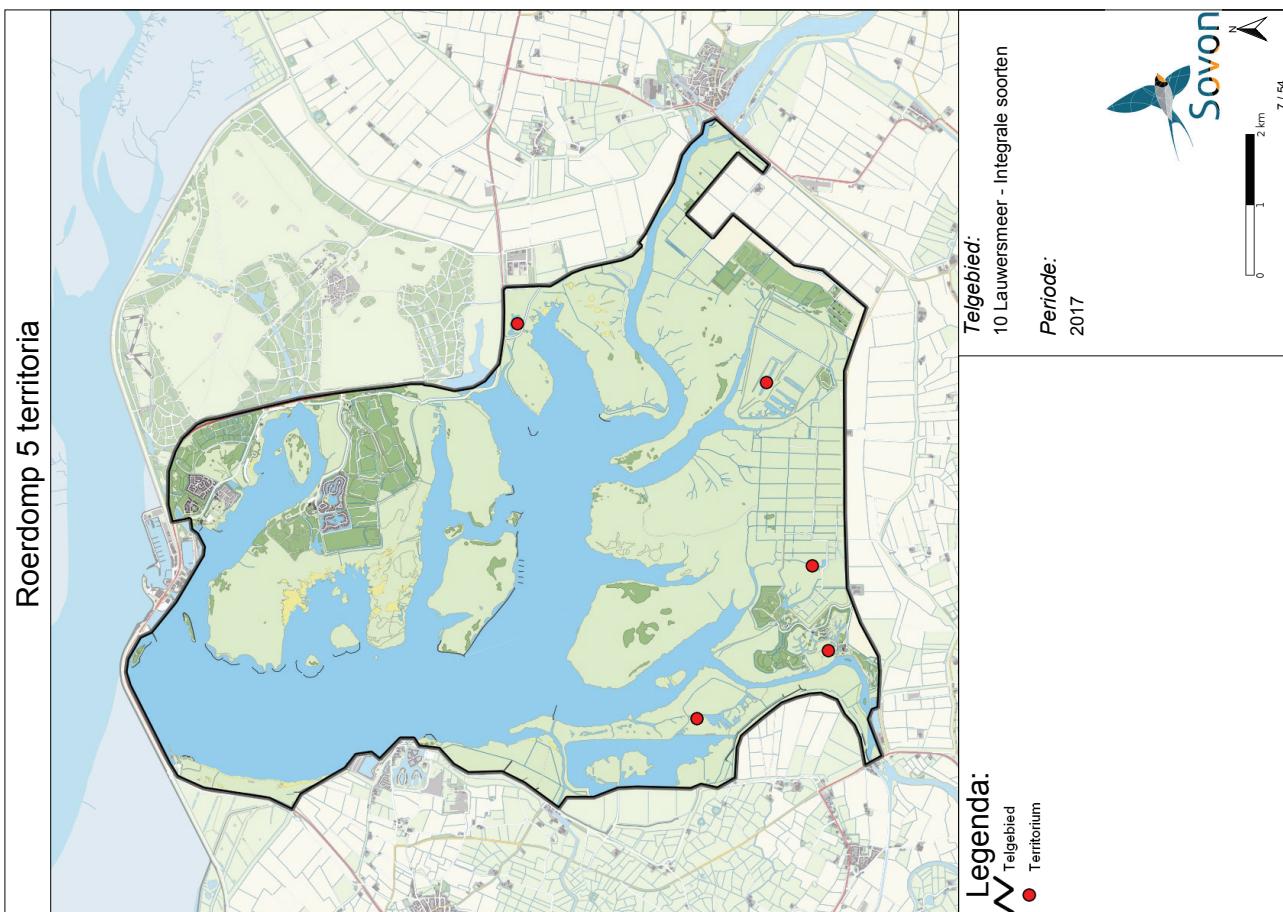
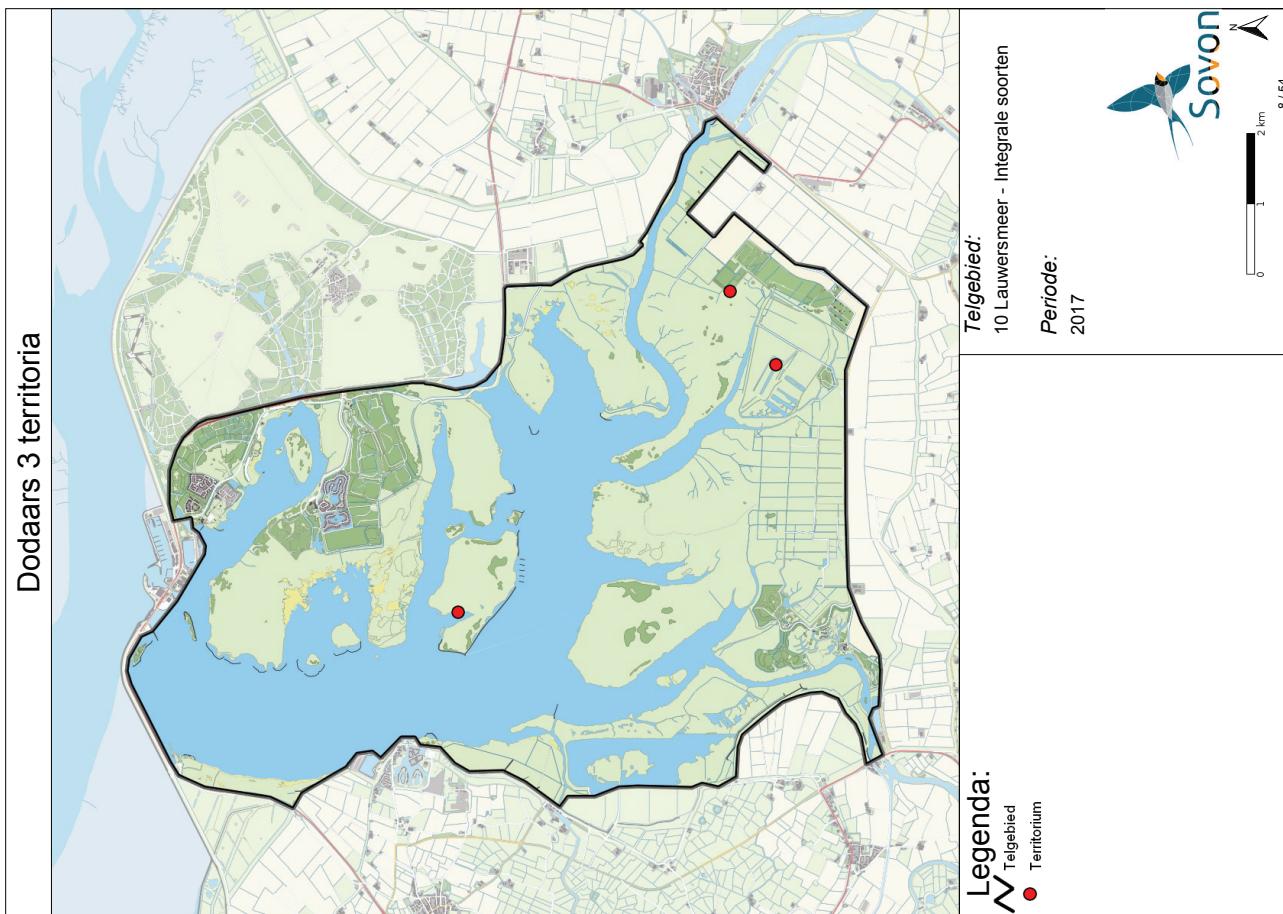
Locatie	hoogte op plaat ( m NAP)	vegetatiehoogte (cm)	vegetatiebedekking (%)	bedekking houtigen (%)	riethoogte (cm)
Ppl. 1	-0,37	44	86	0	101
Ppl. 2	-0,40	12	85	0	63
SH 1	0,04	42	82	2	140
SH 2	-0,10	70	83	3	149
ZBP 1	0,02	47	70	63	39
ZBP 2	0,05	26	62	37	34
Zlob 1	-0,35	33	93	55	54
Zlob 2	-0,39	35	89	55	52
Rug 1	0,40	19	42	7	38
Rug 2	0,40	26	43	7	56

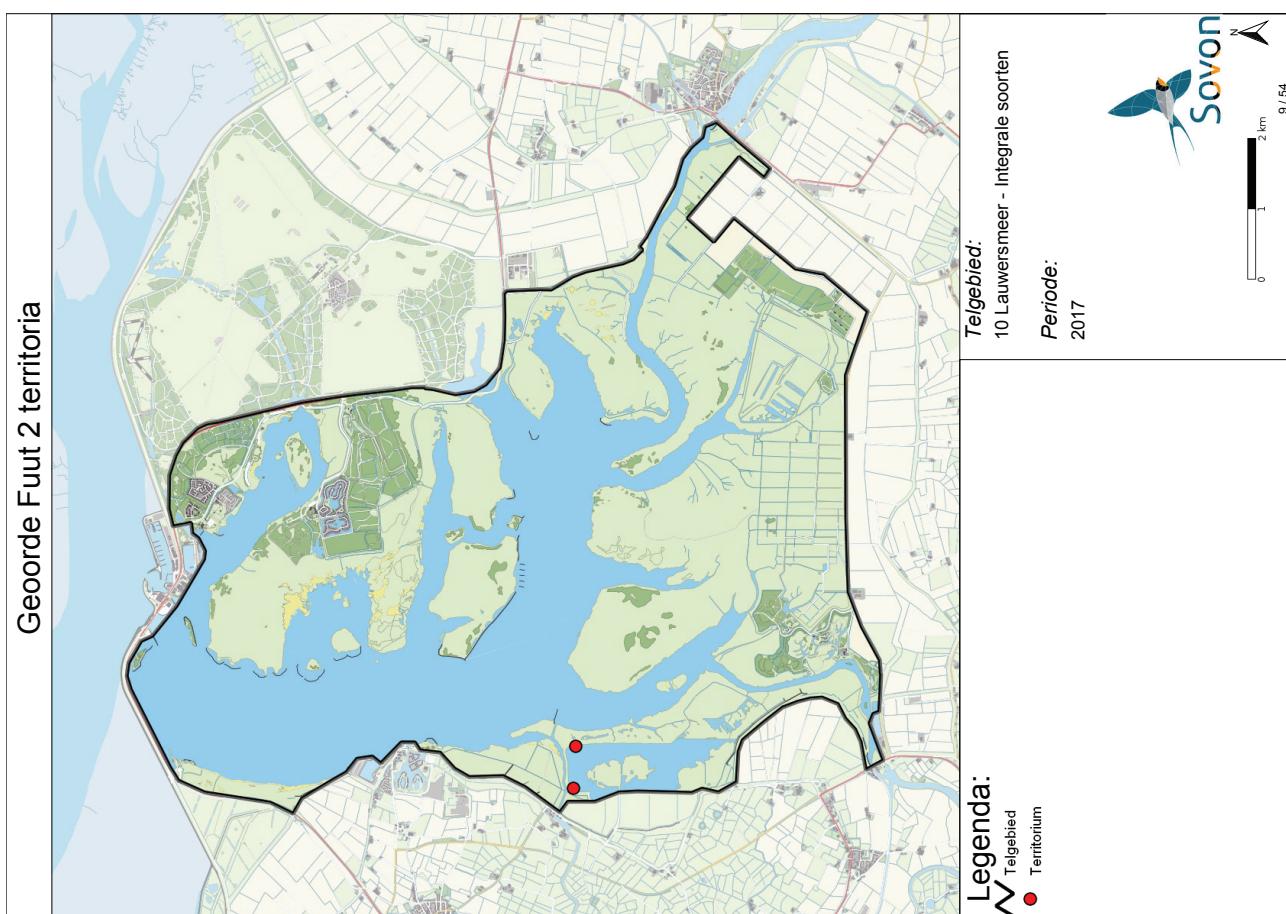
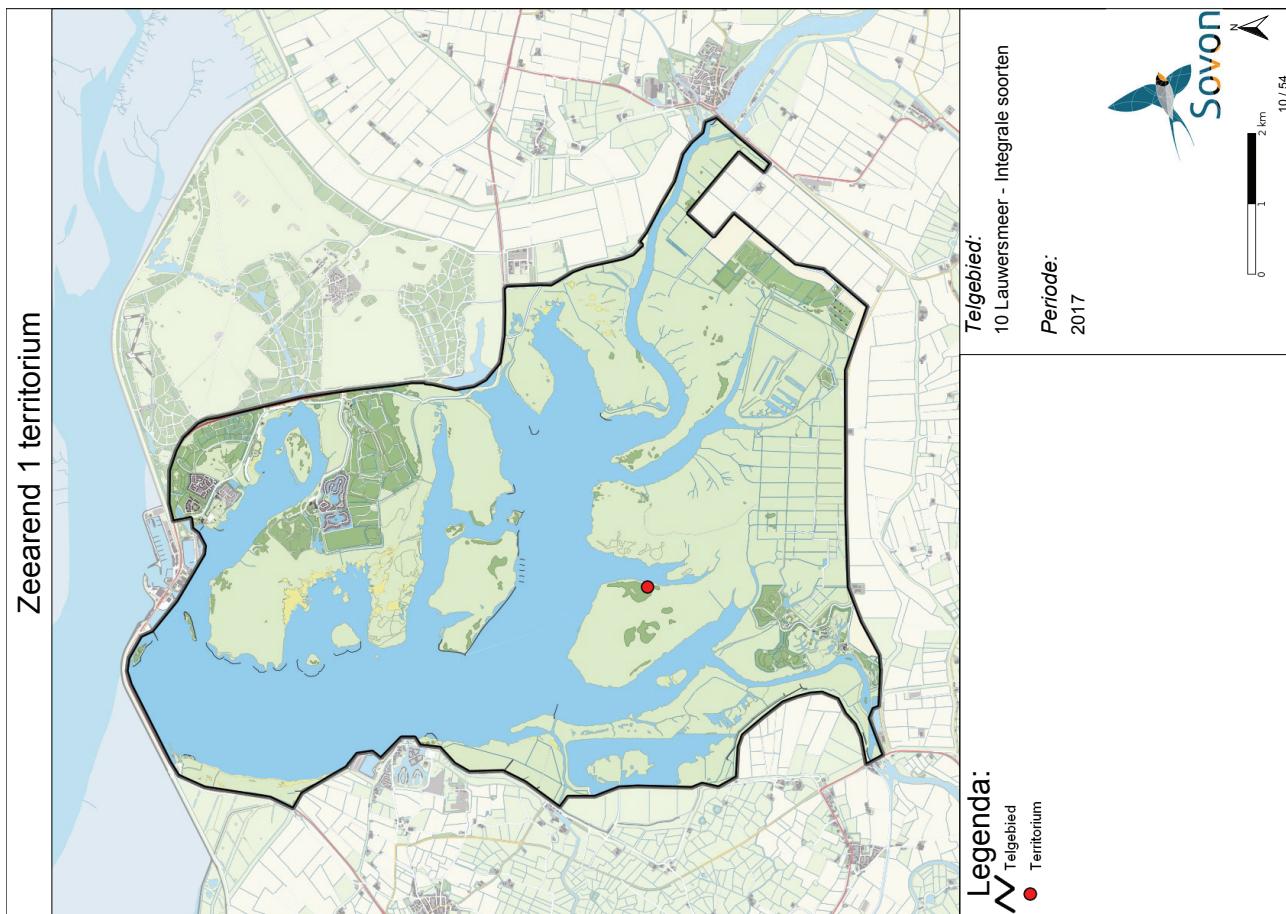
## Bijlage 18. Stippenkaarten integrale soorten 2017

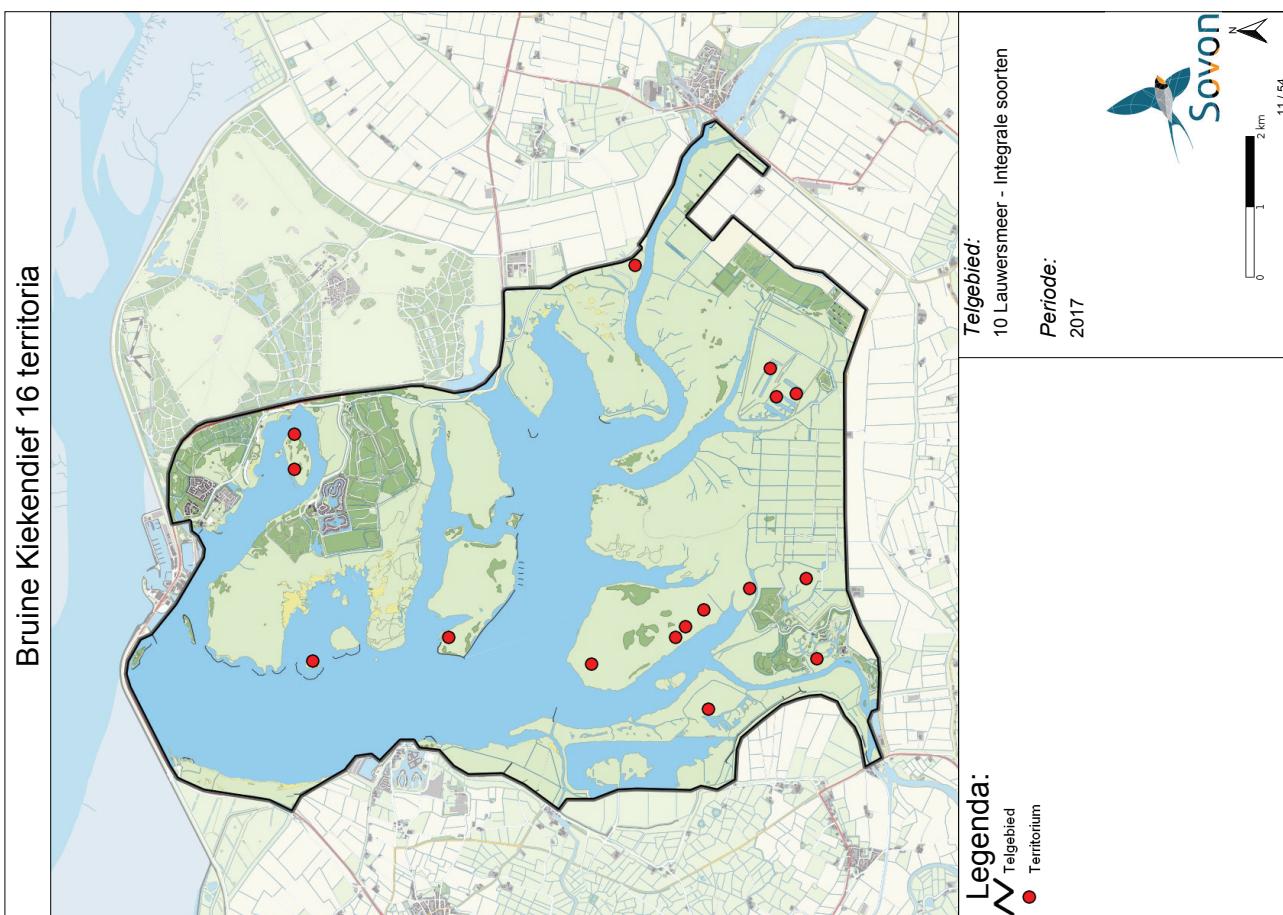
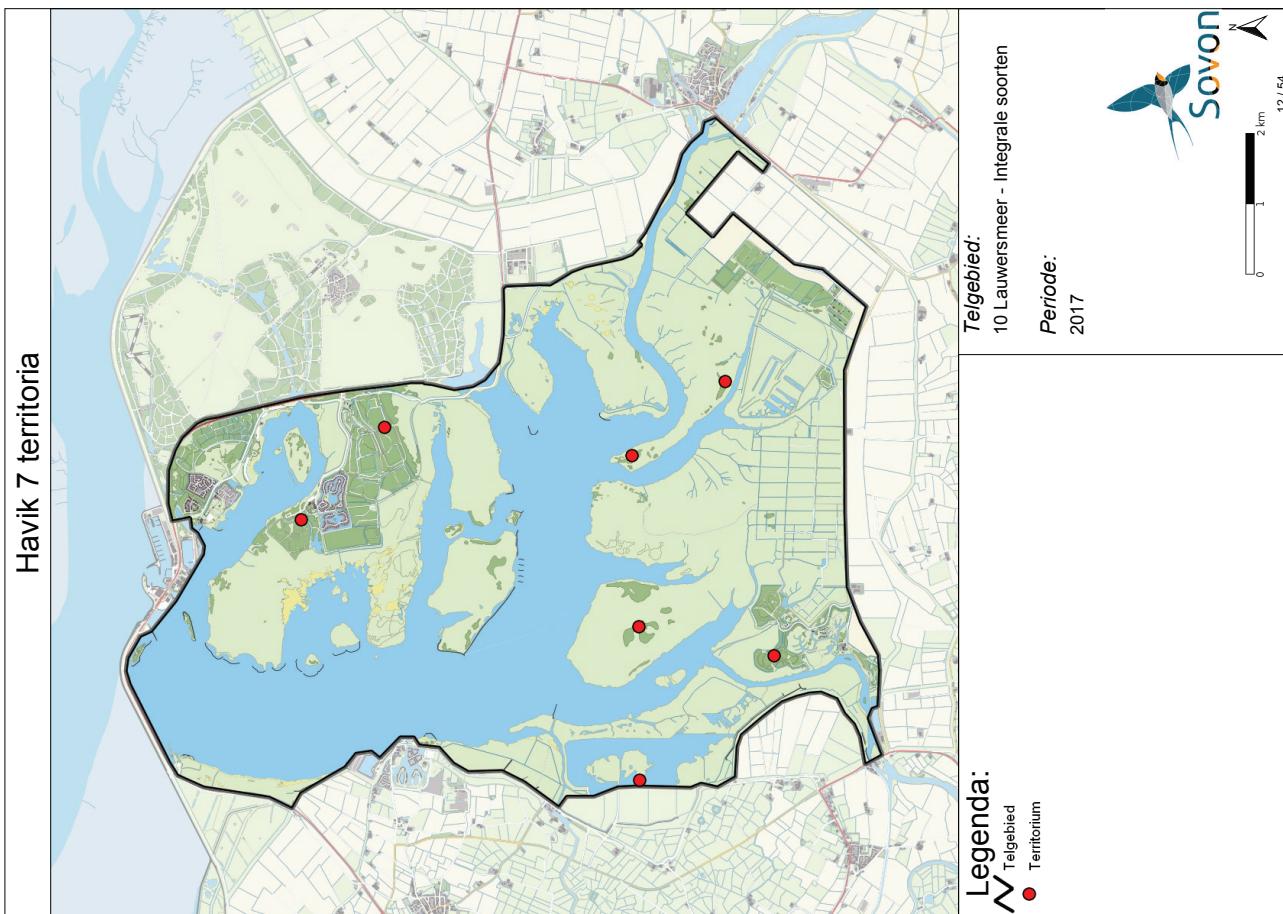


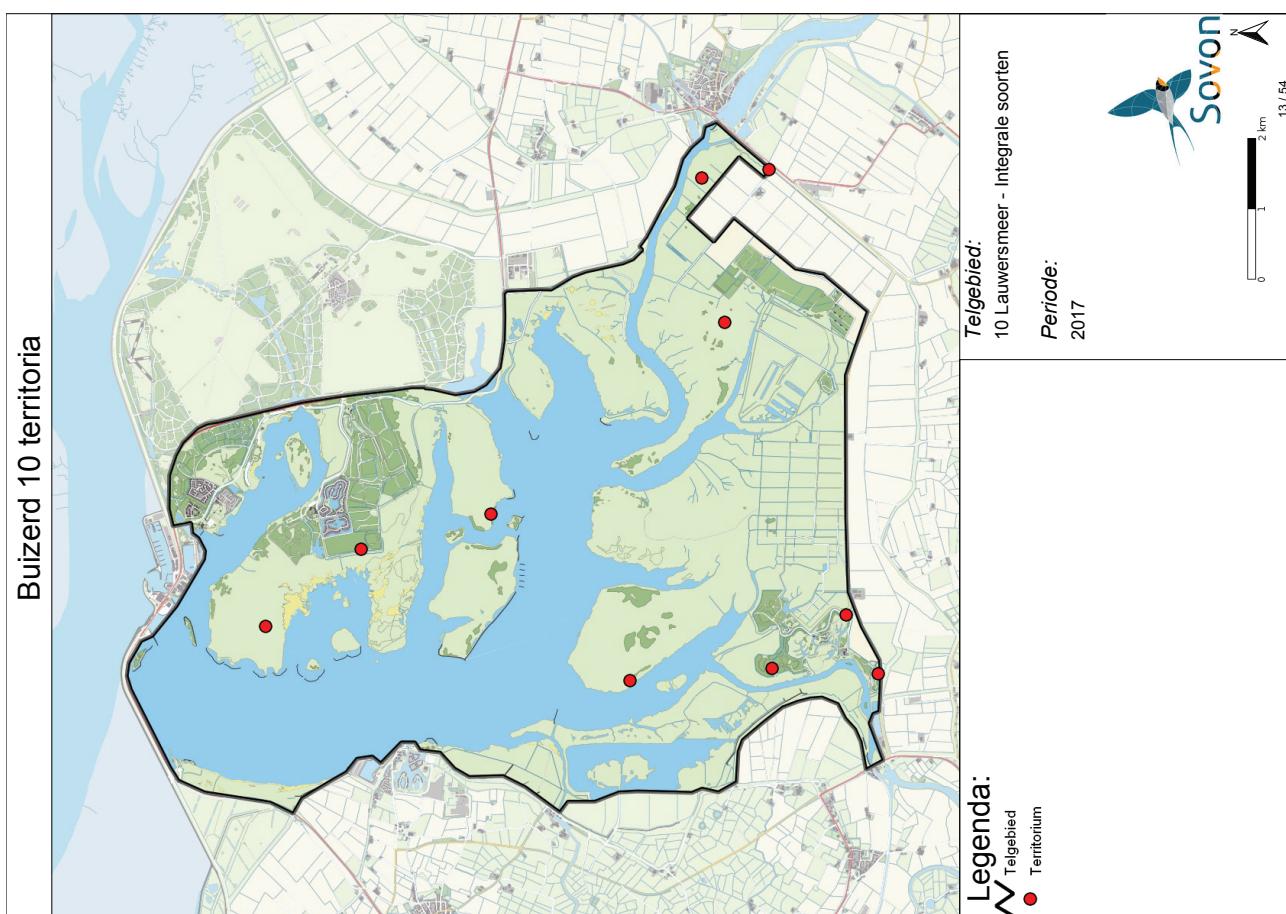
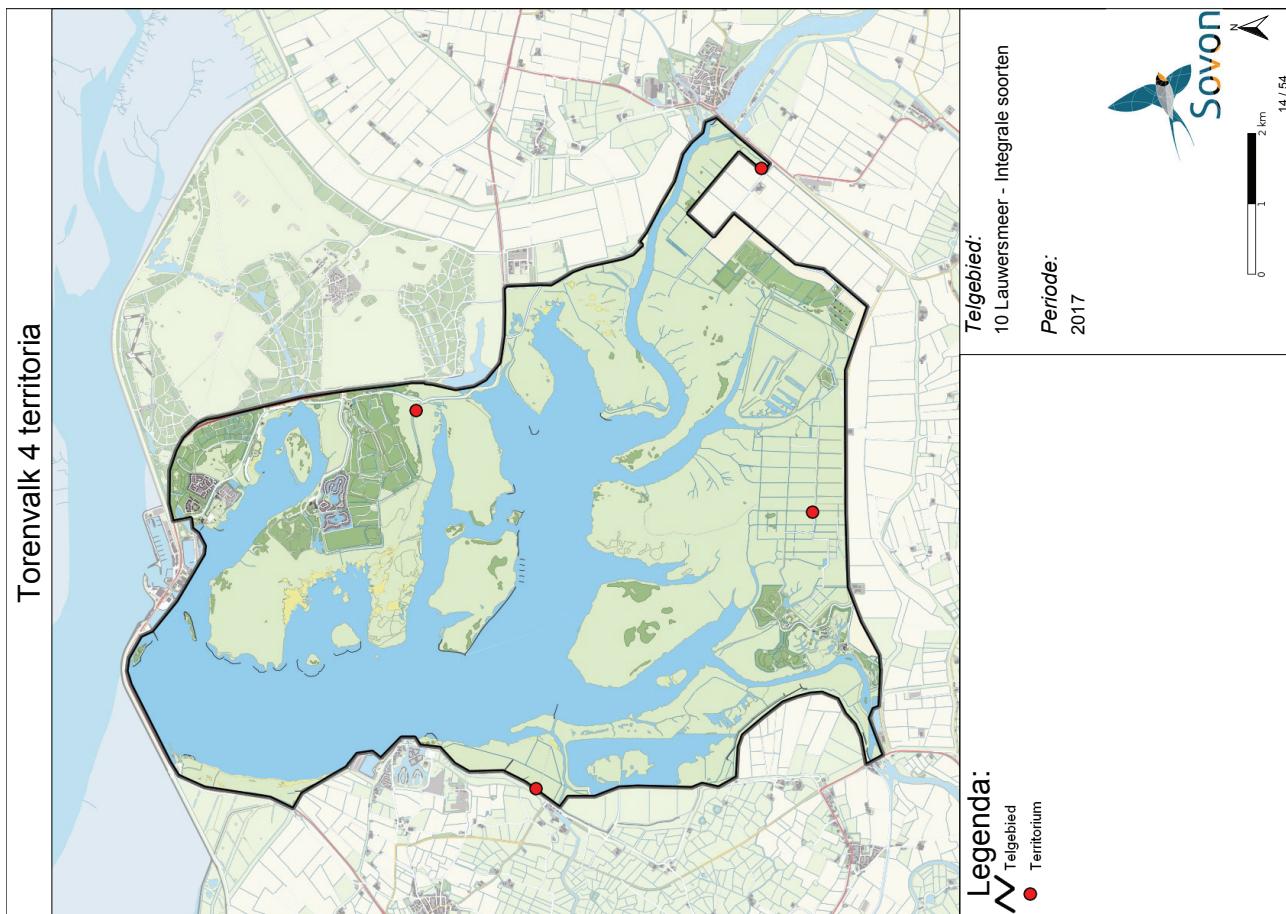


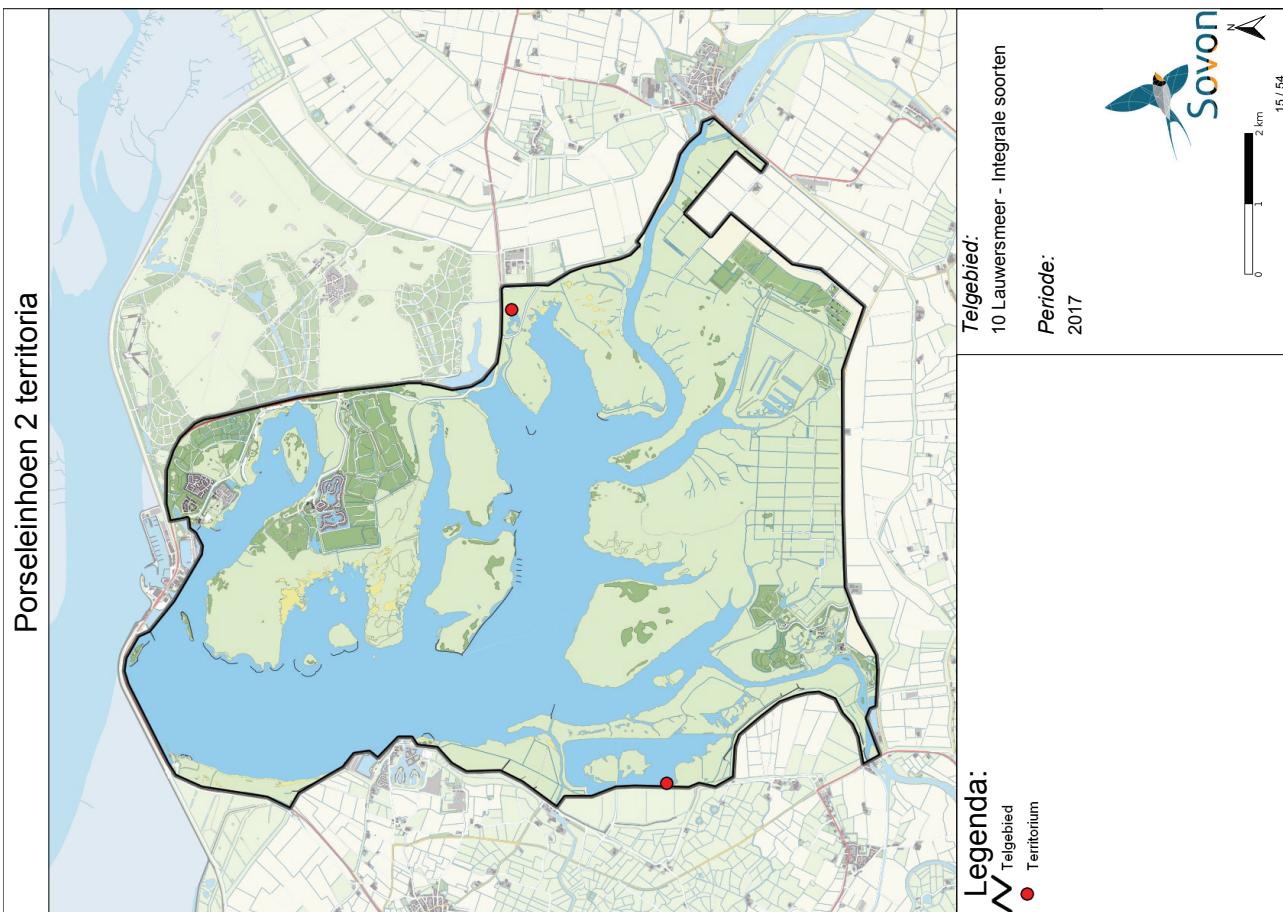
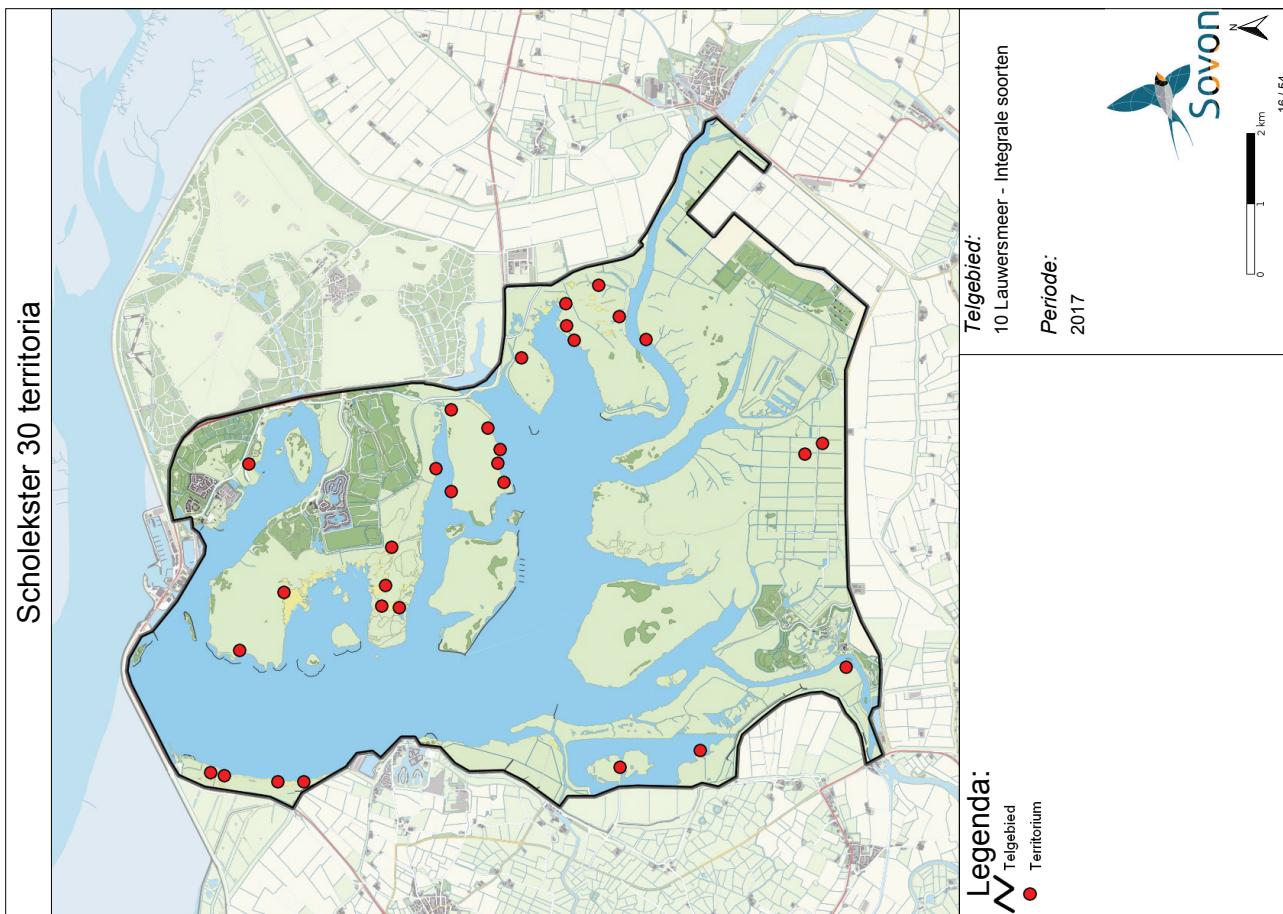


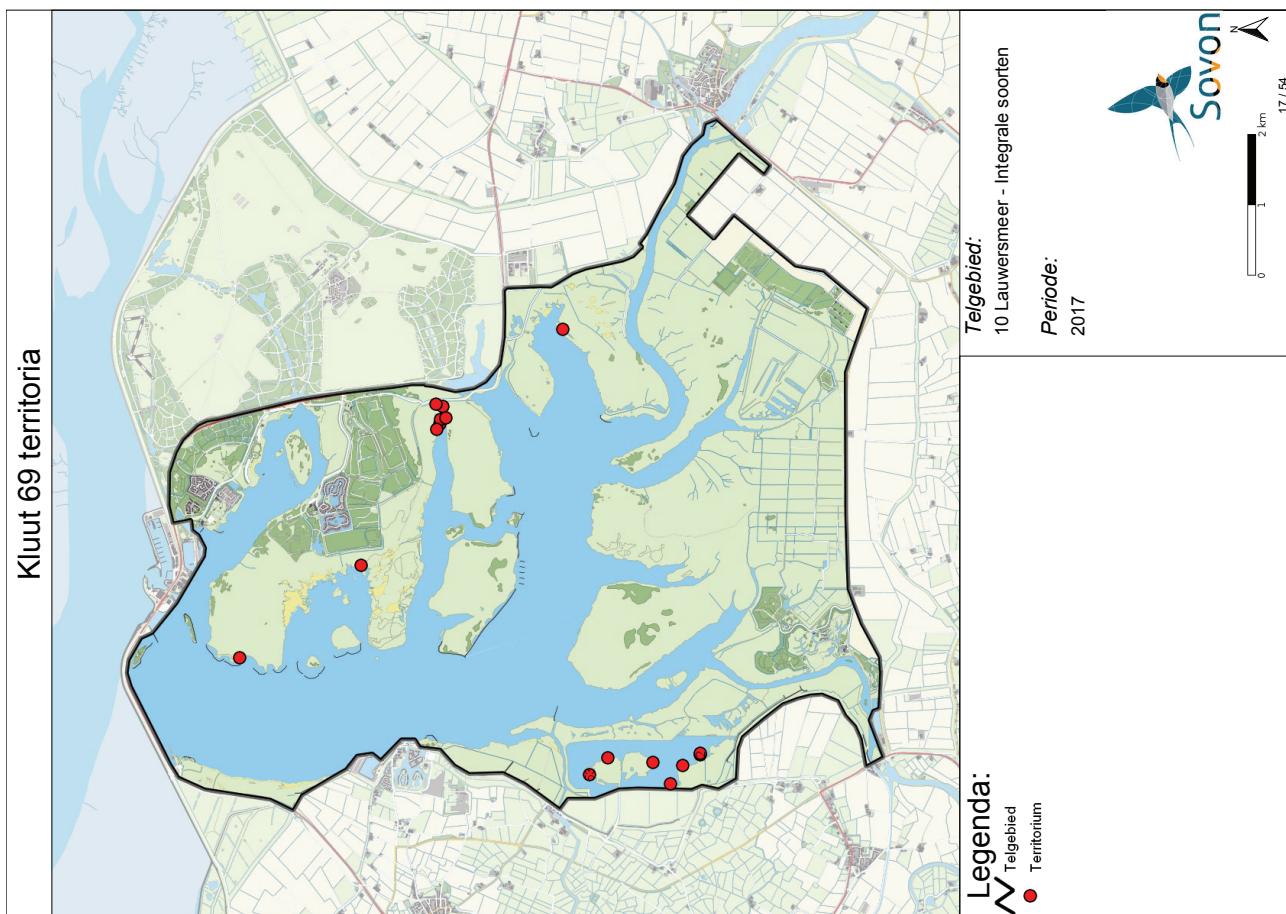
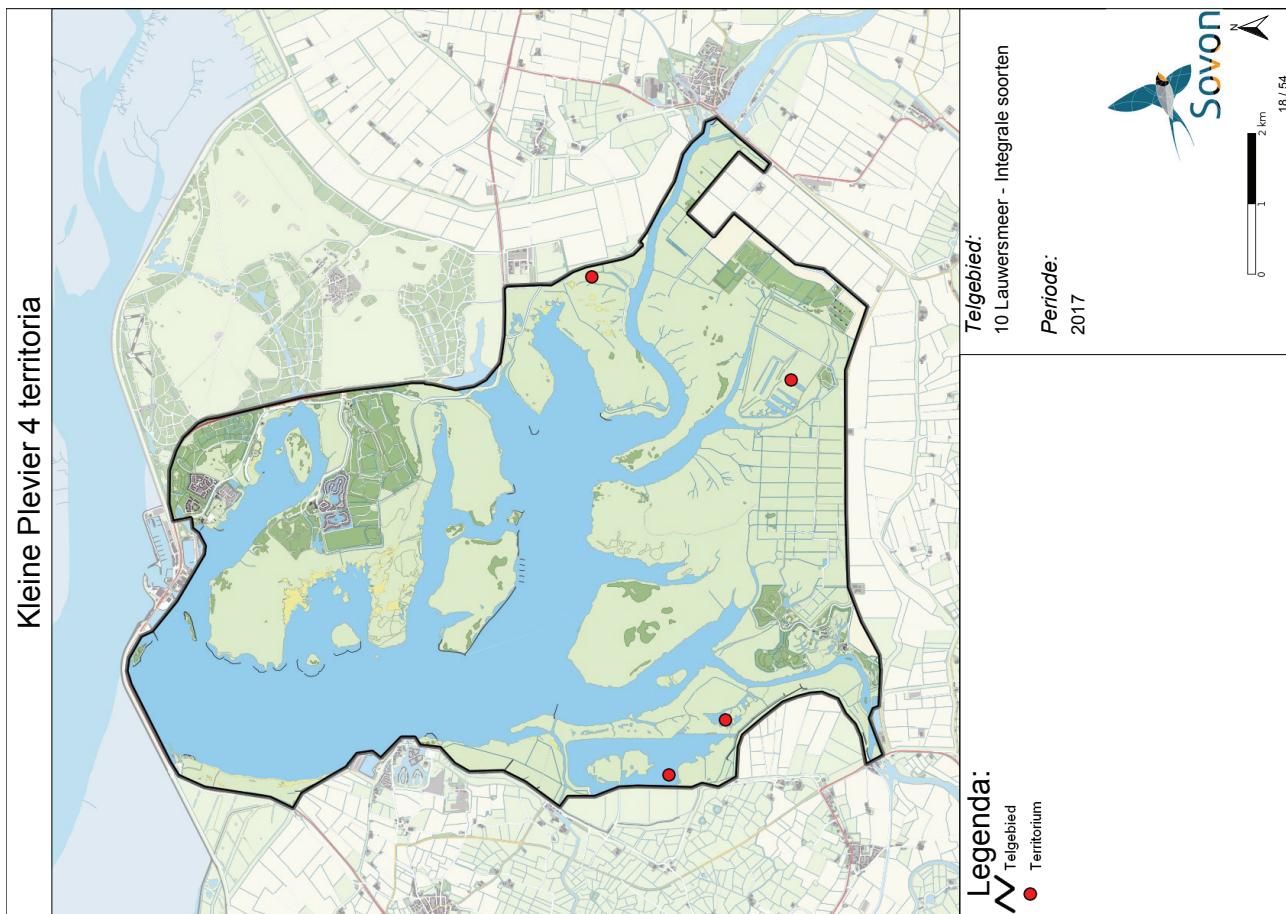


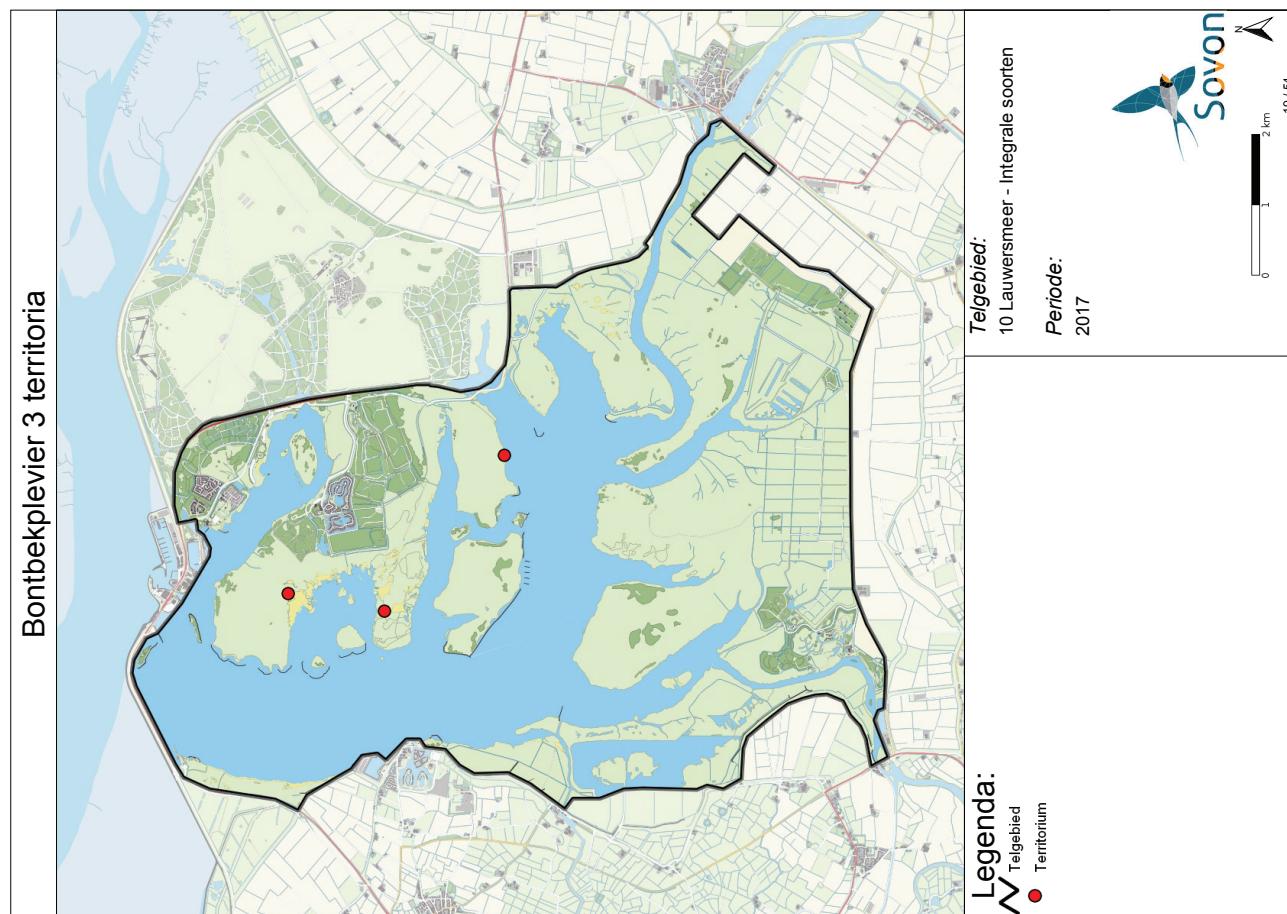
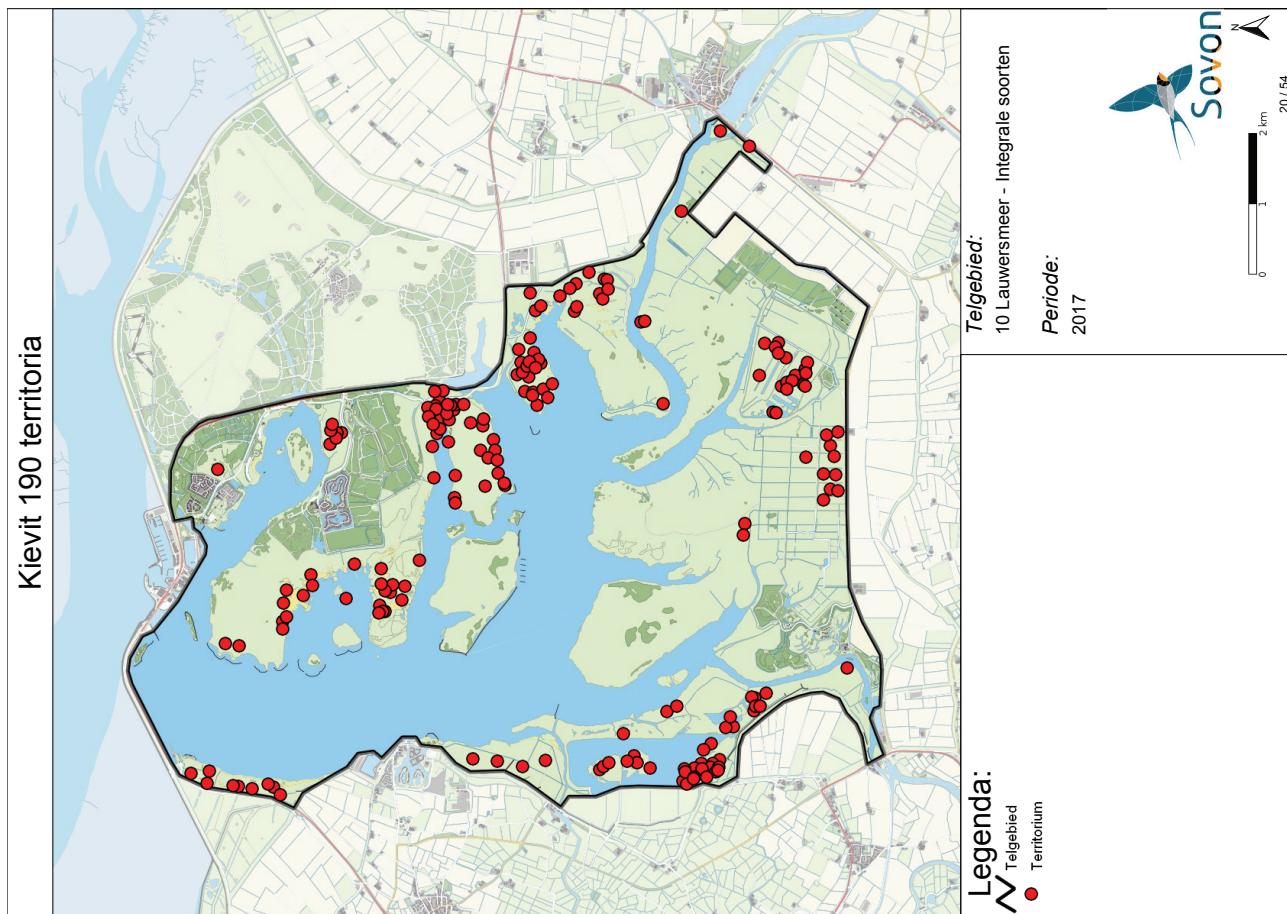


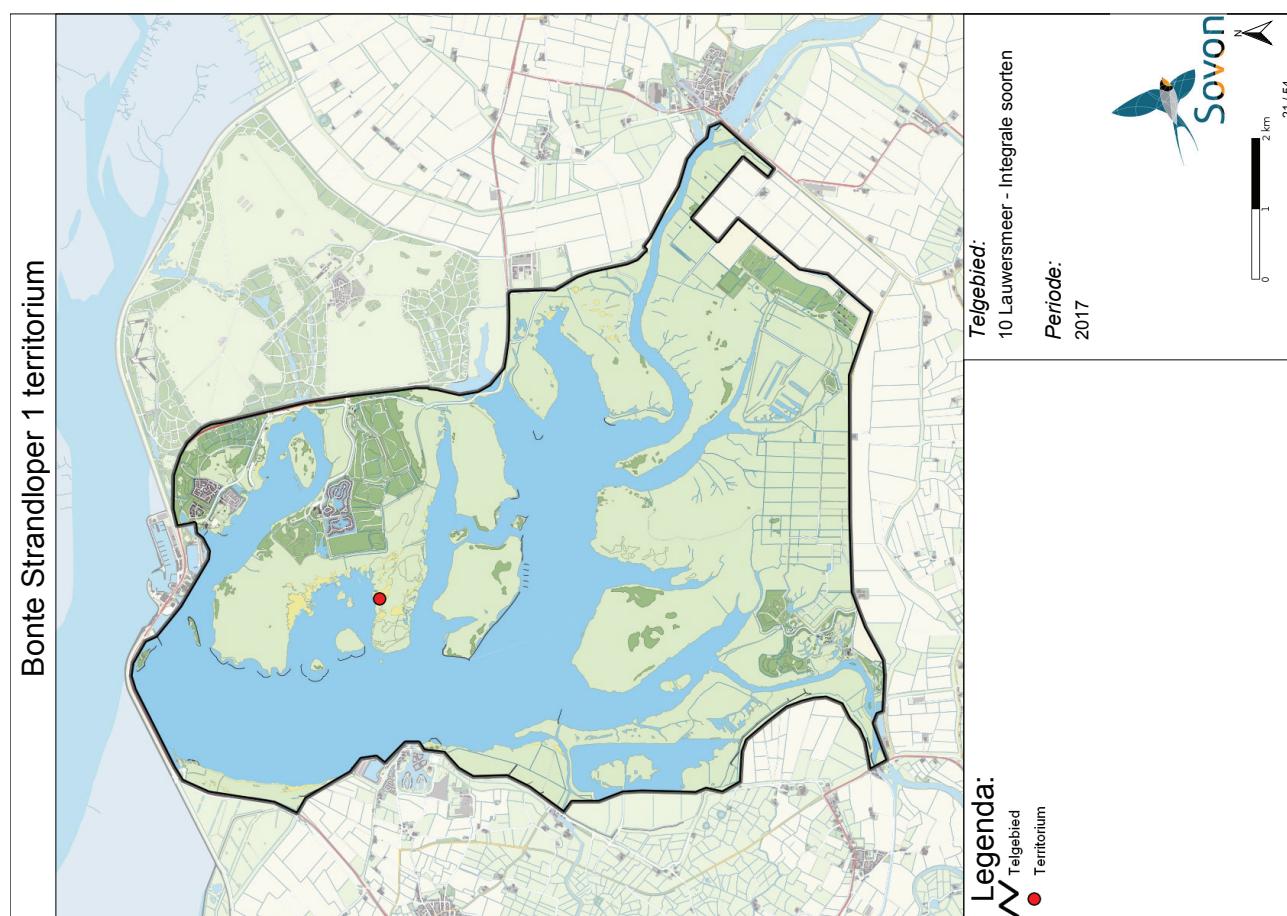
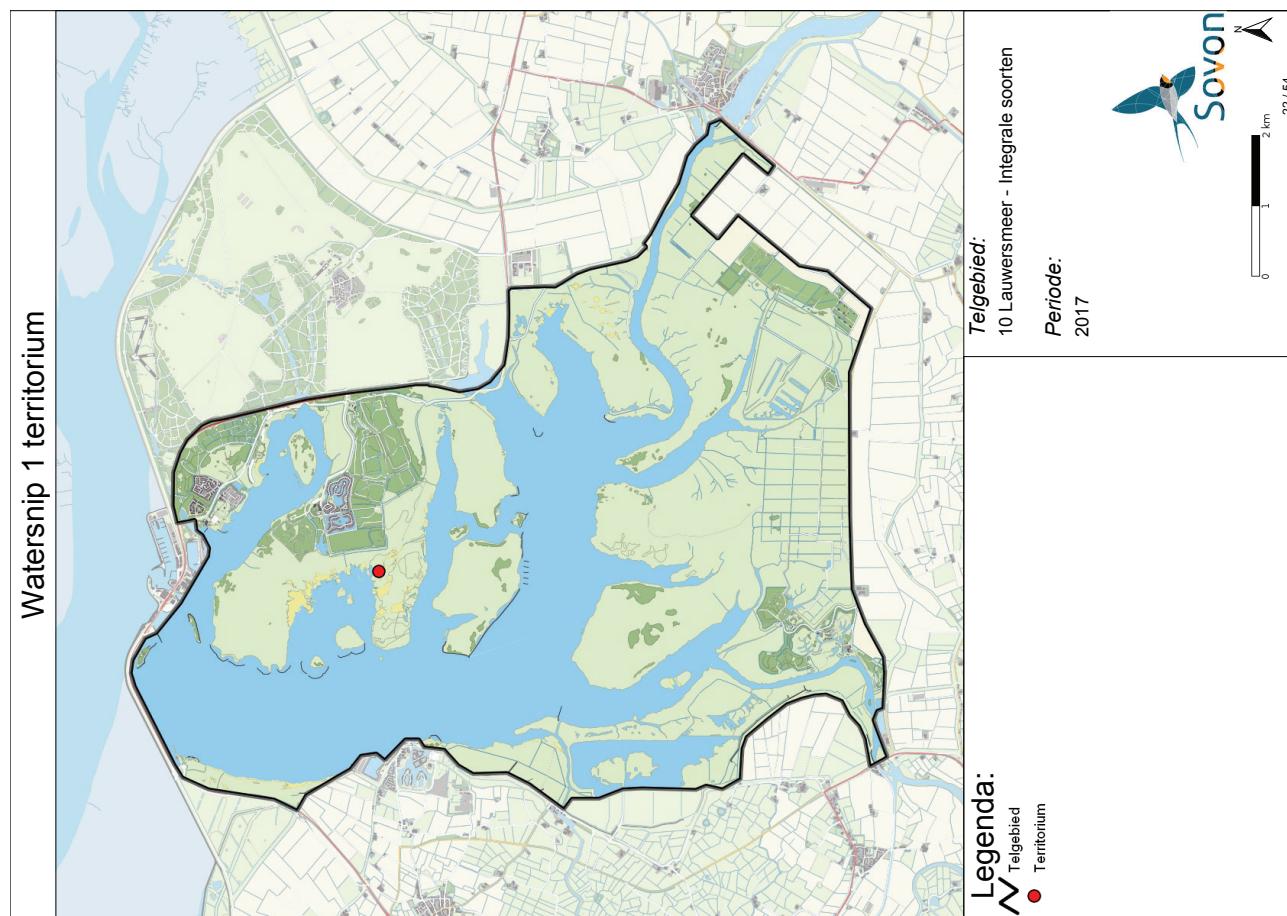


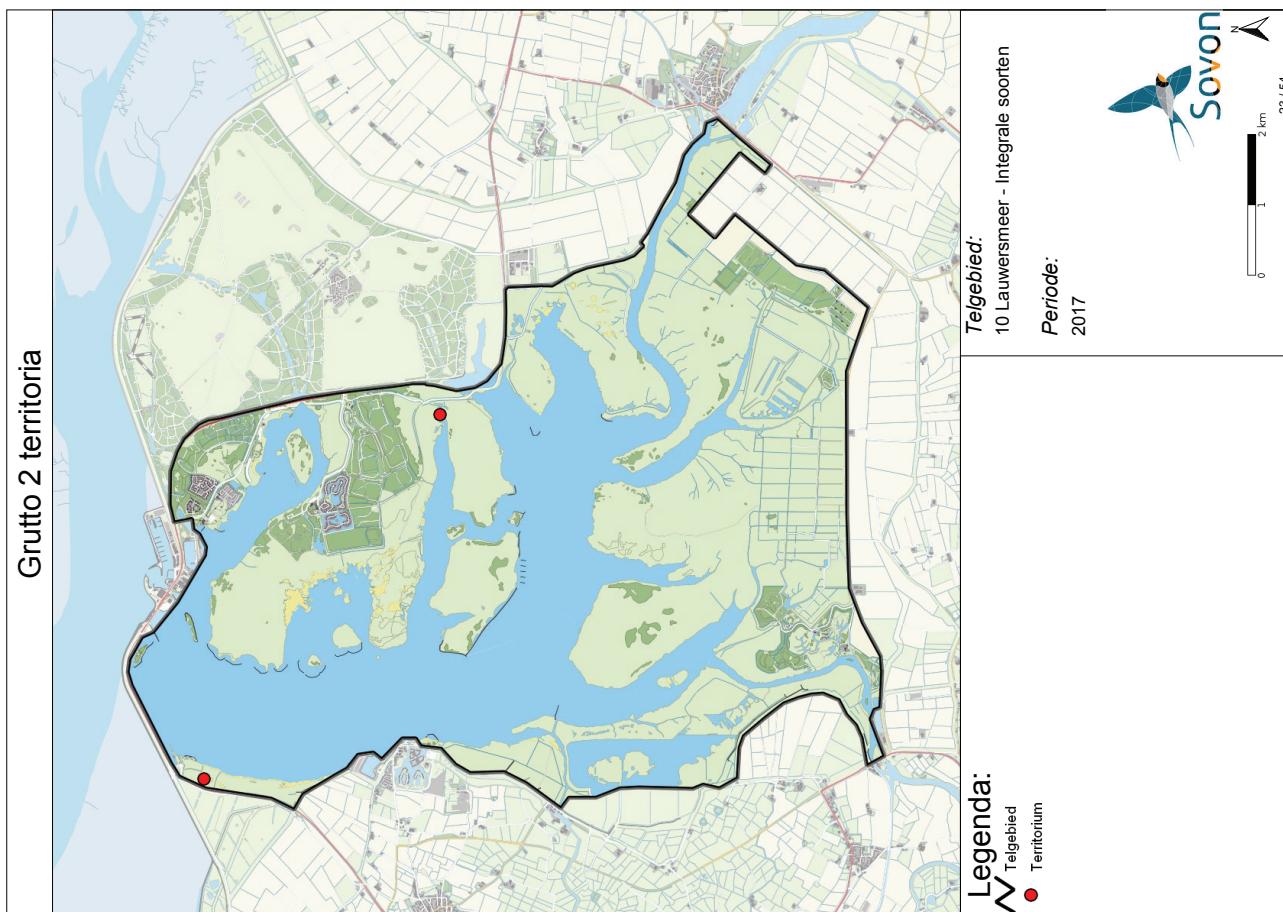
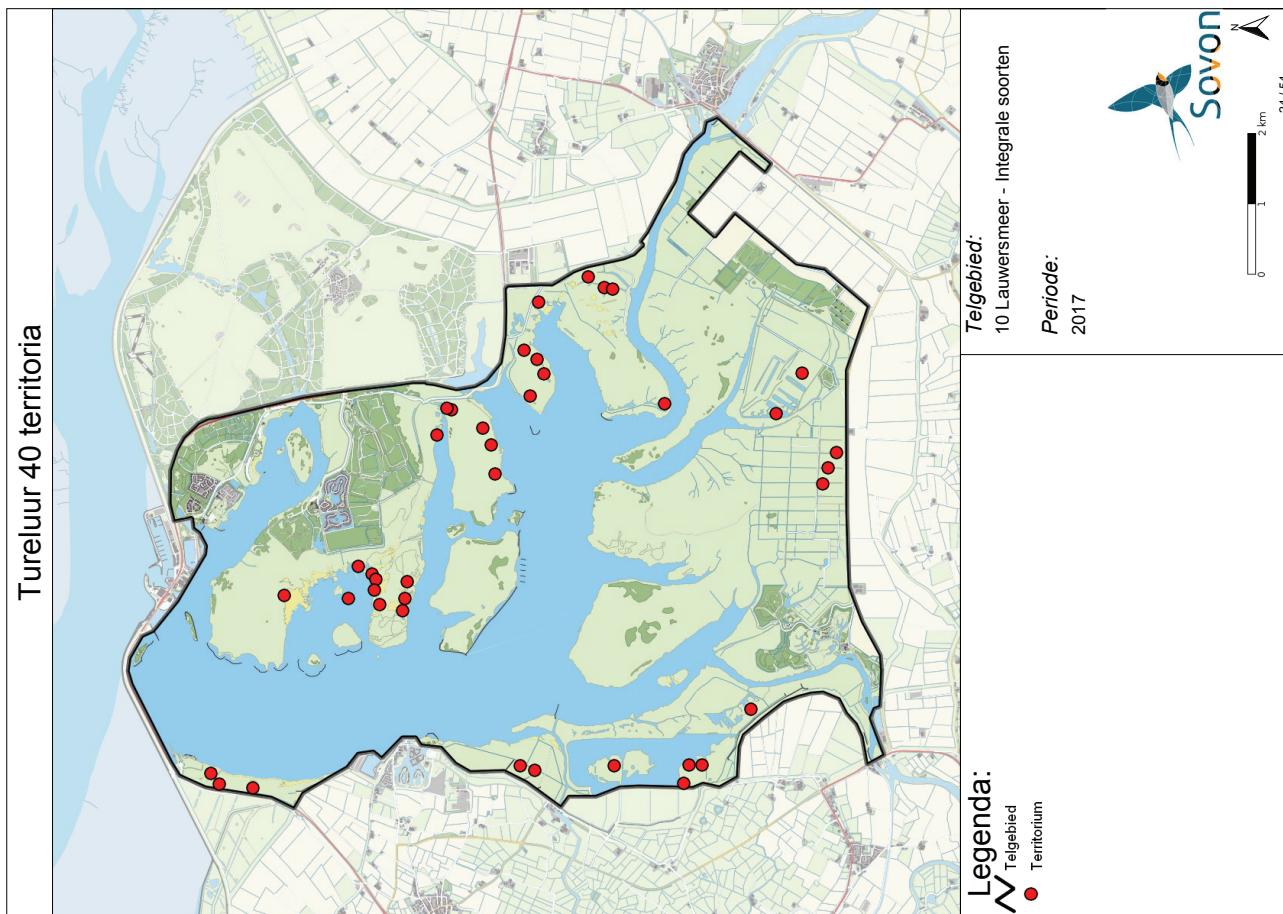


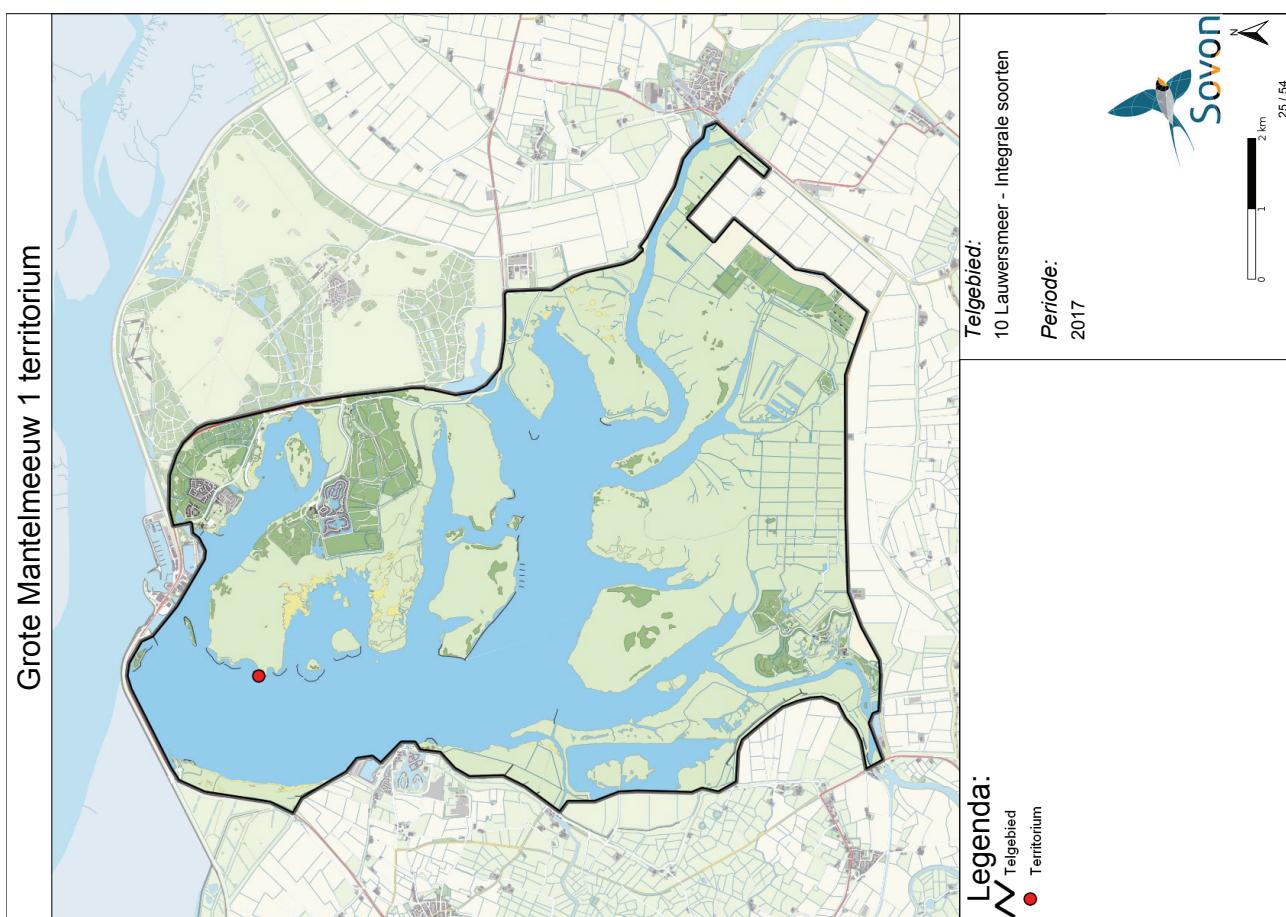
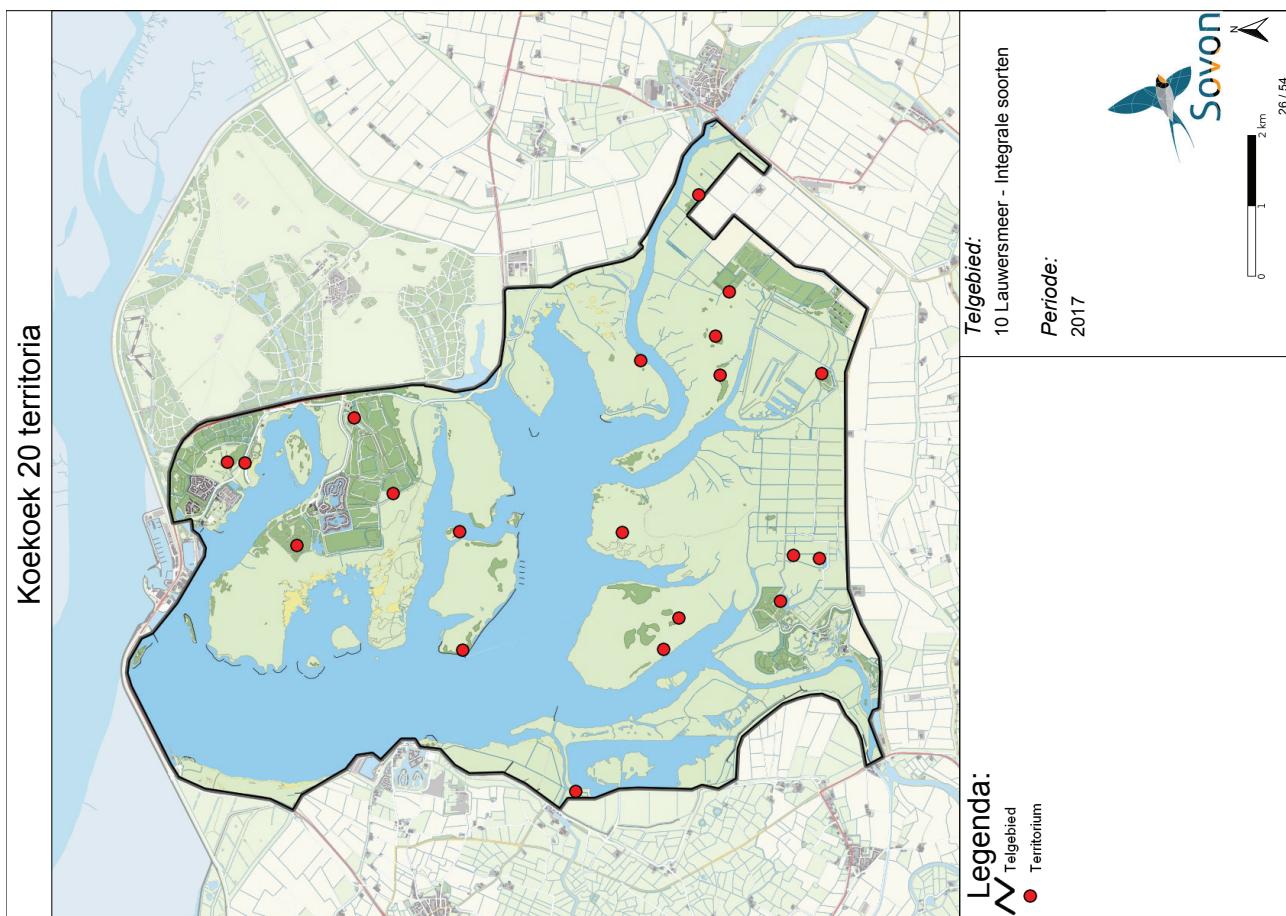


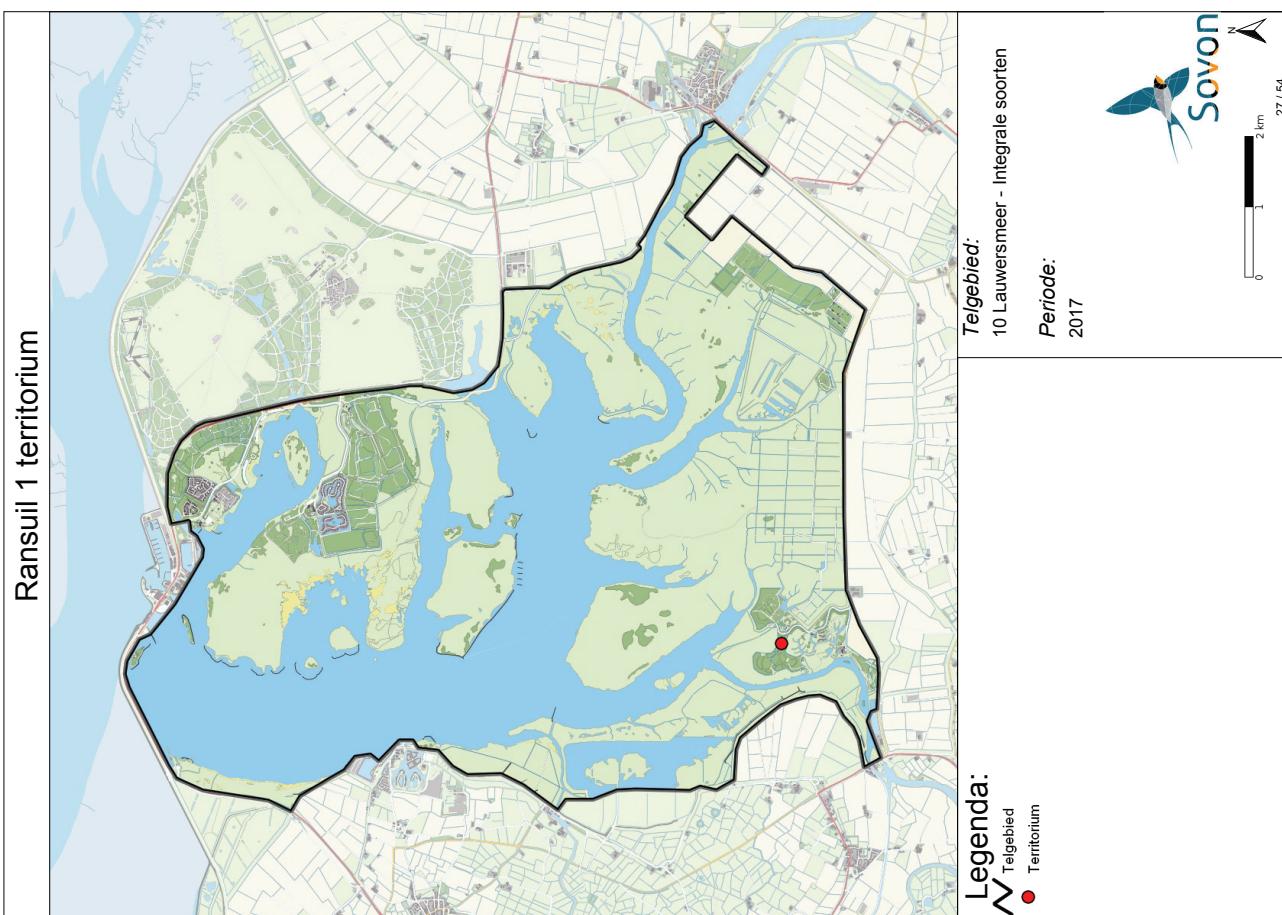
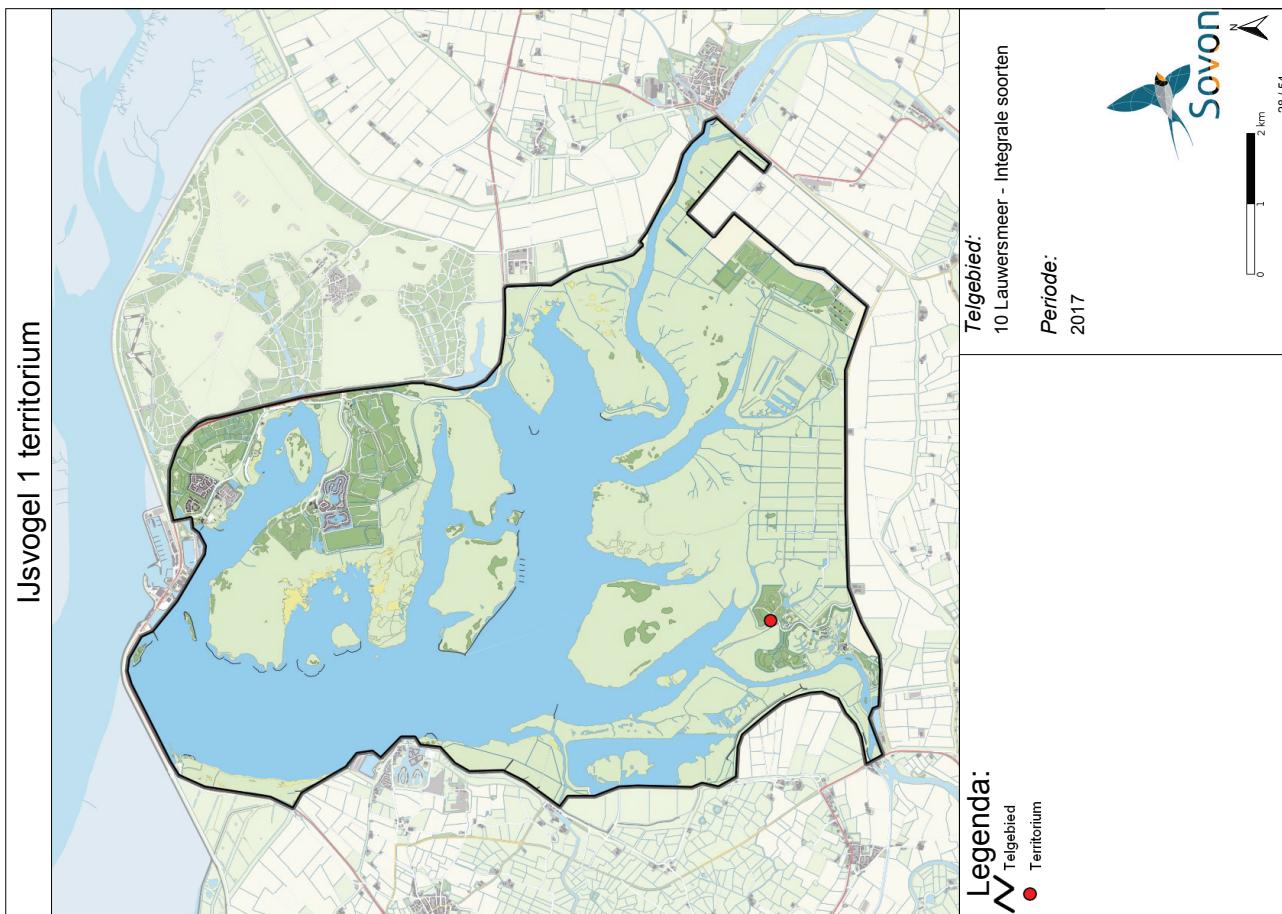


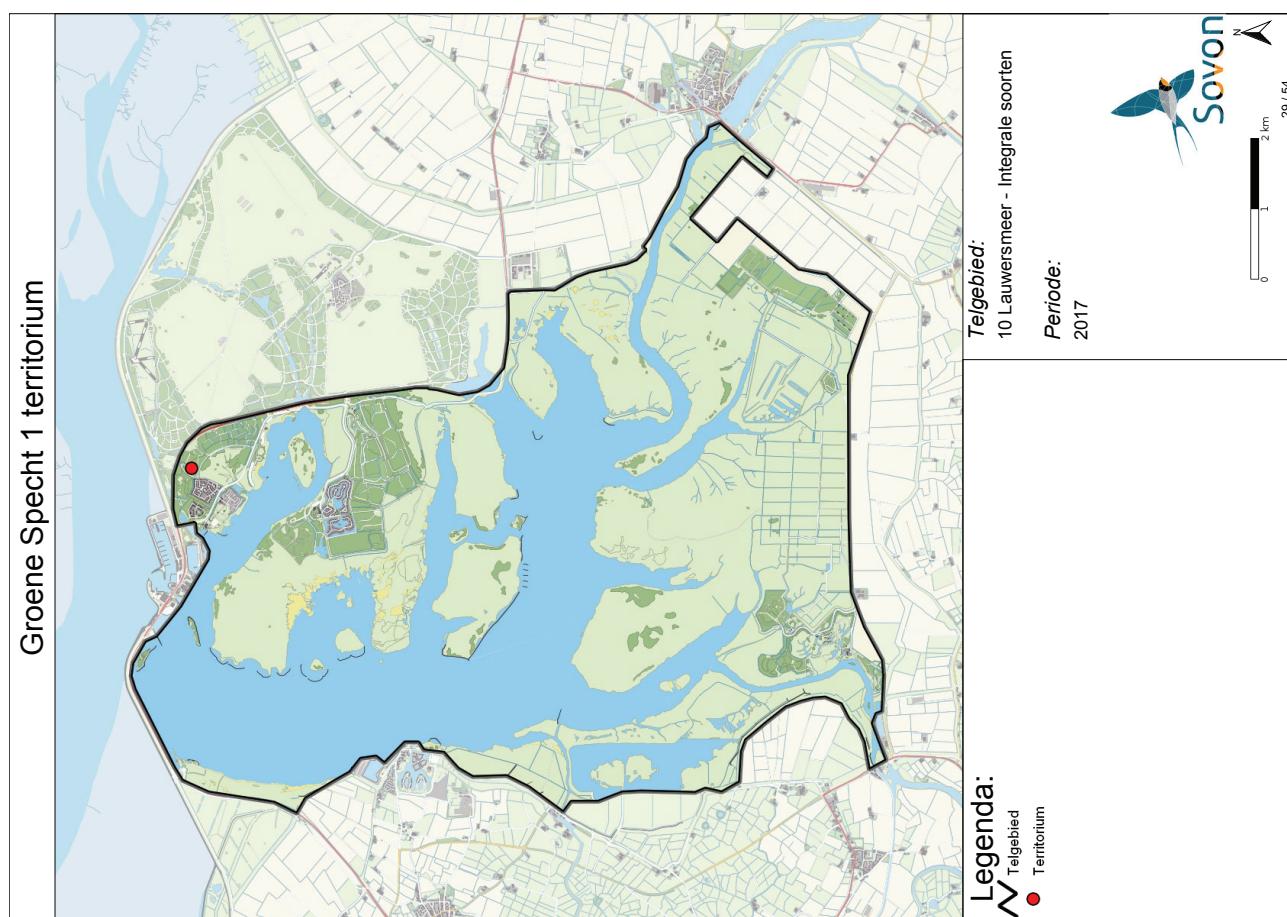
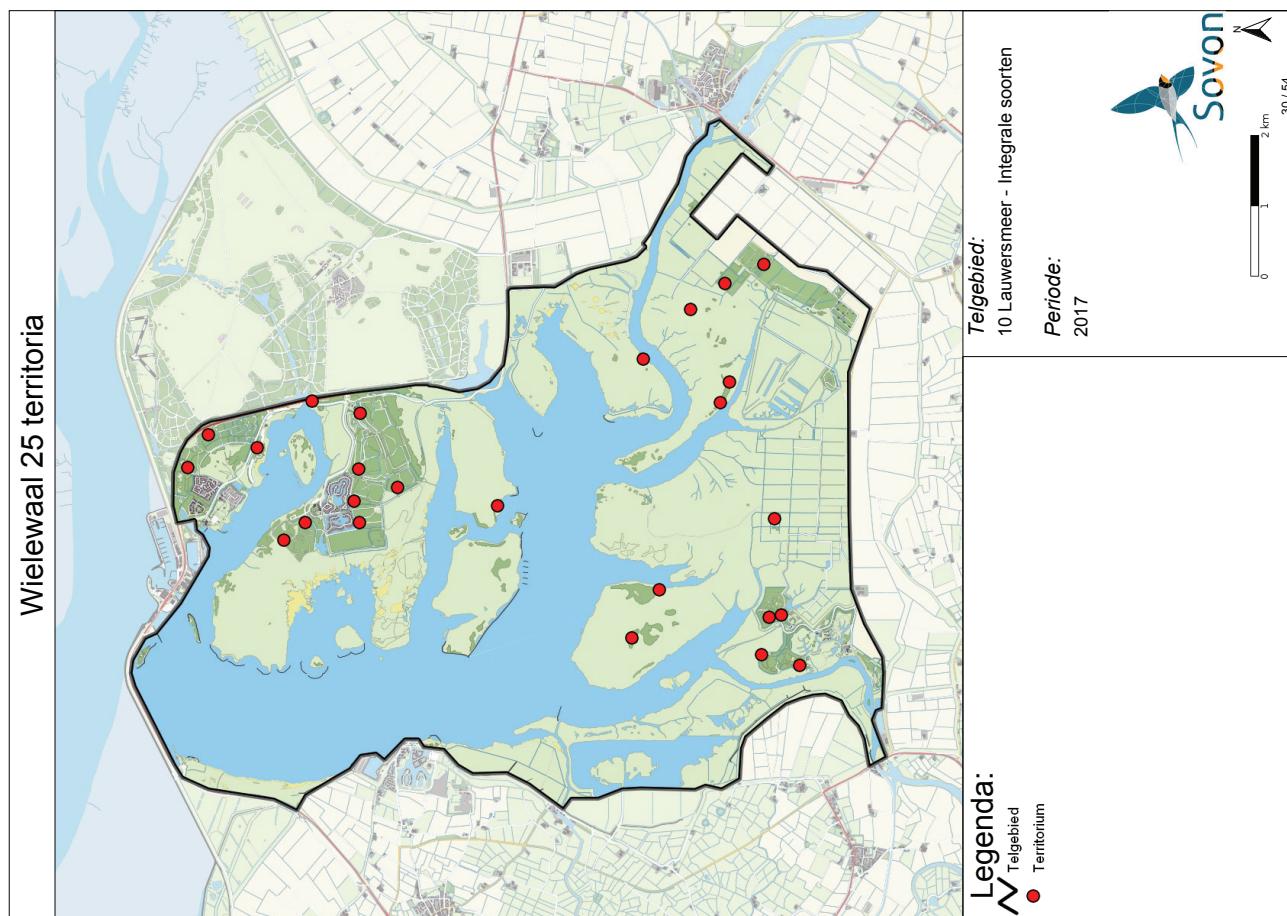


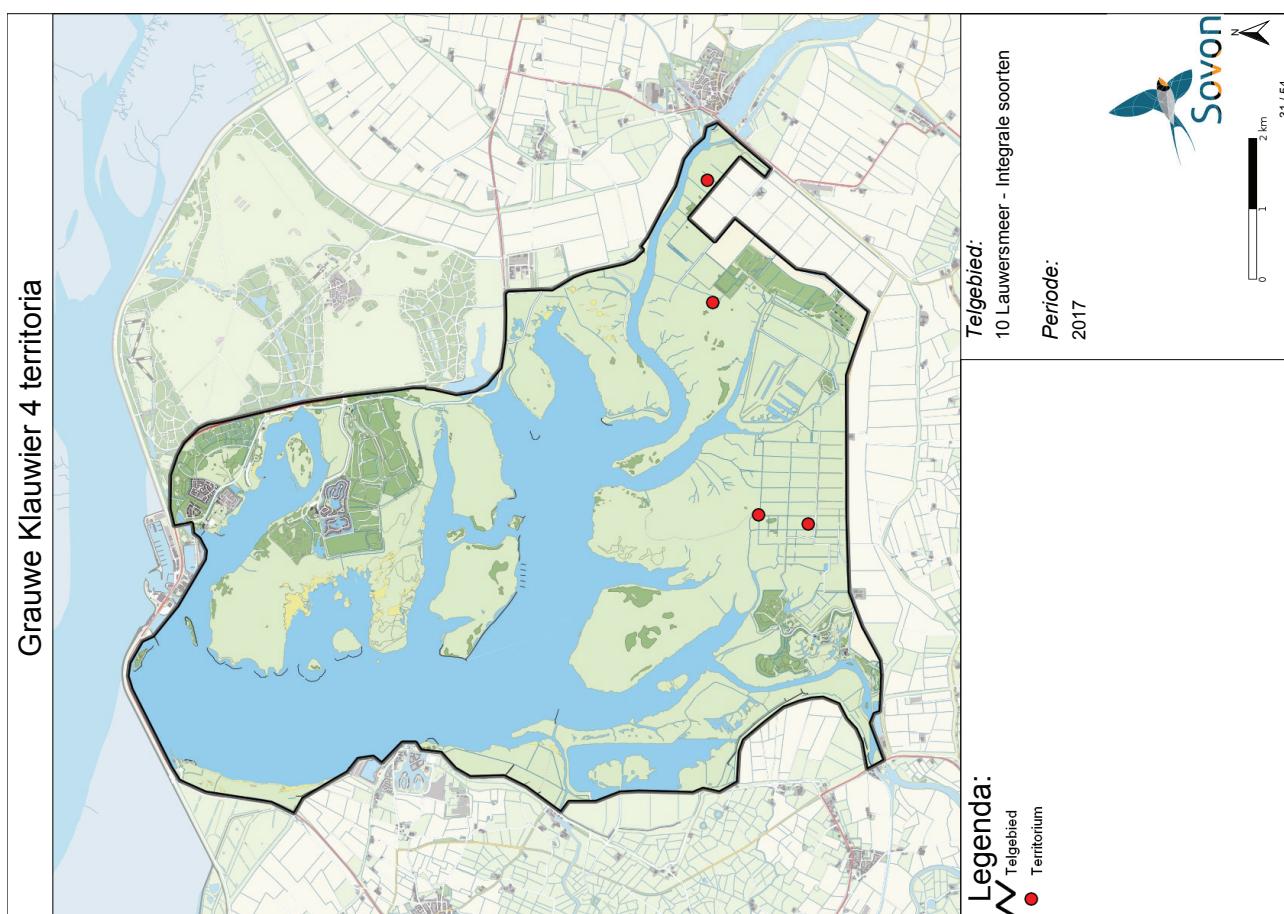
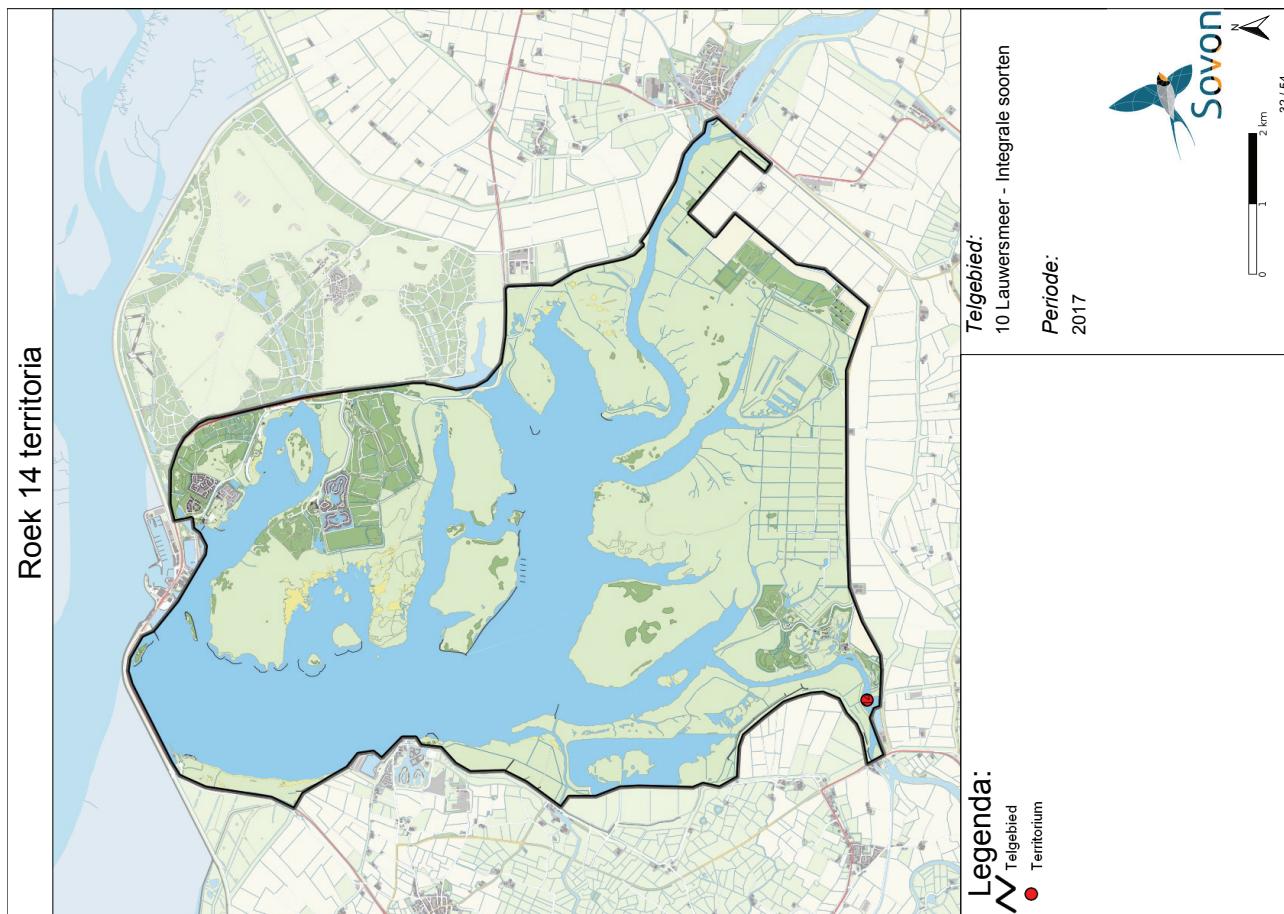


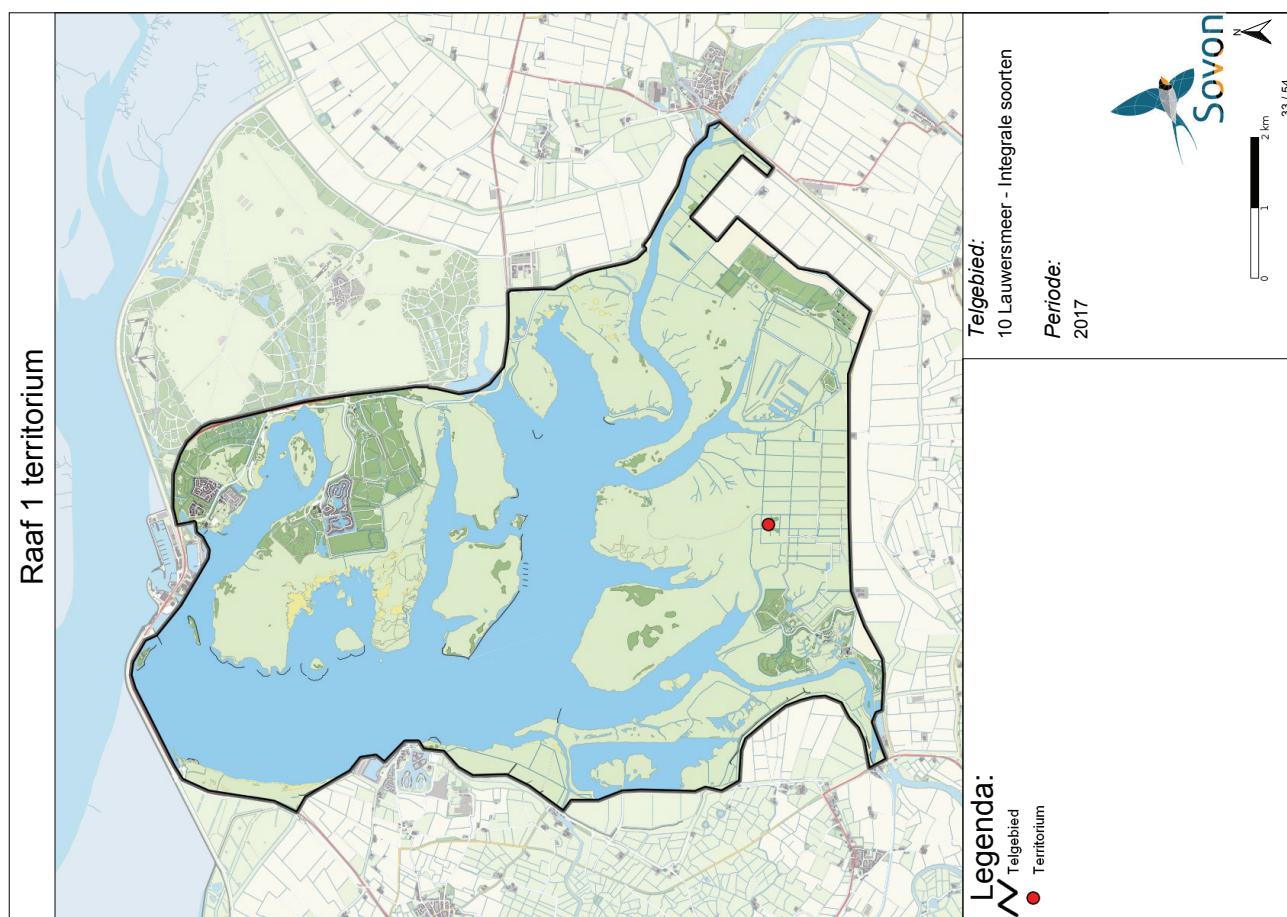
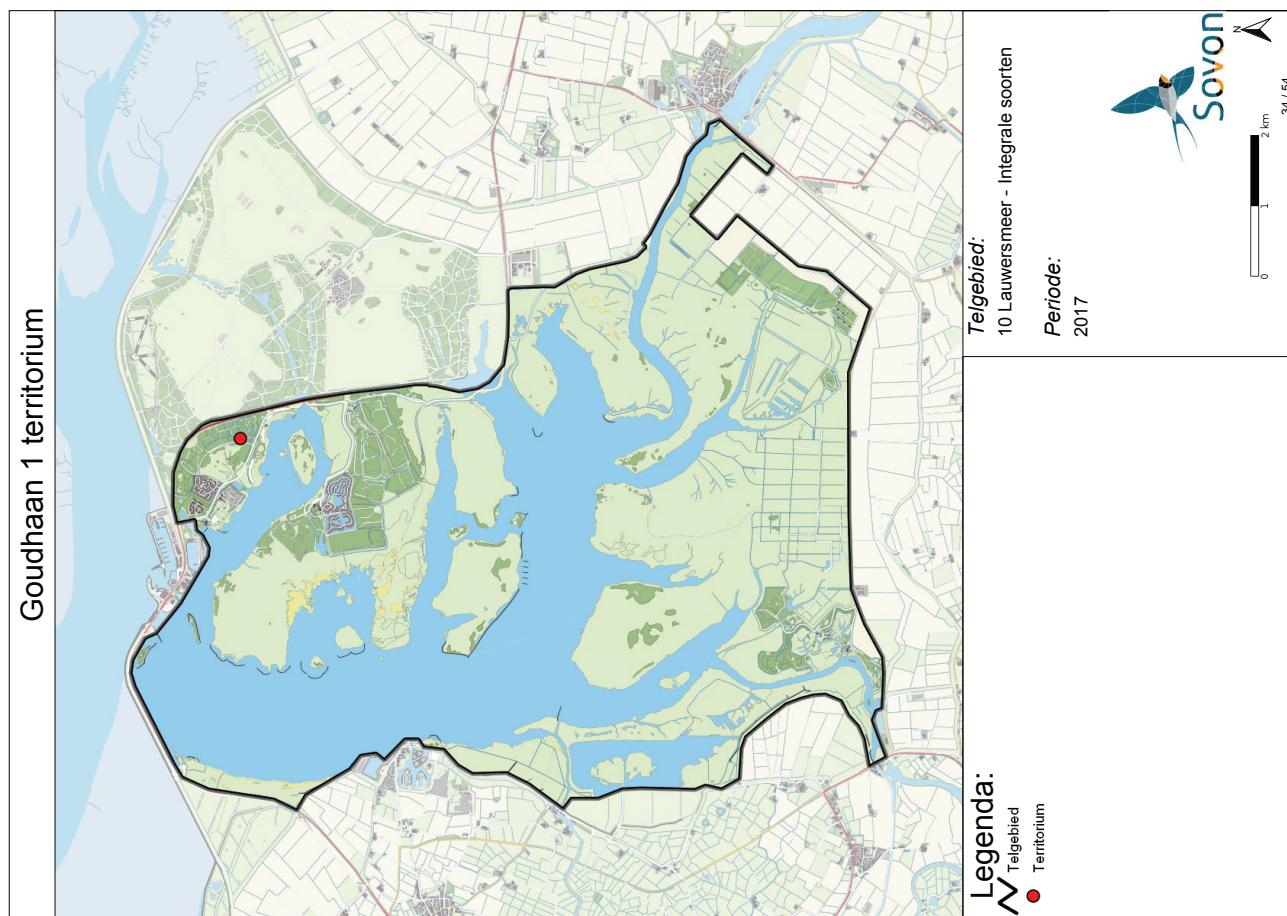


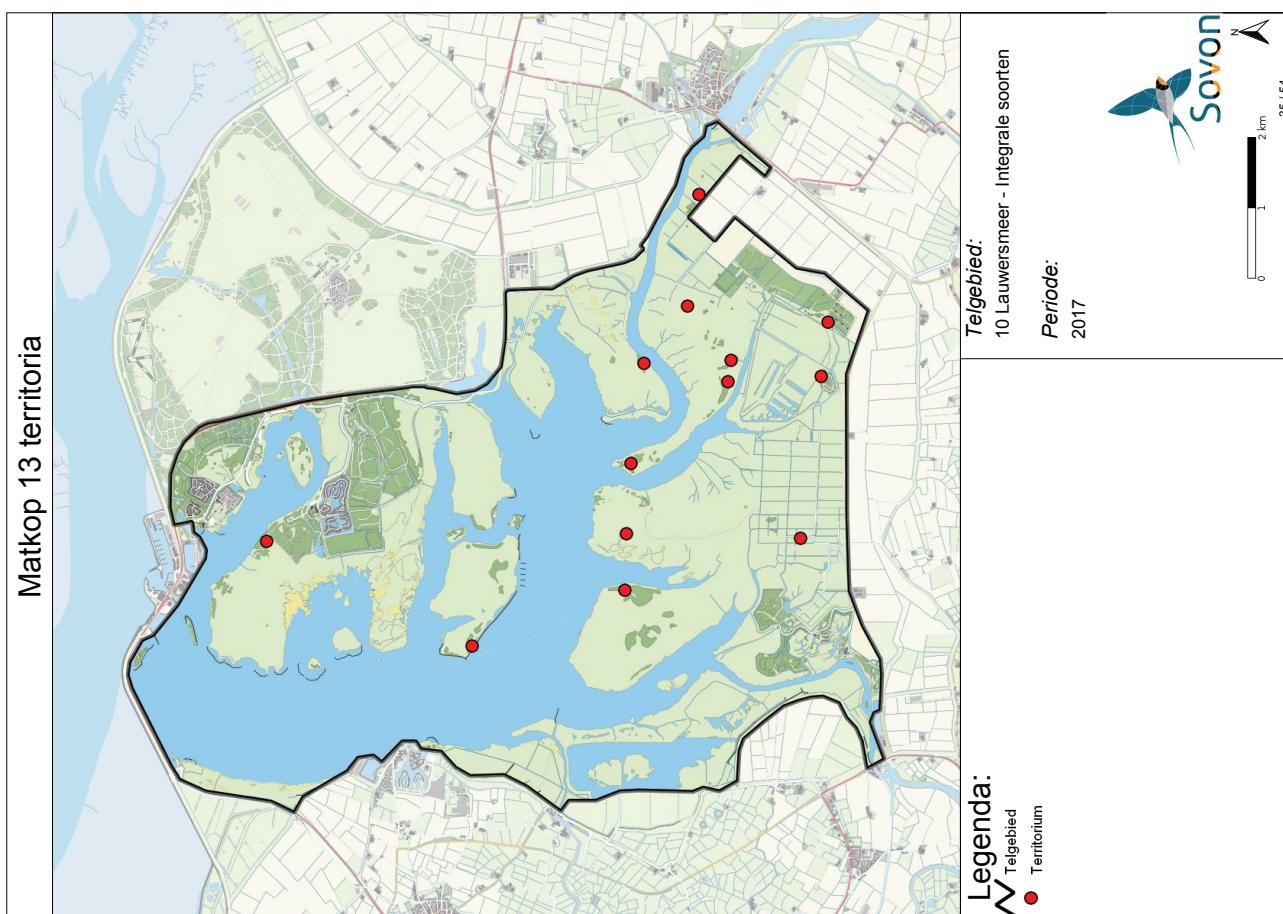
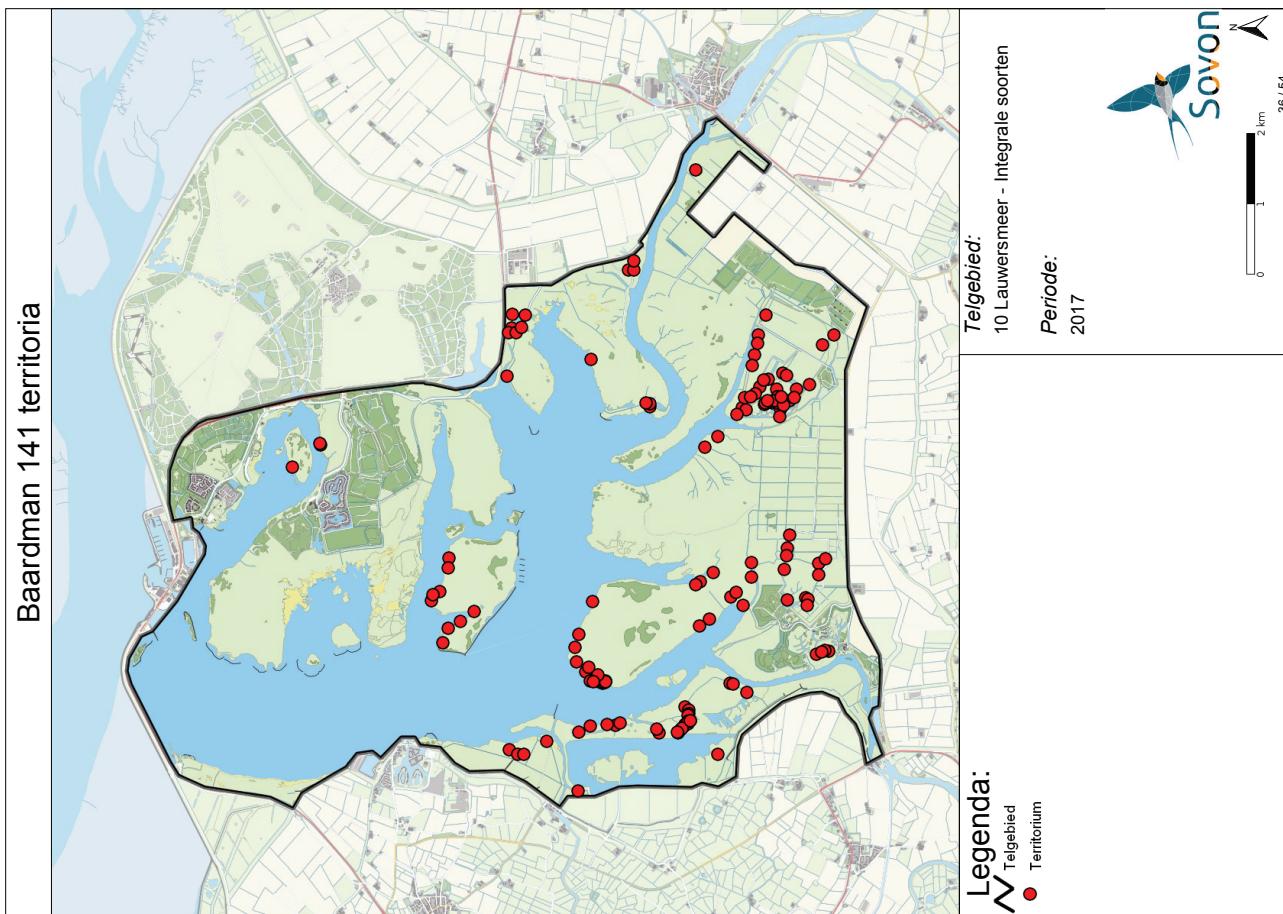


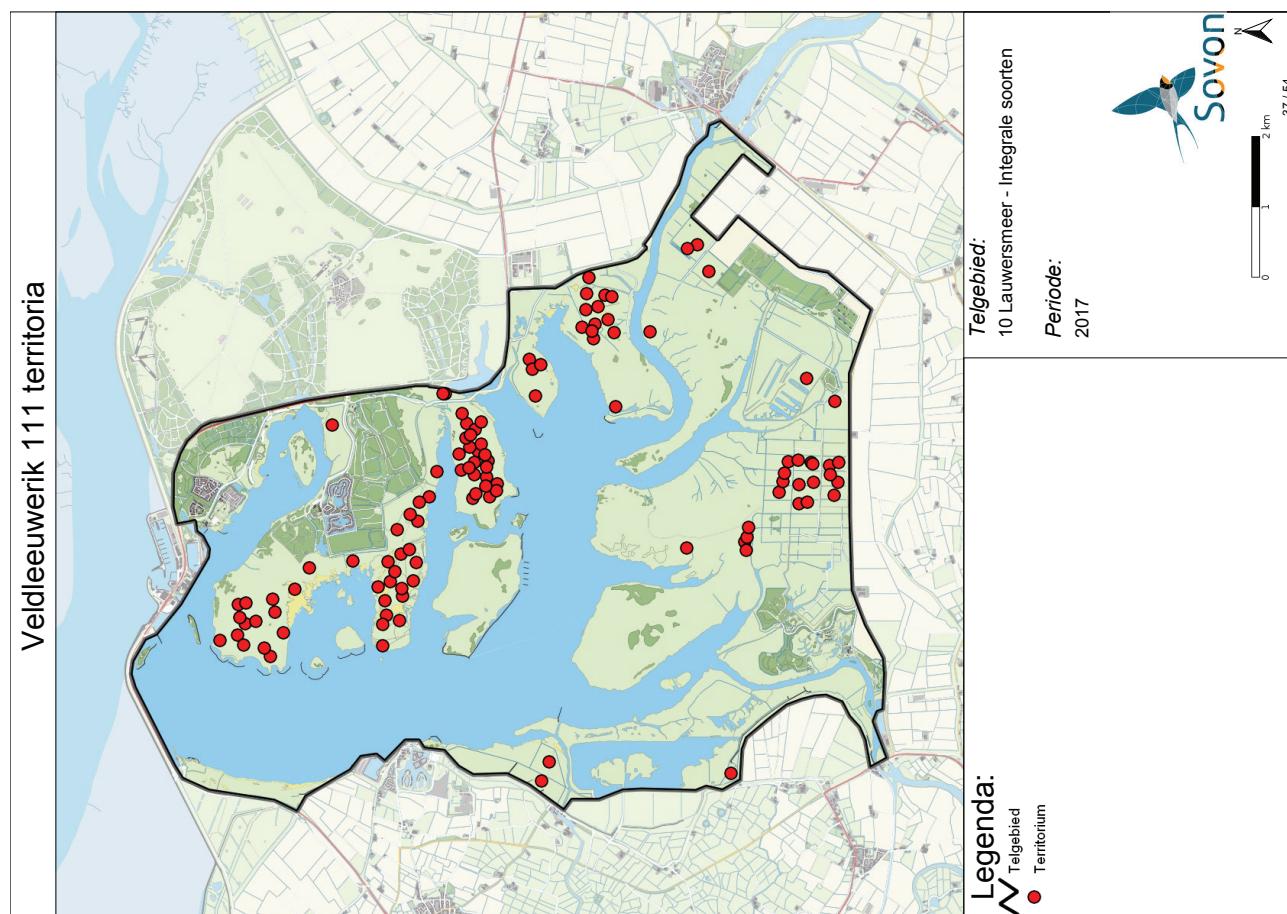
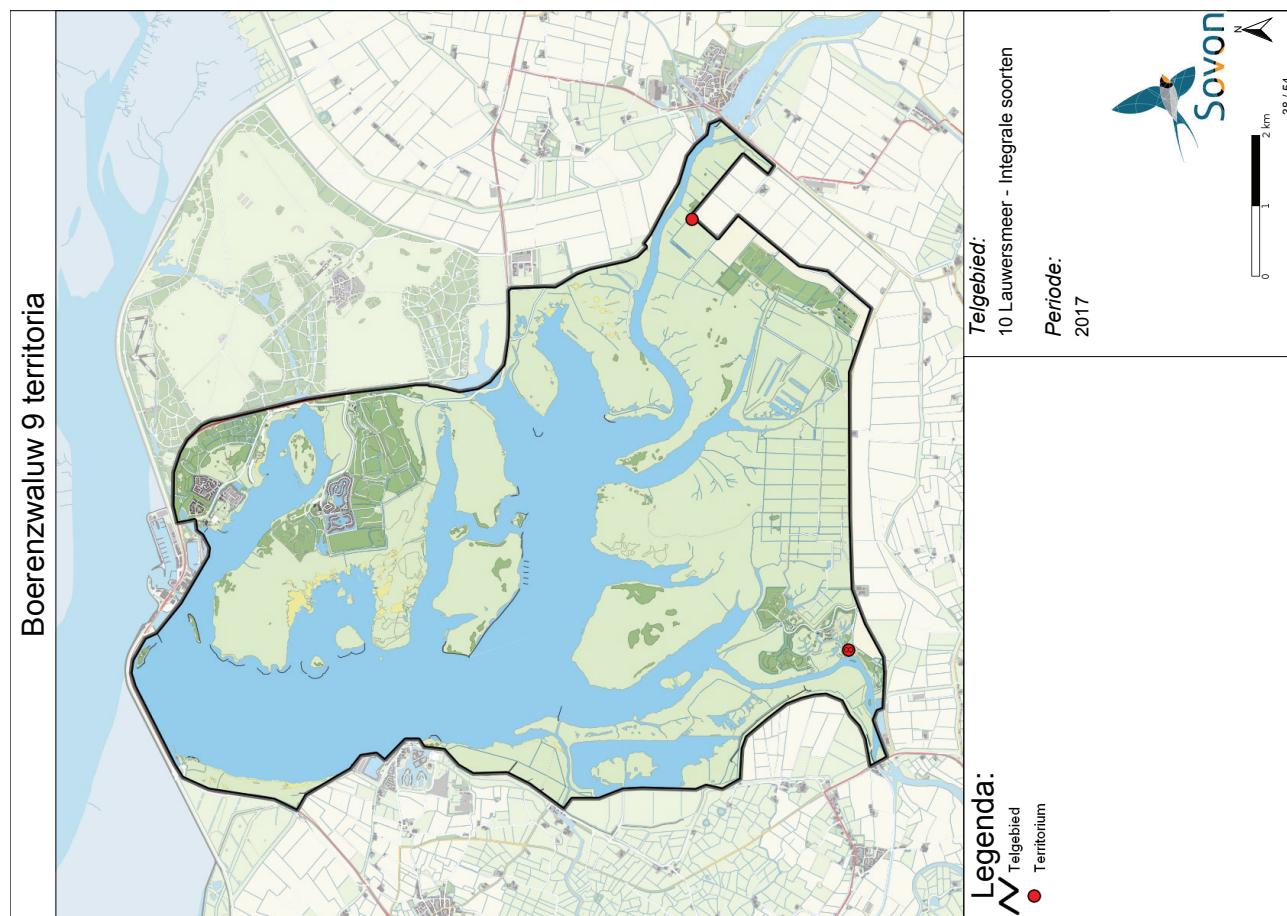


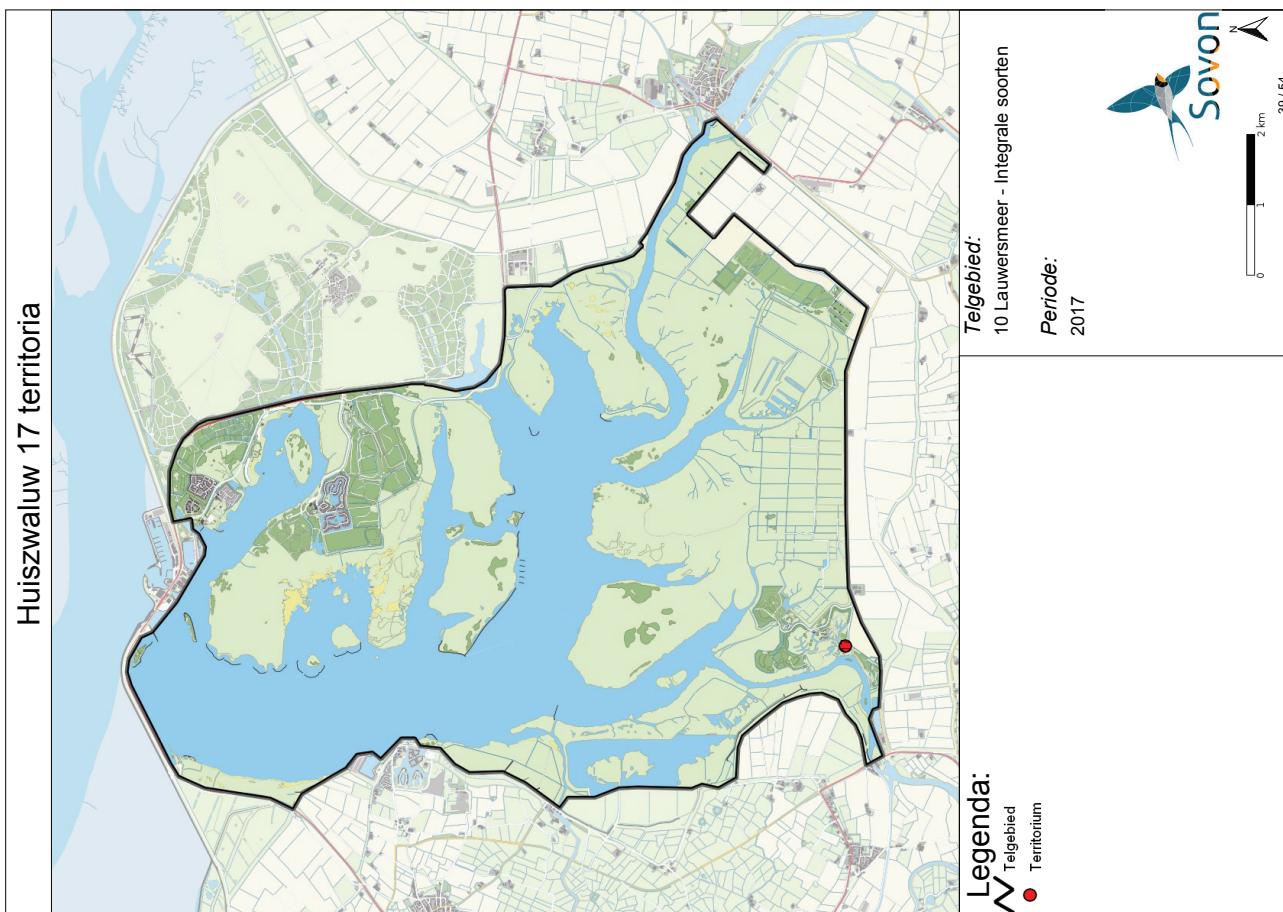
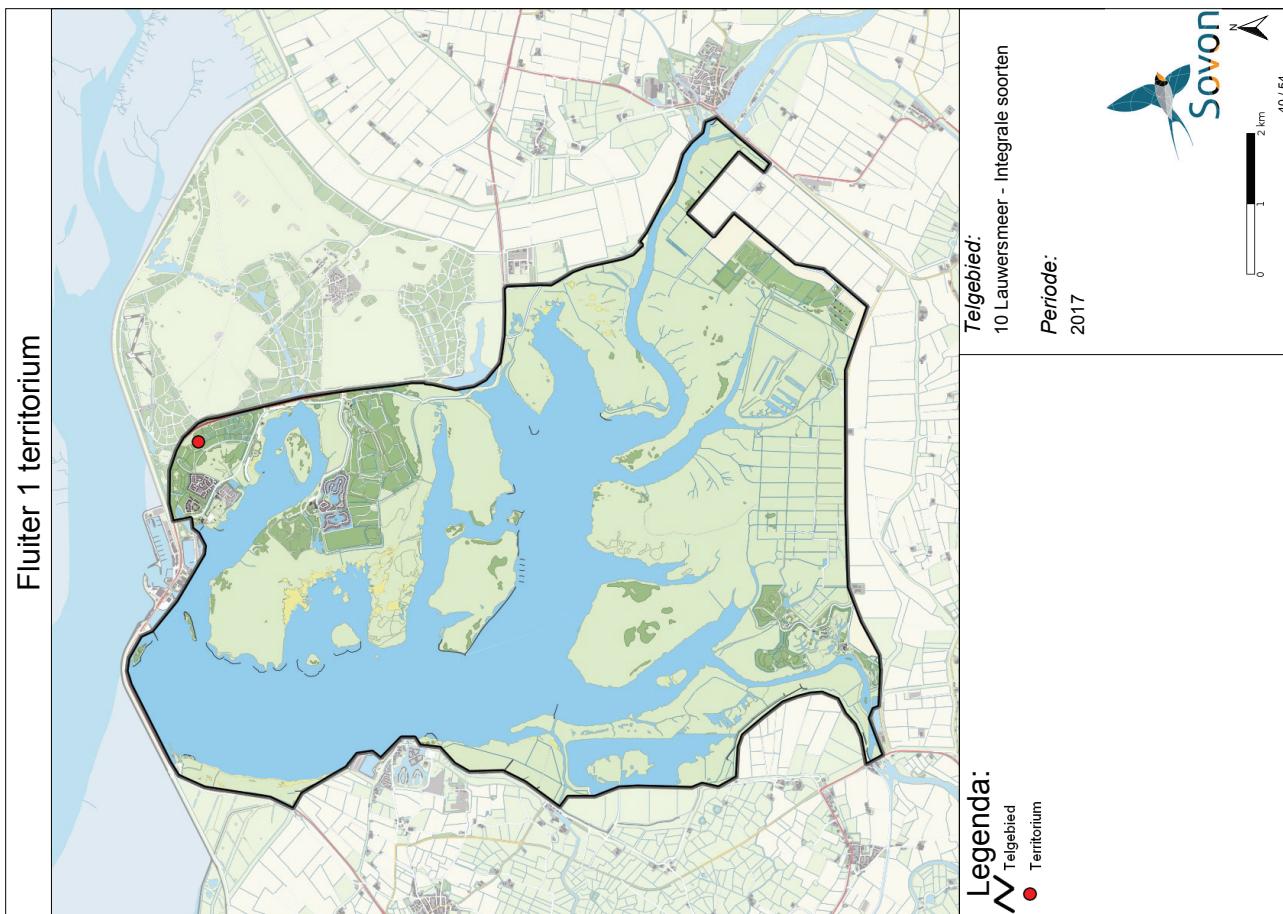


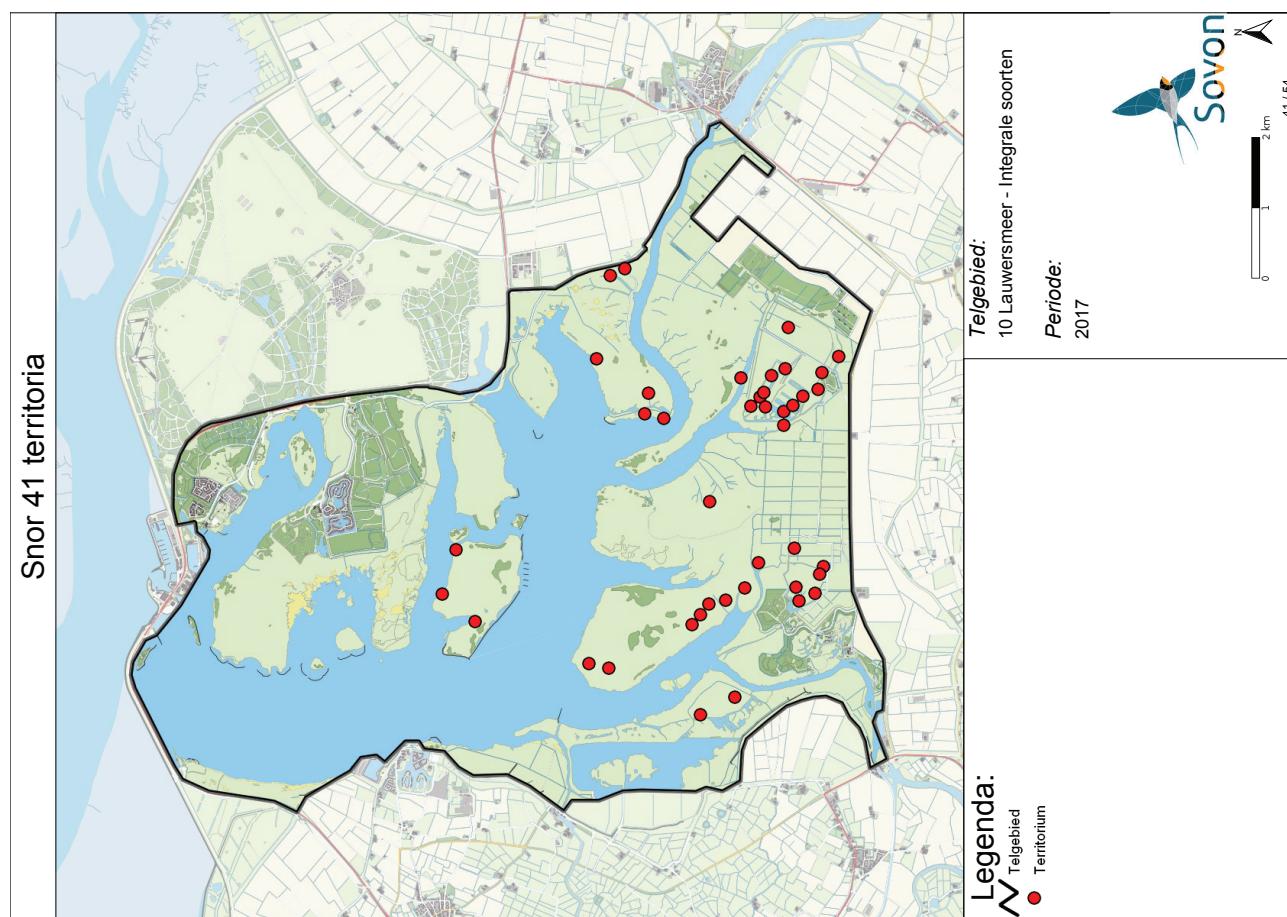
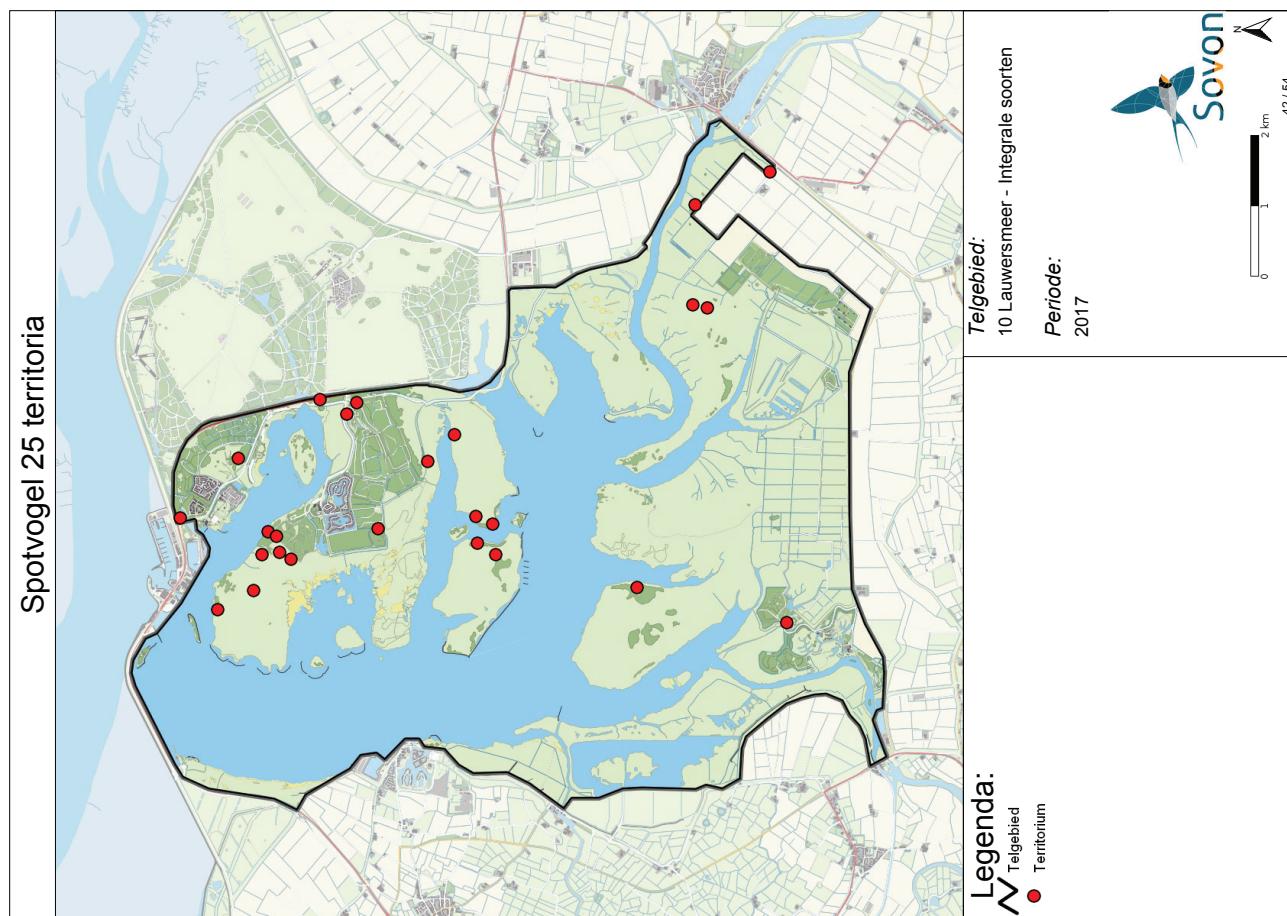


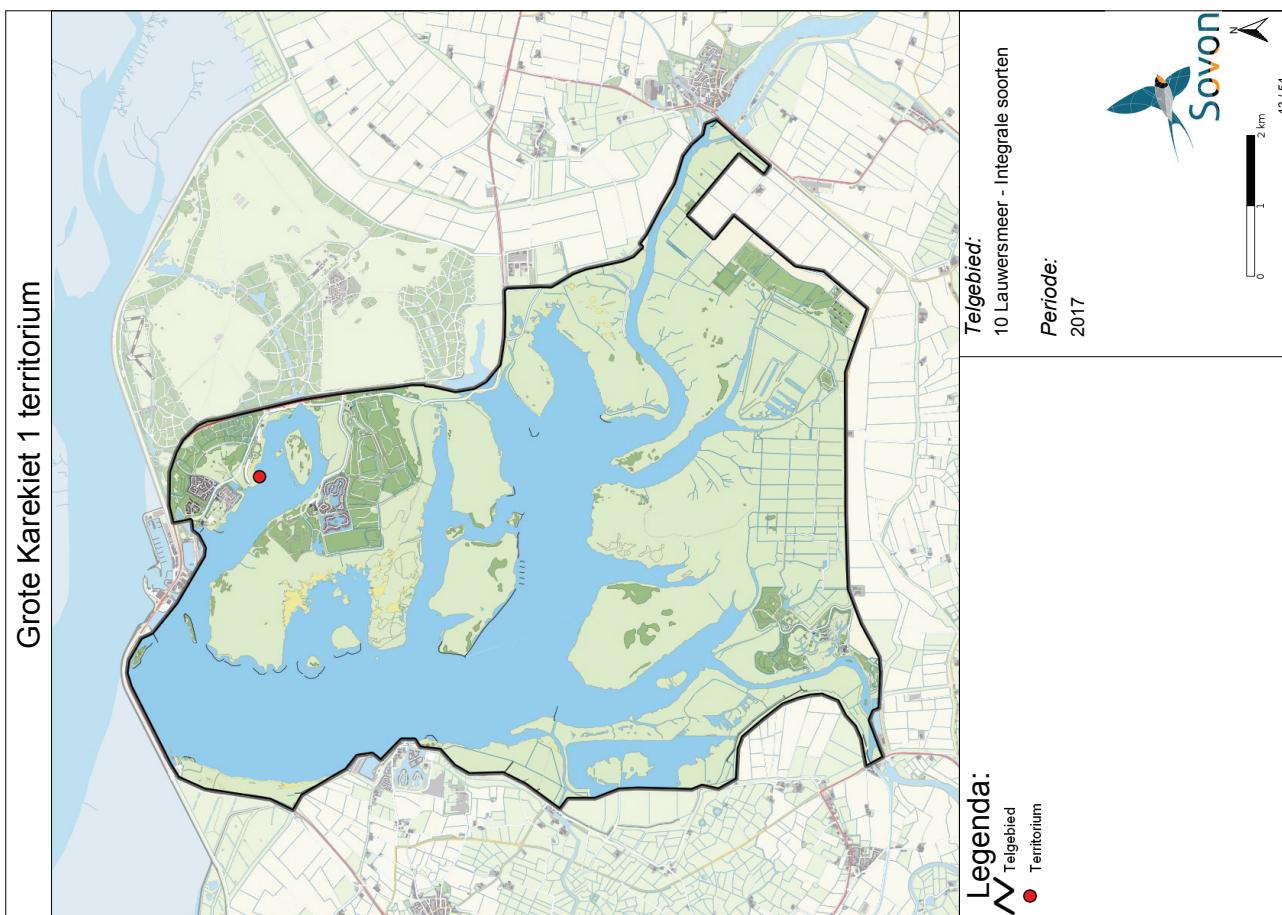
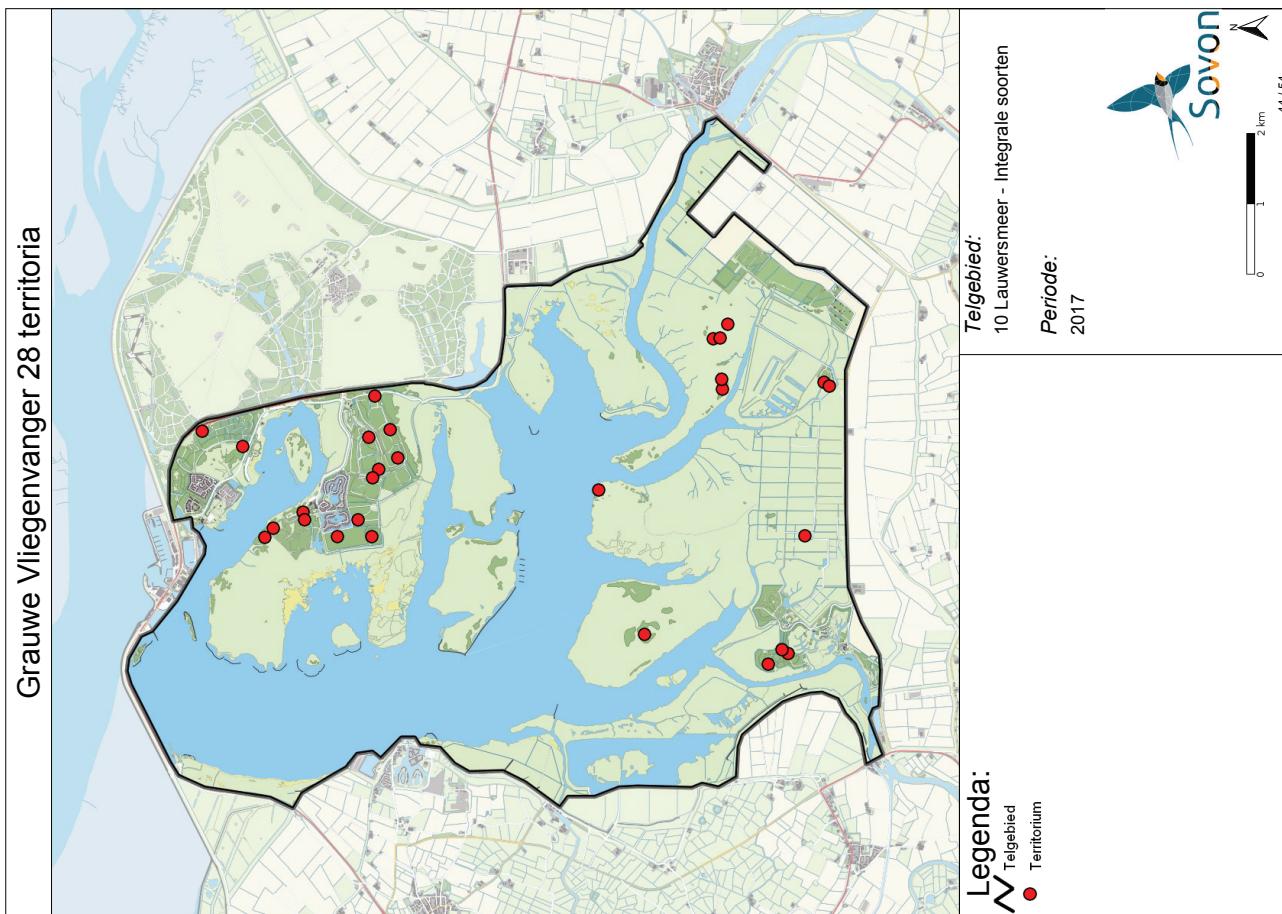


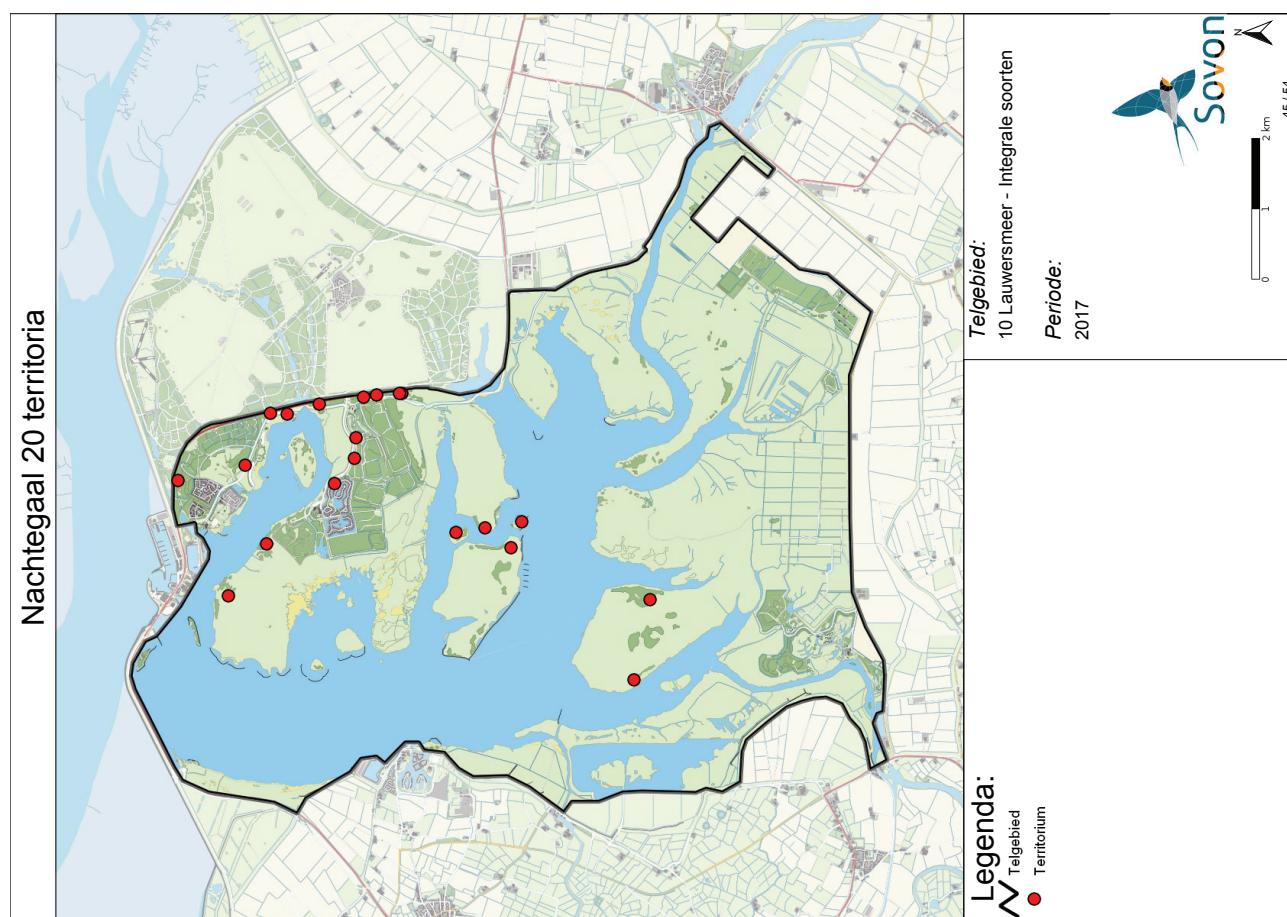
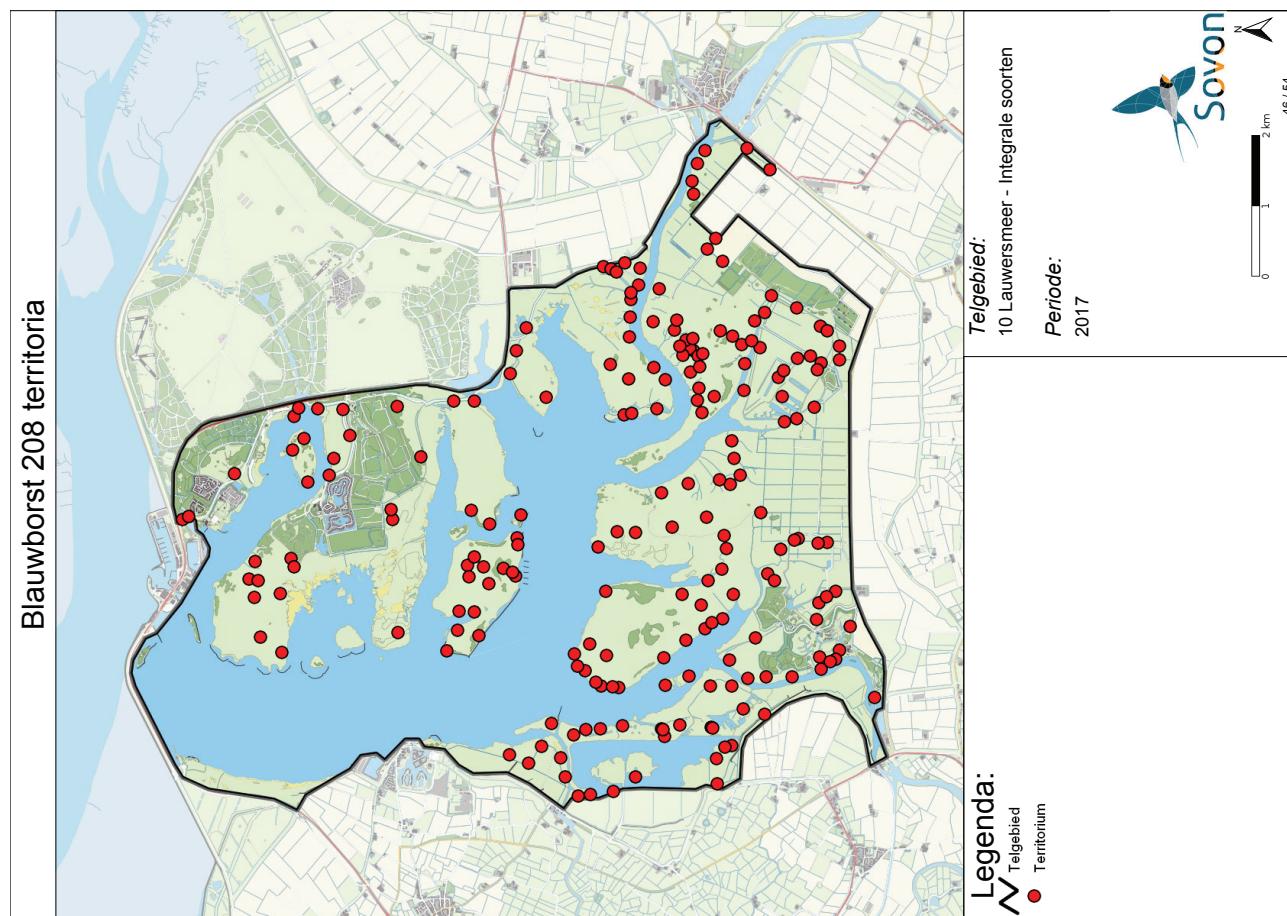


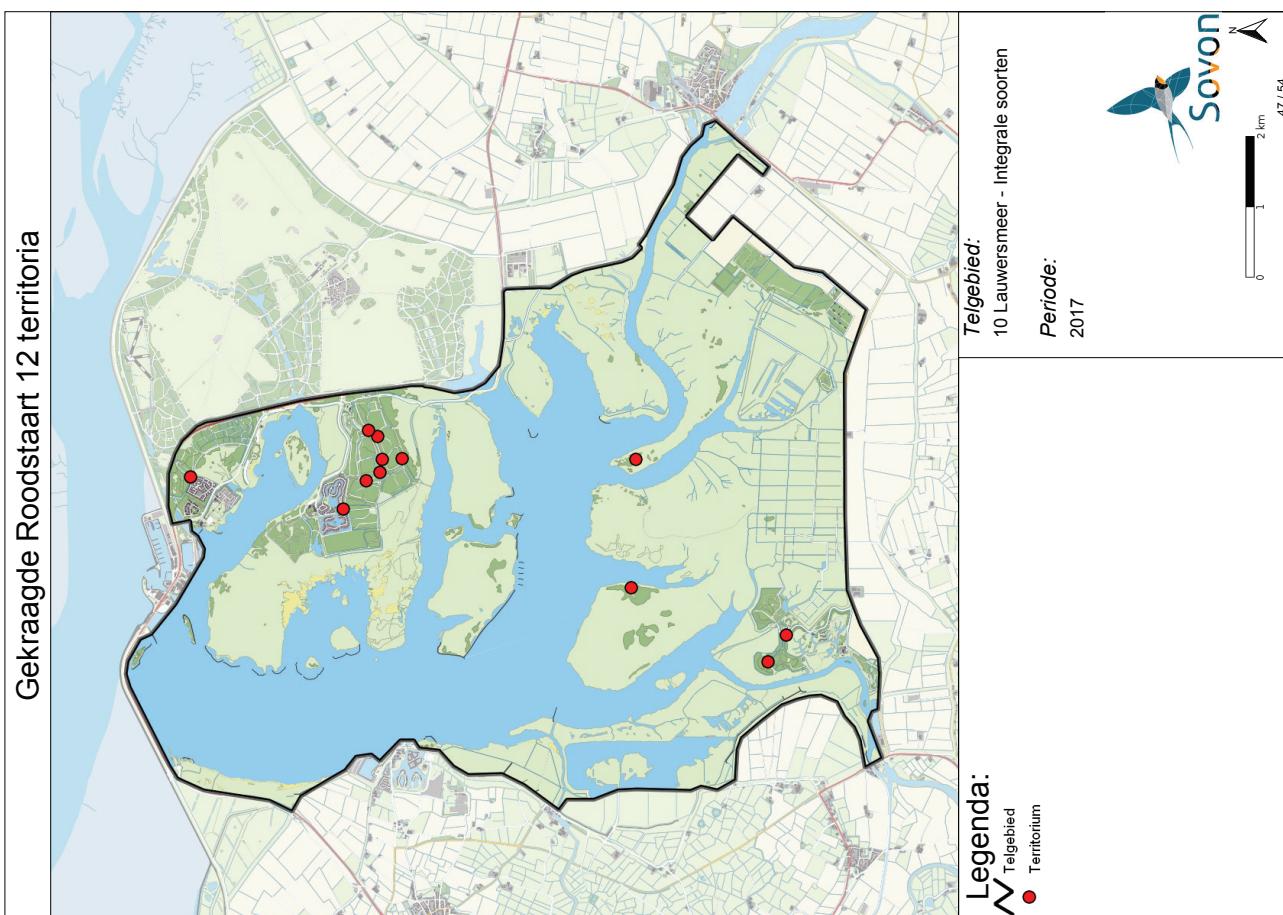
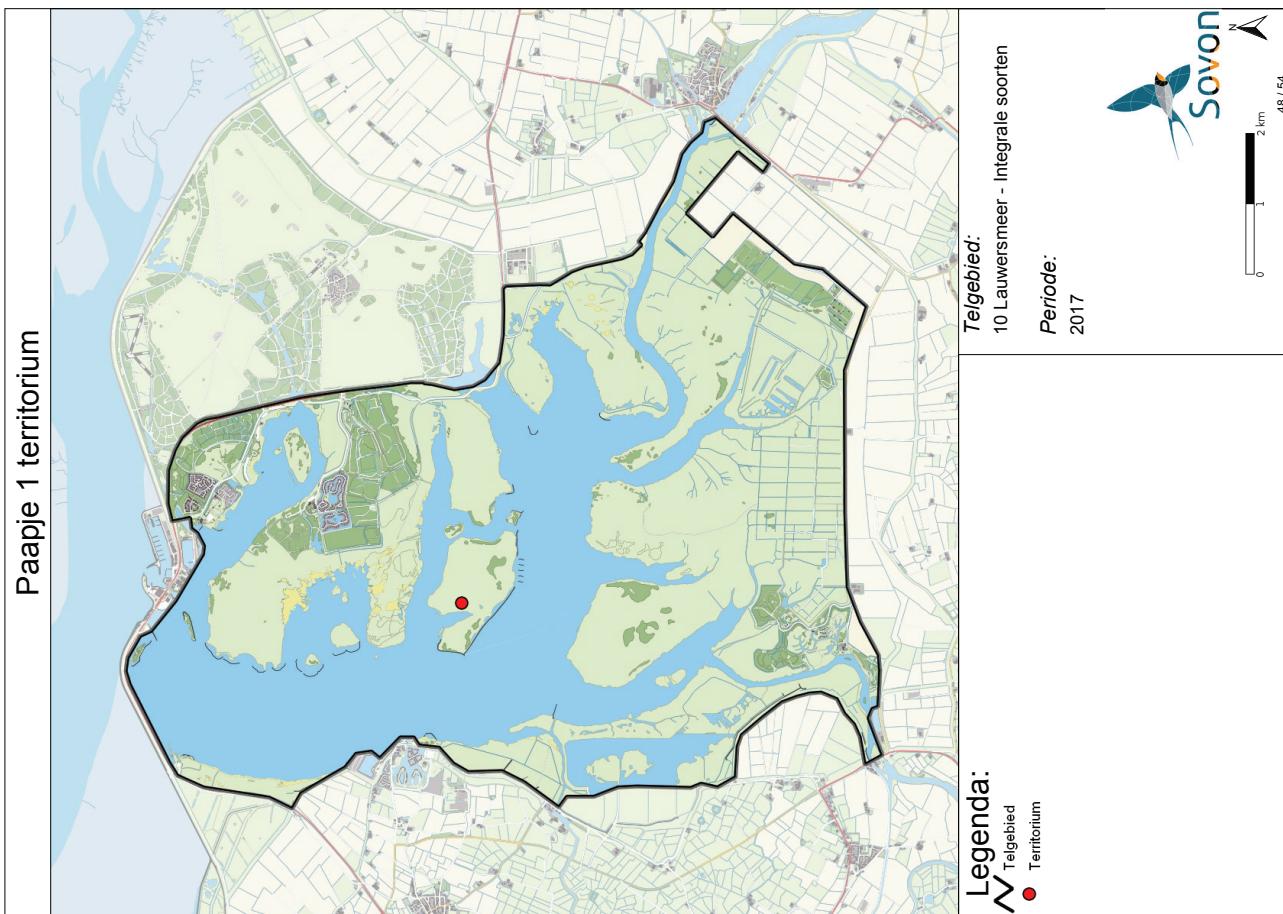


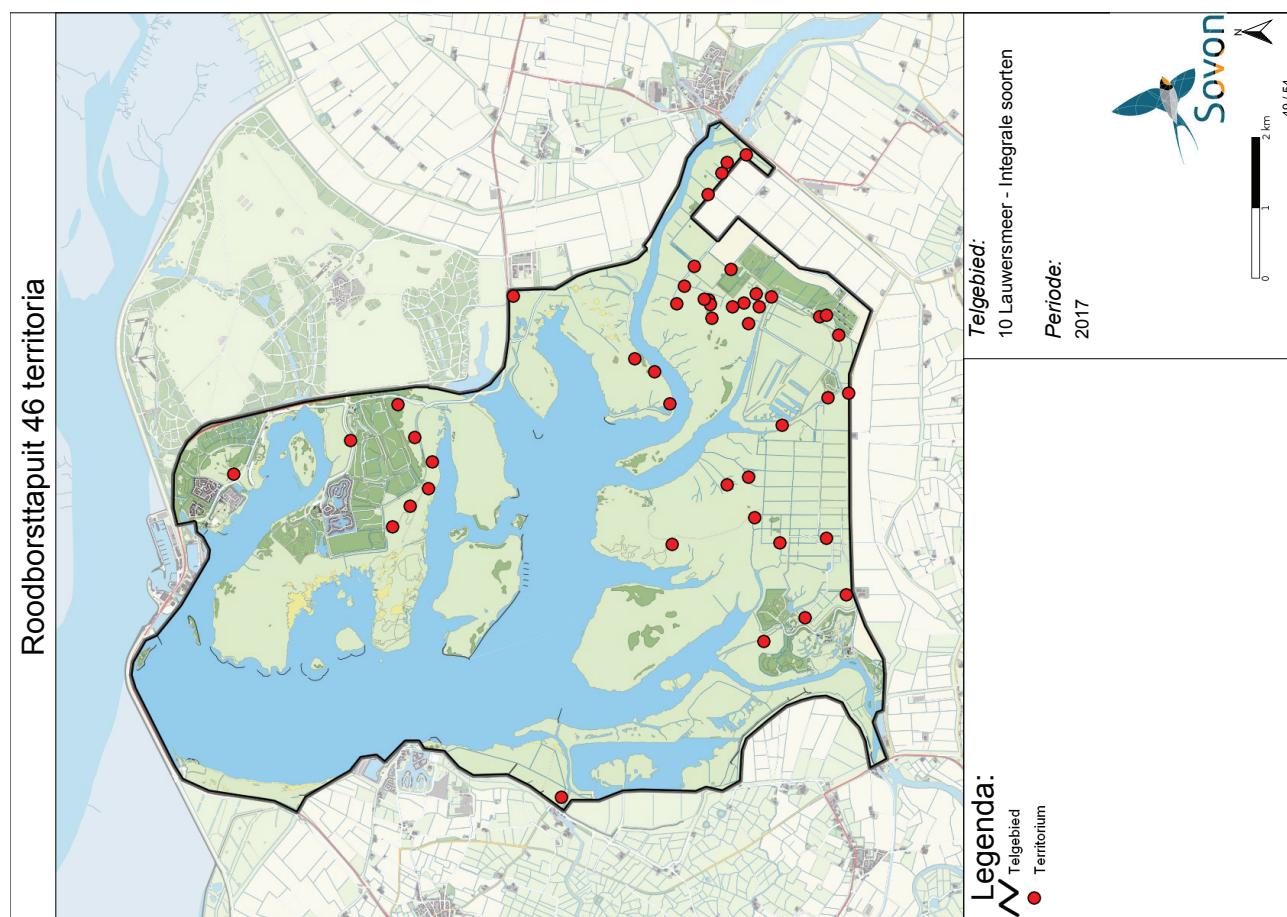
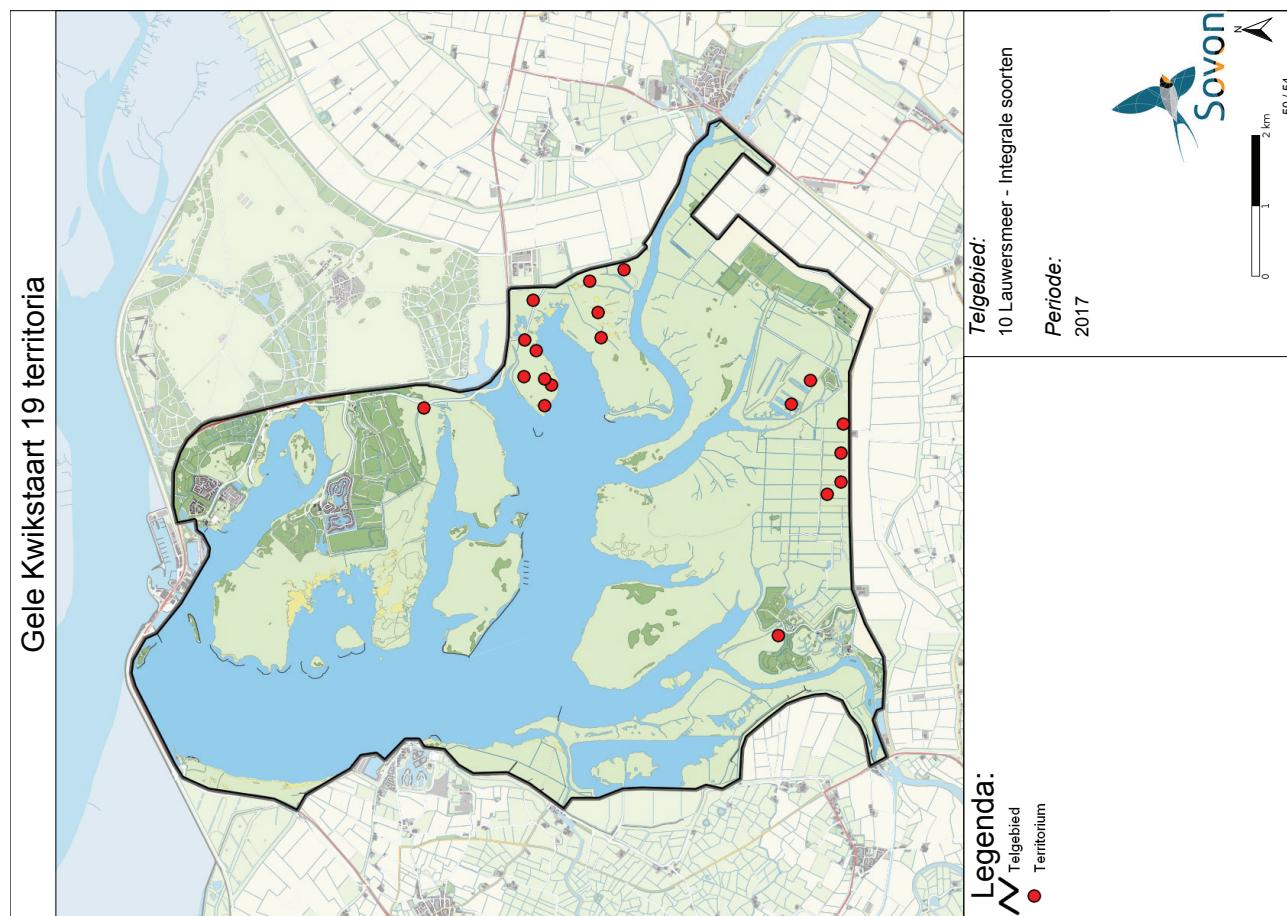


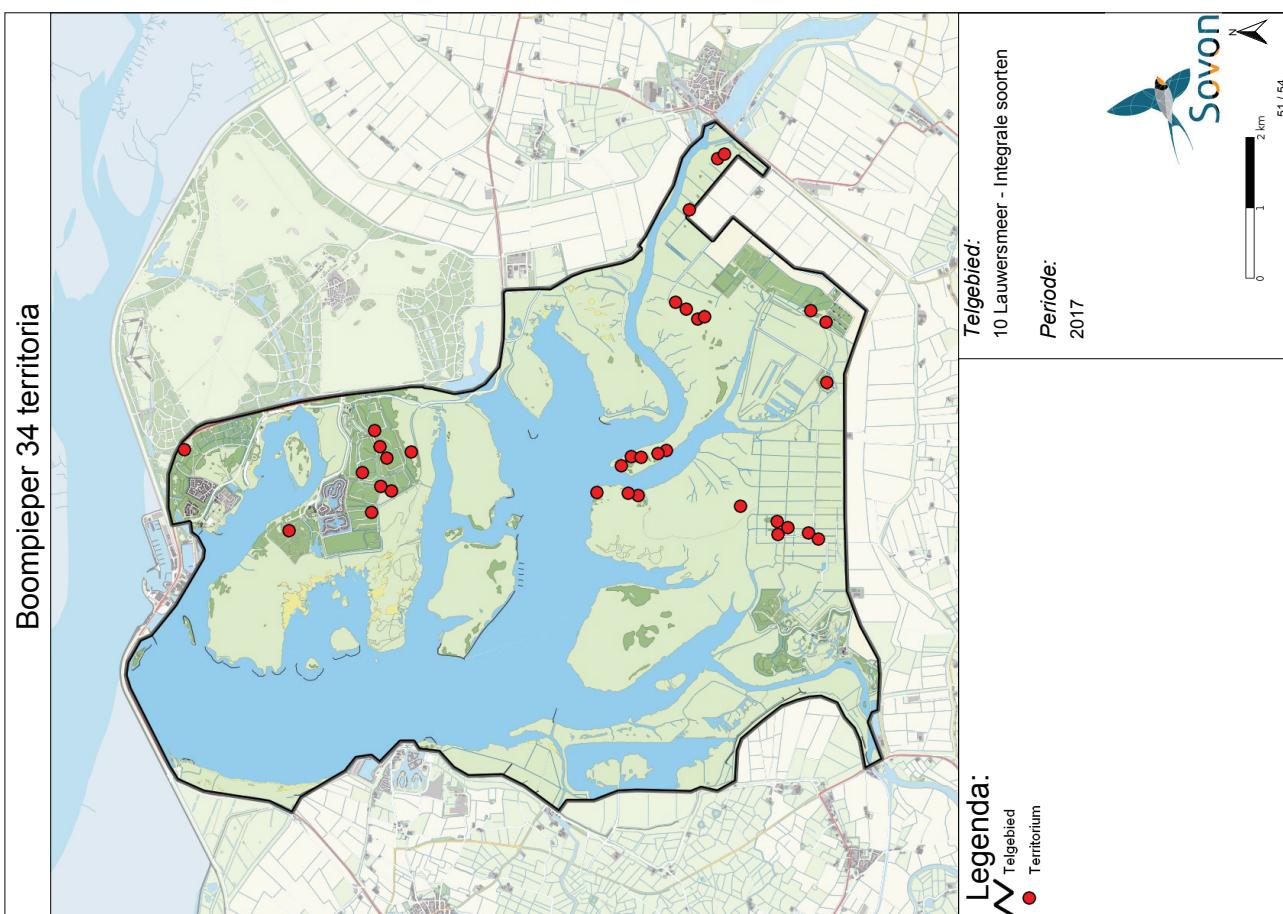
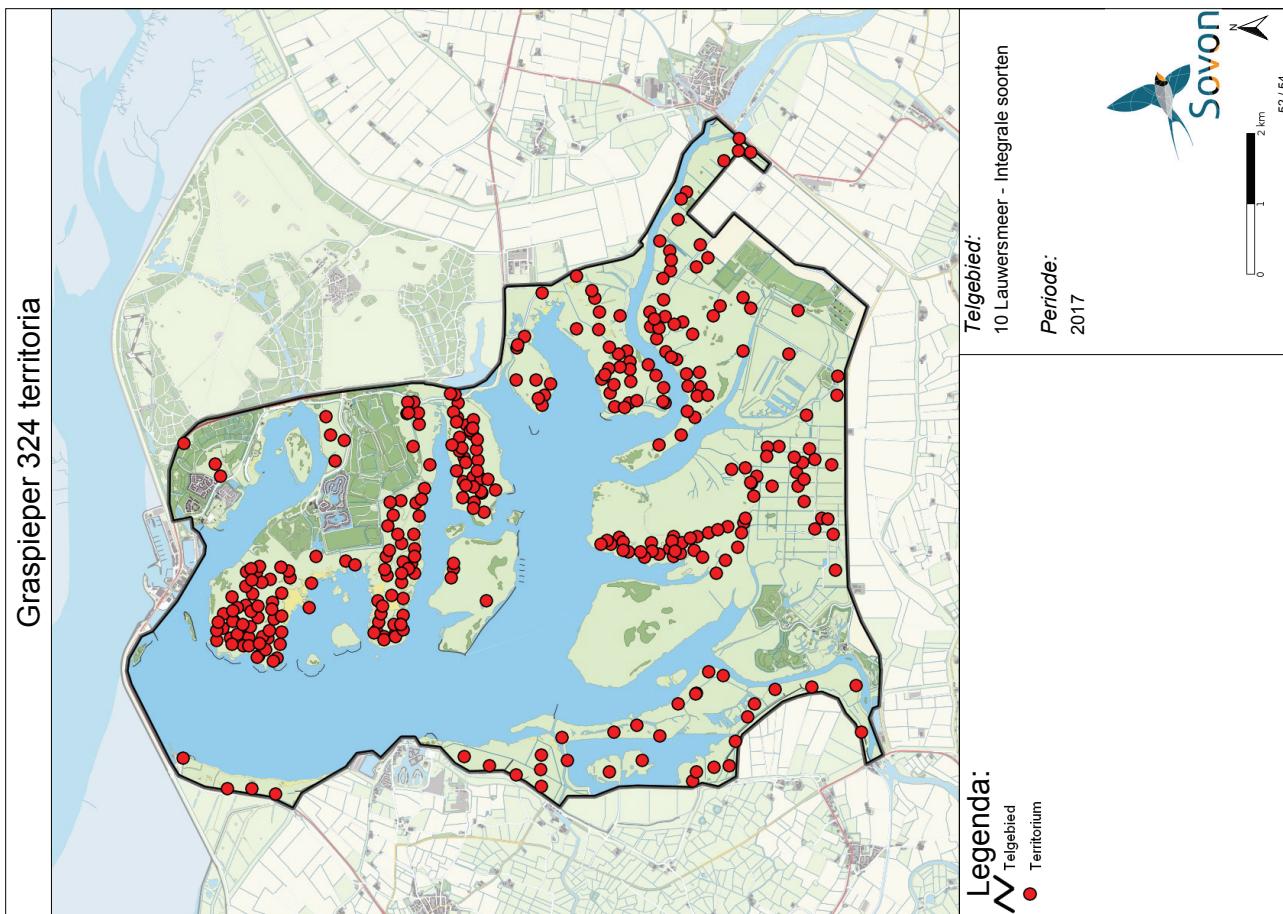


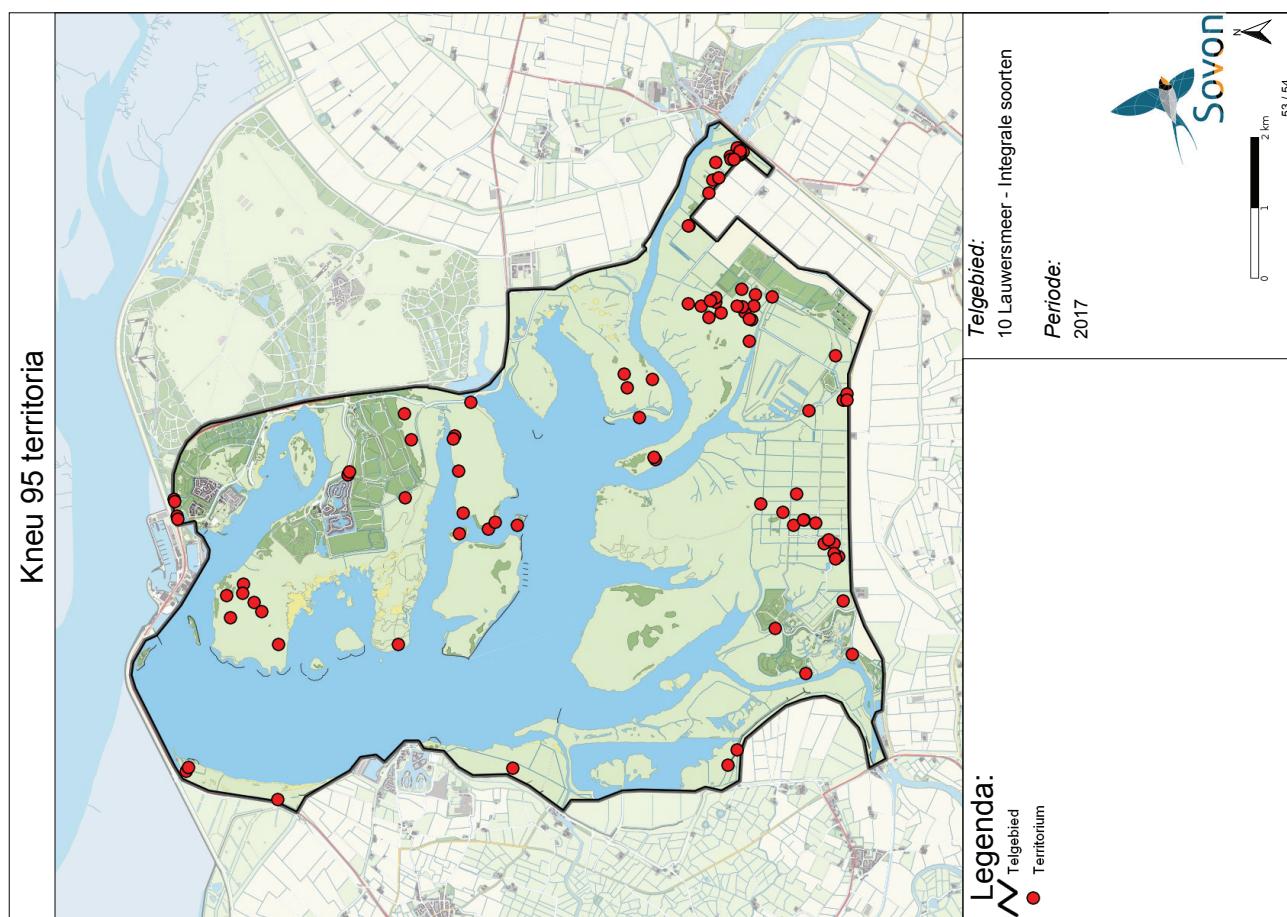
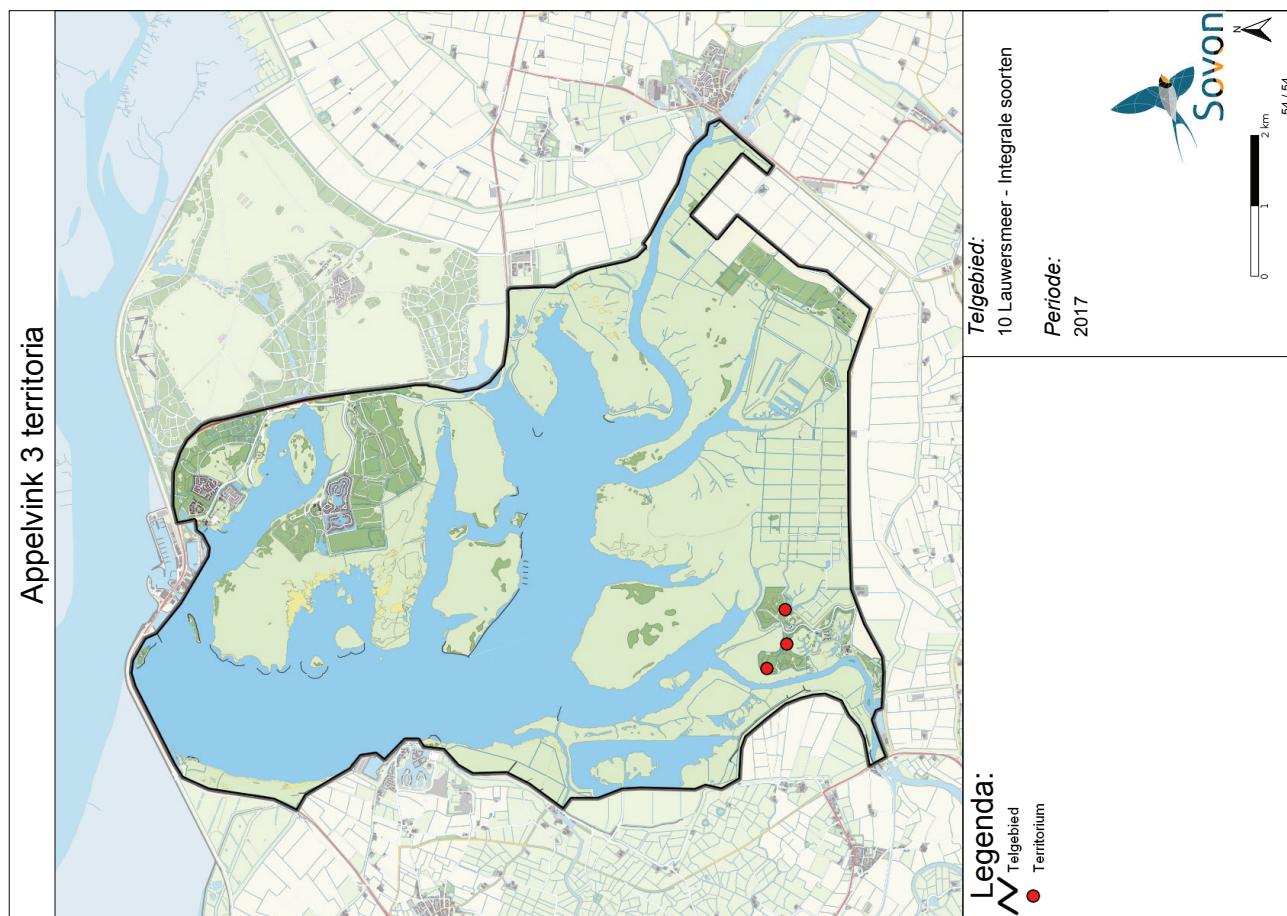






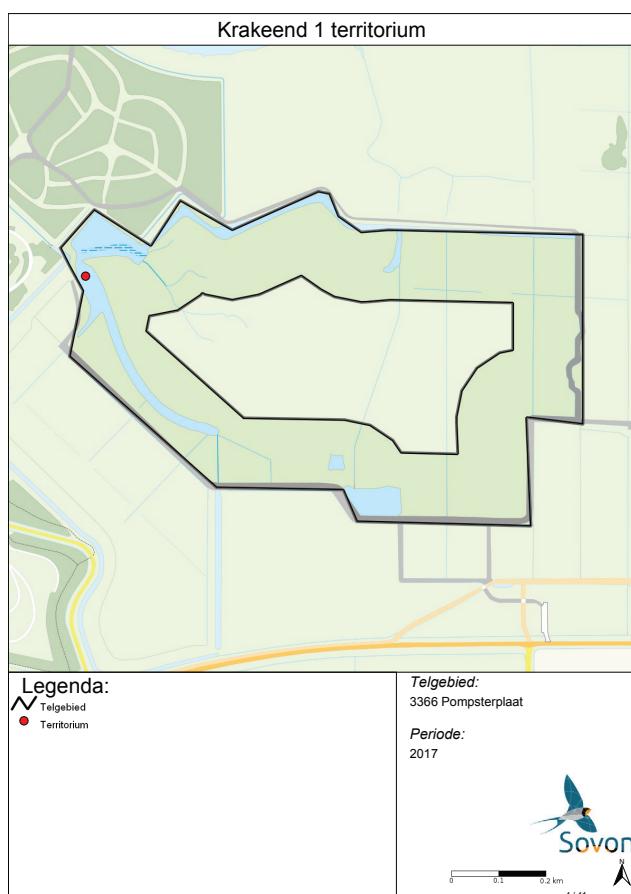
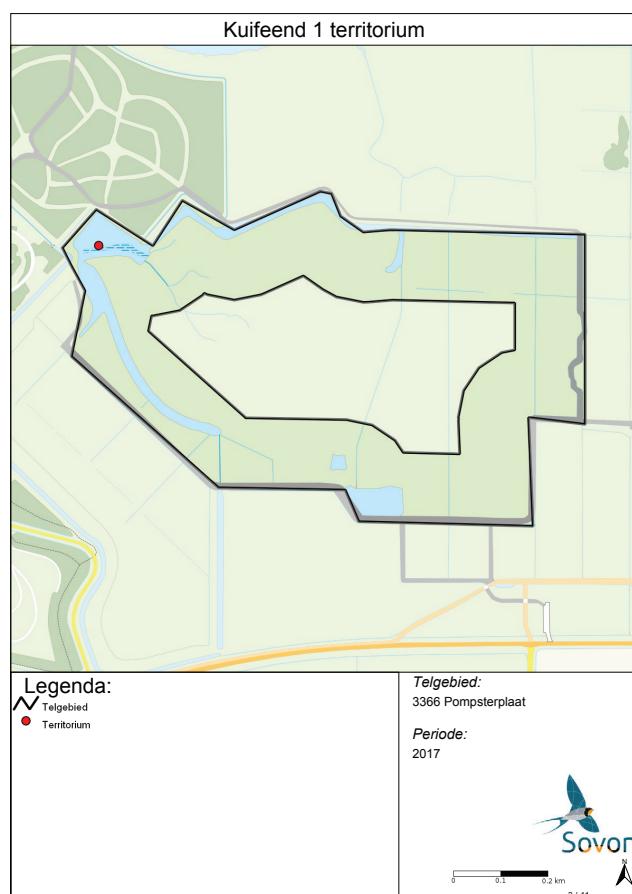
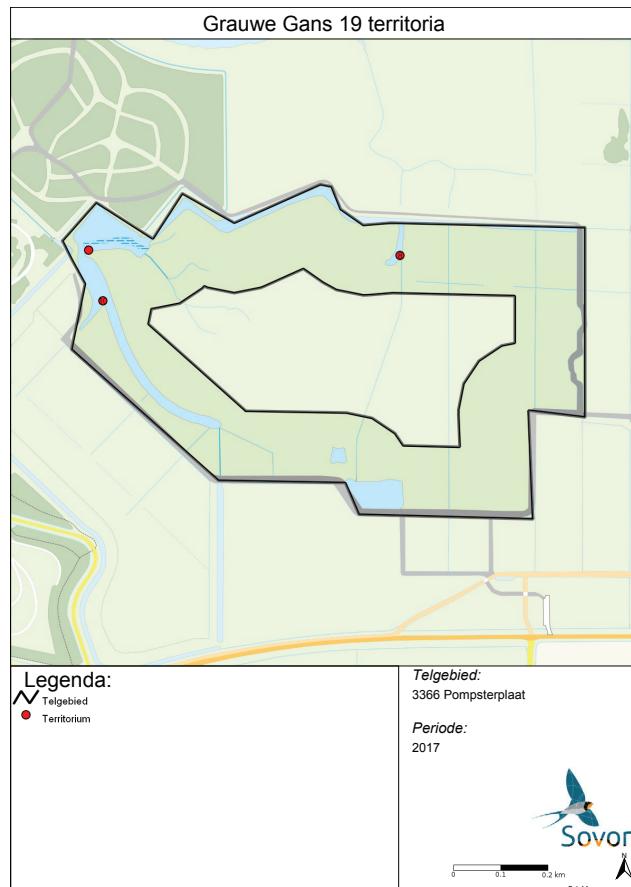
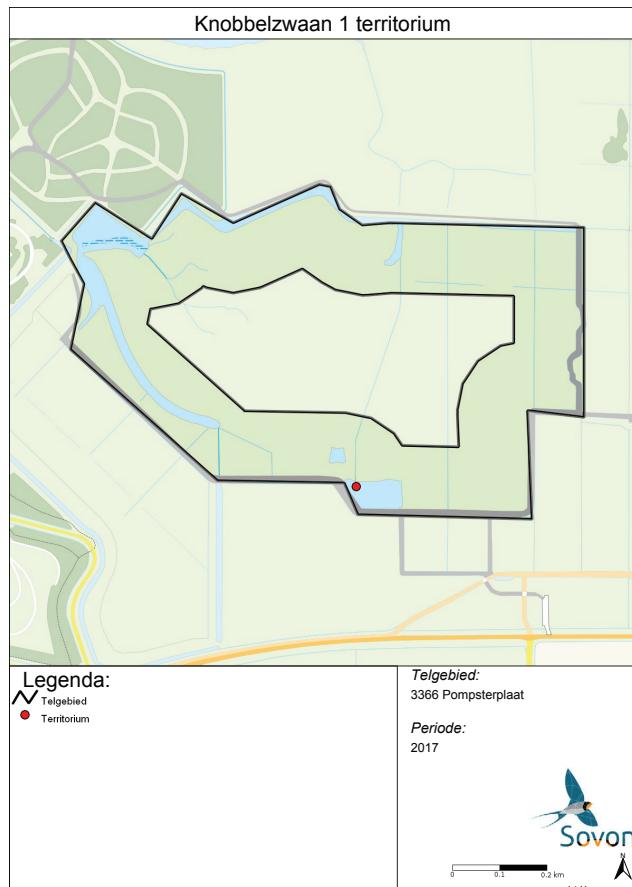


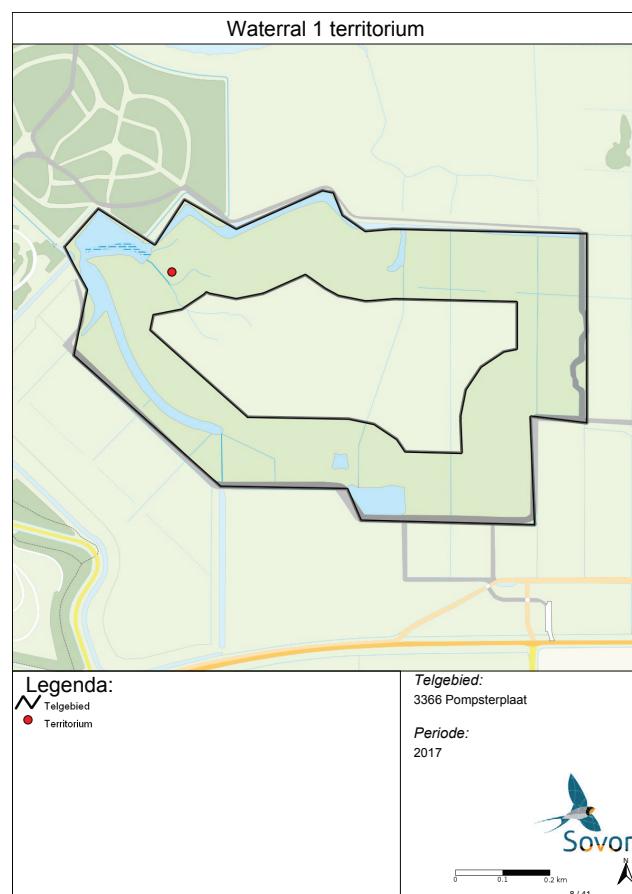
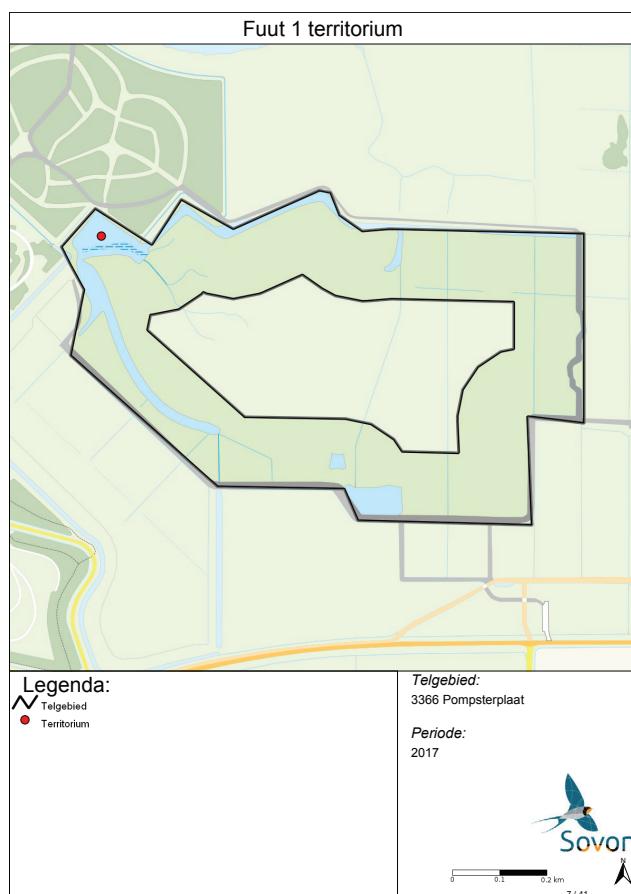
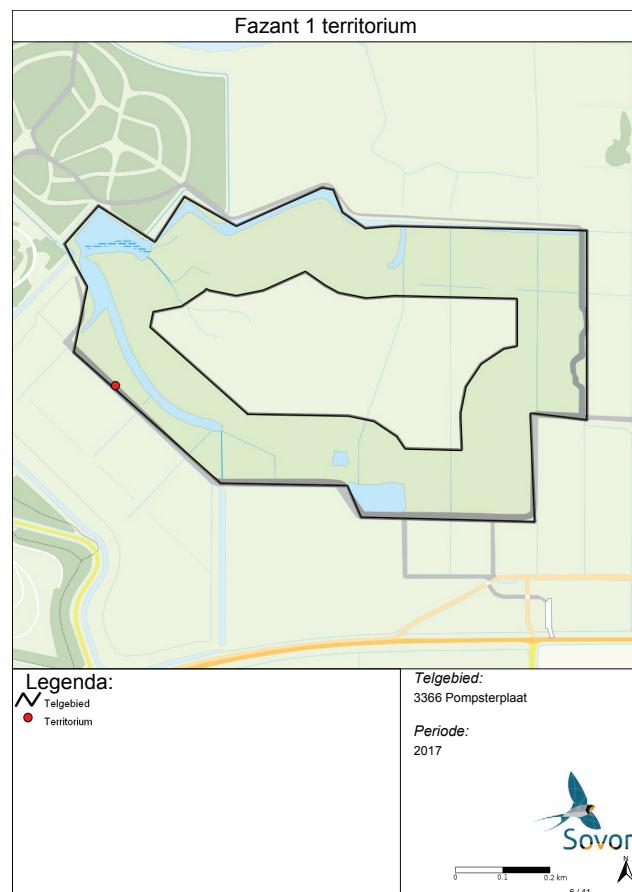
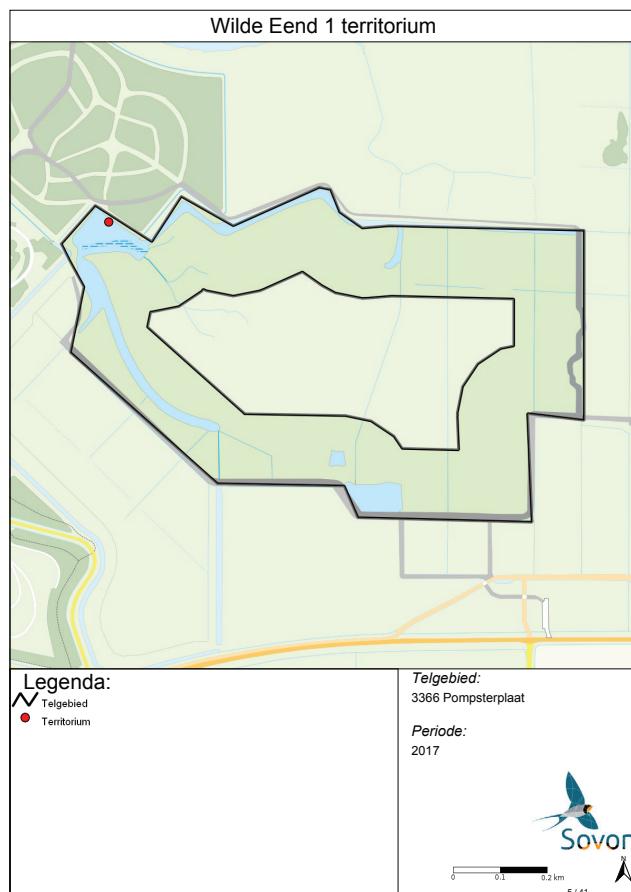


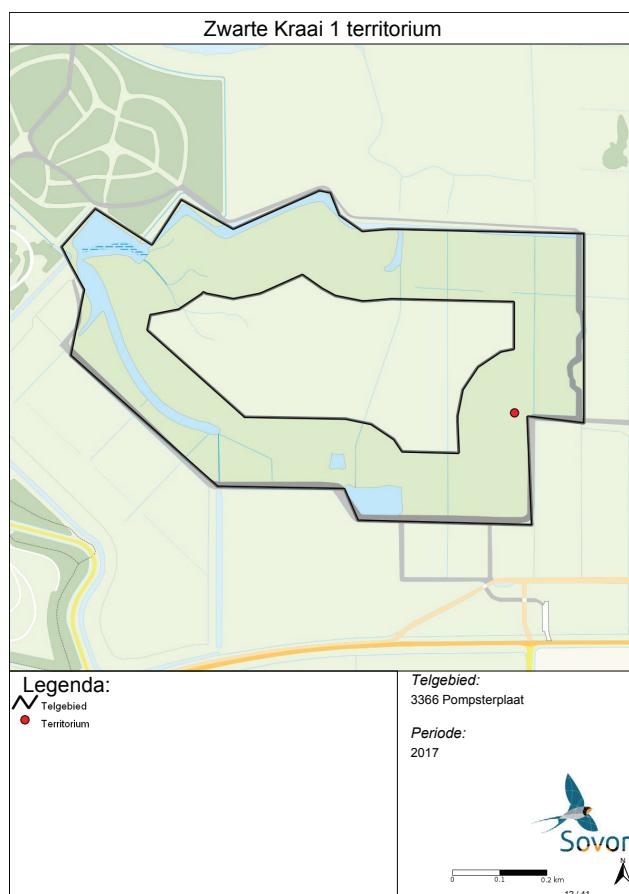
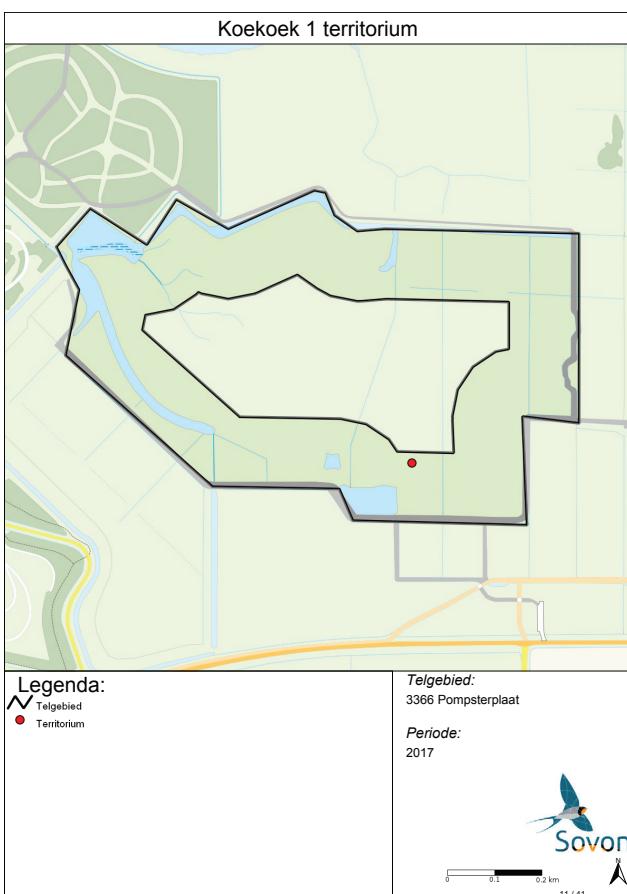
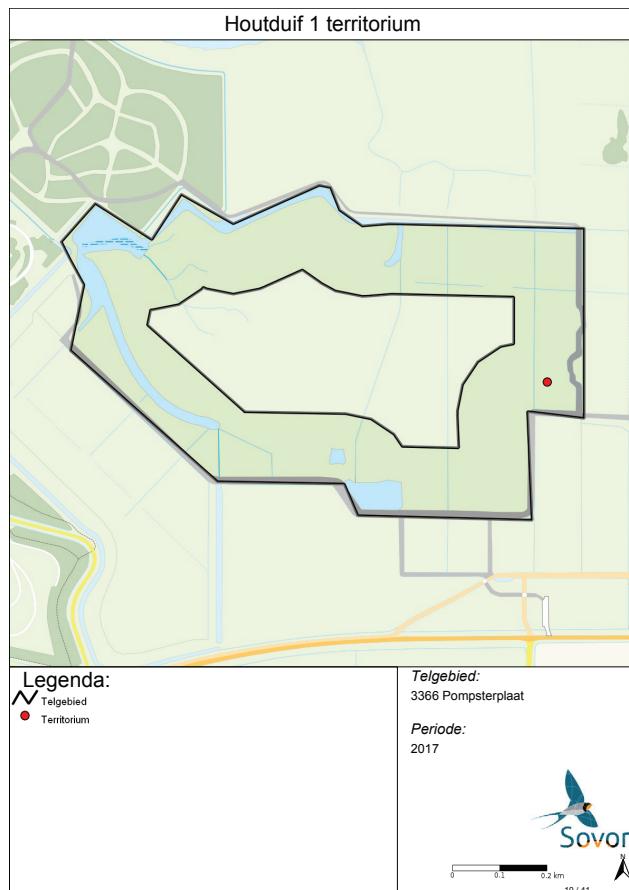
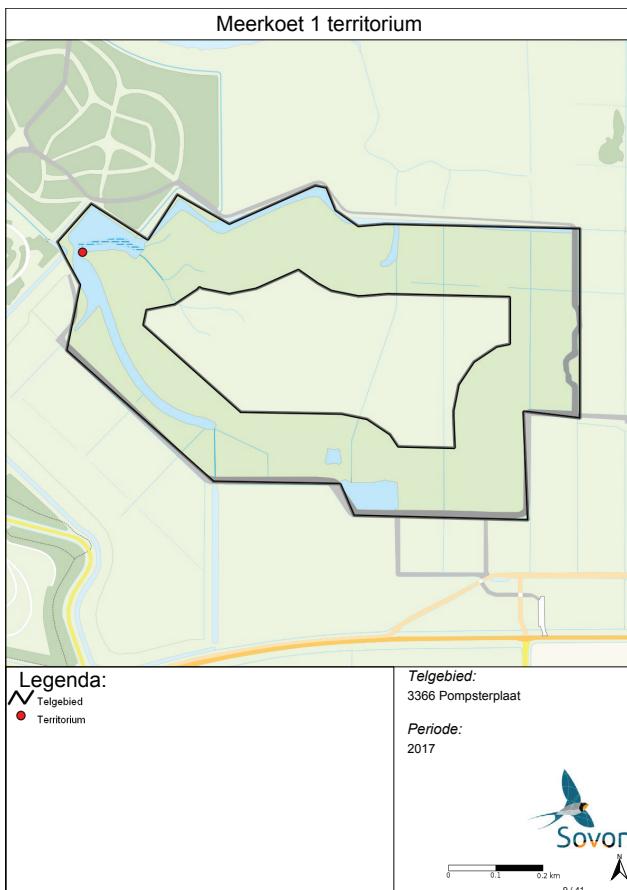


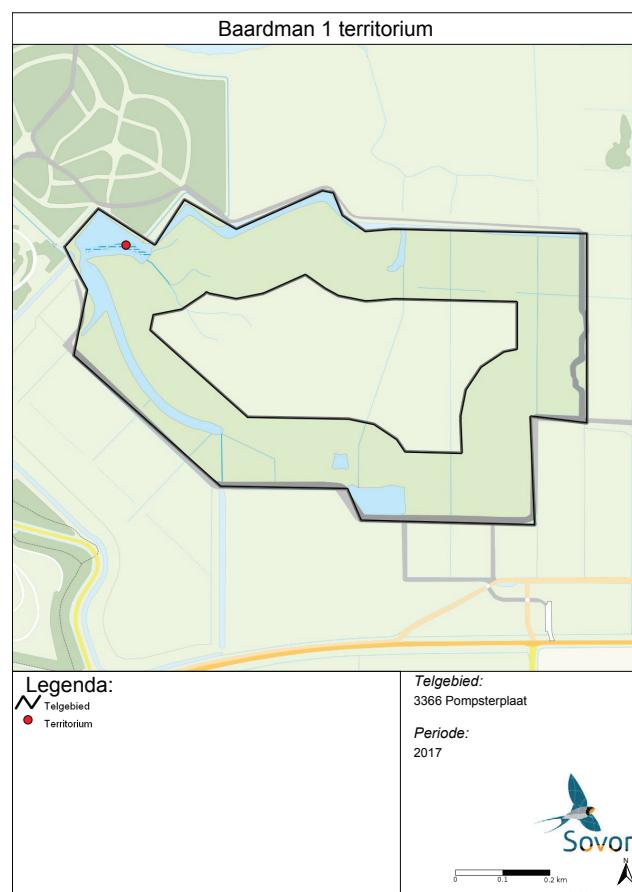
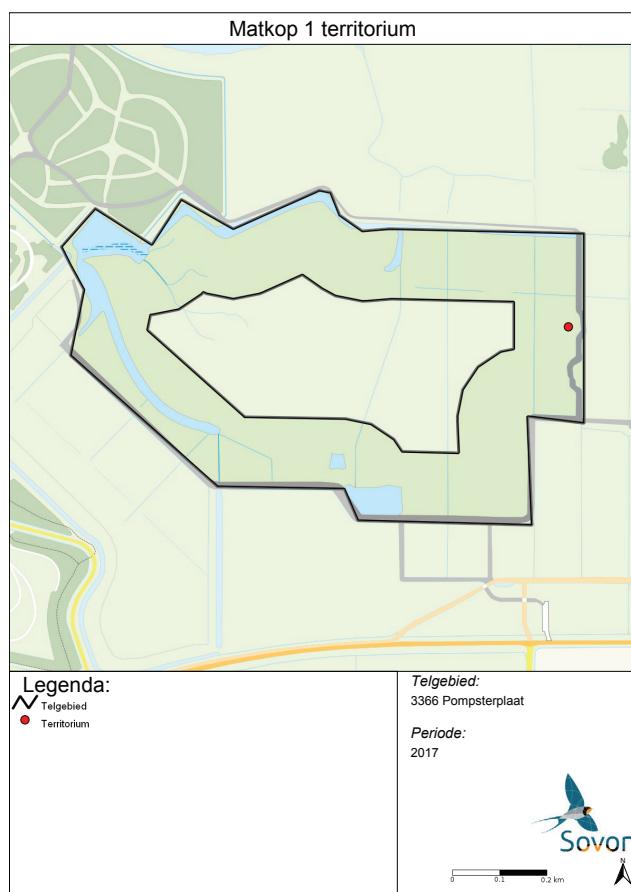
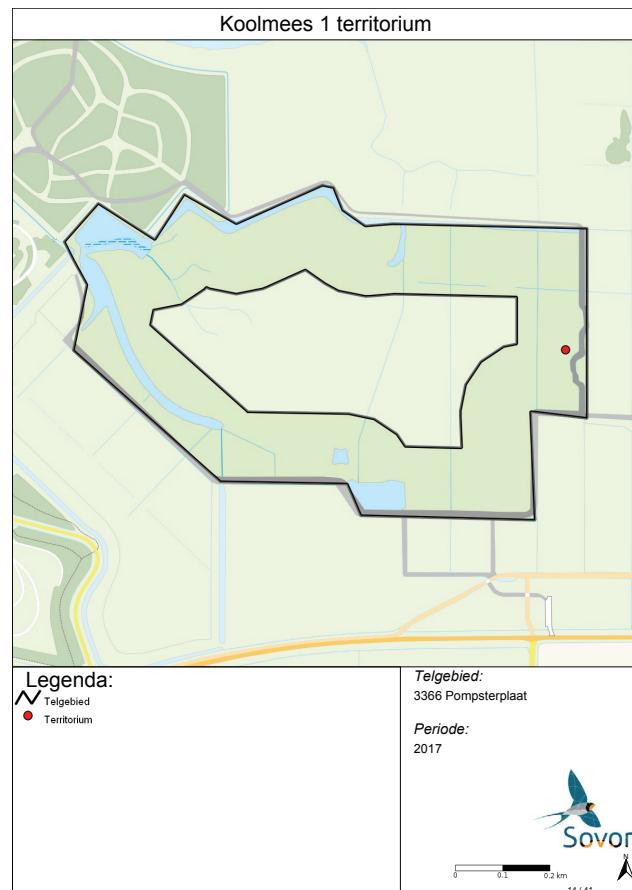
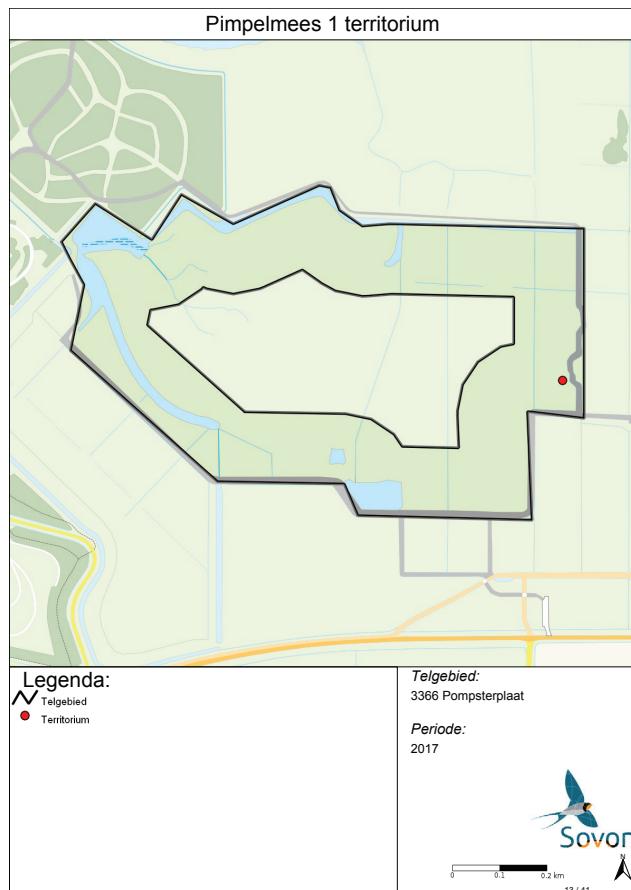
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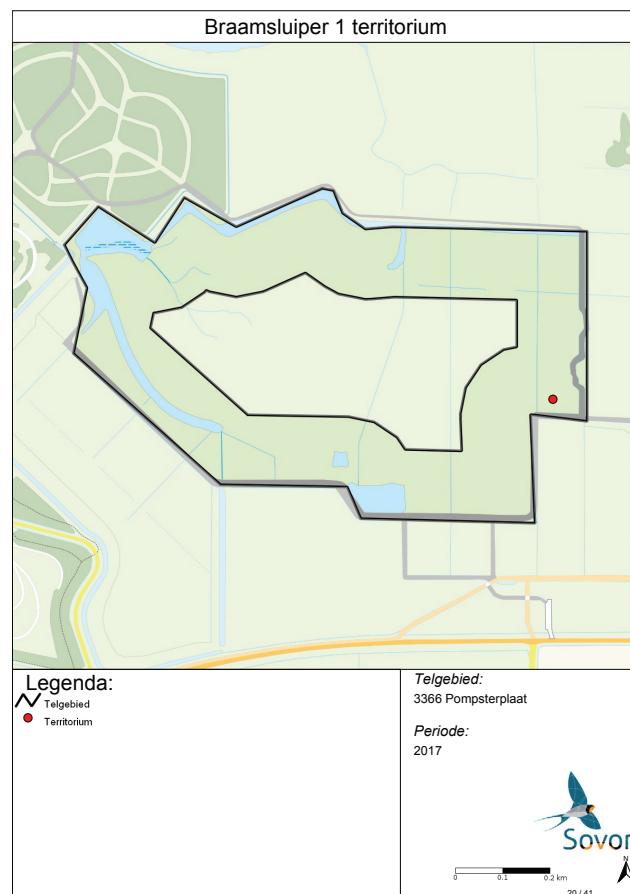
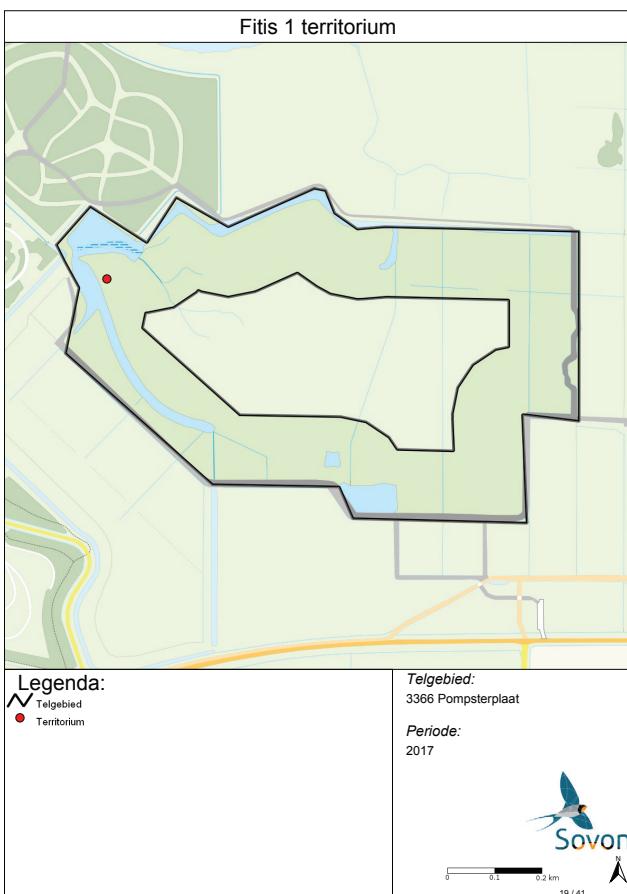
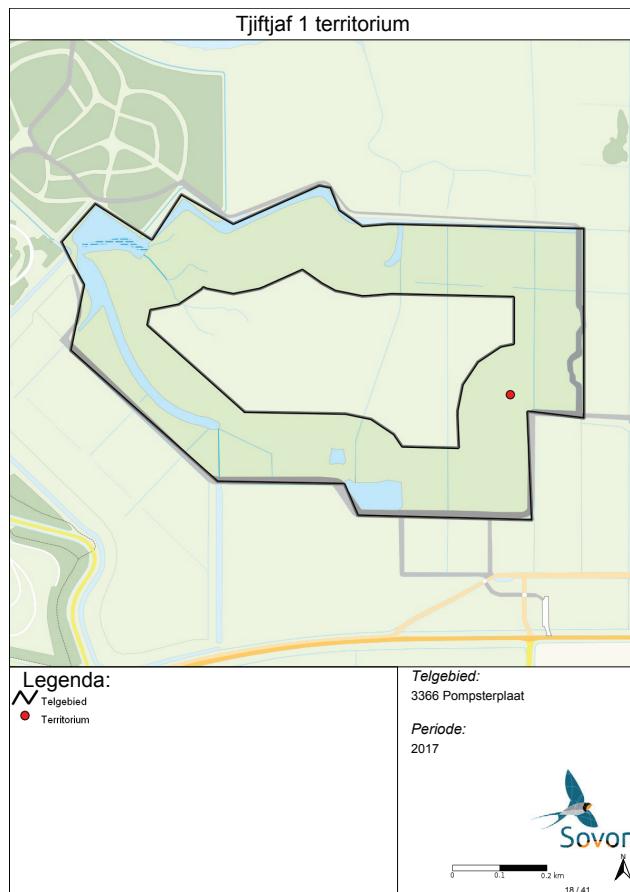
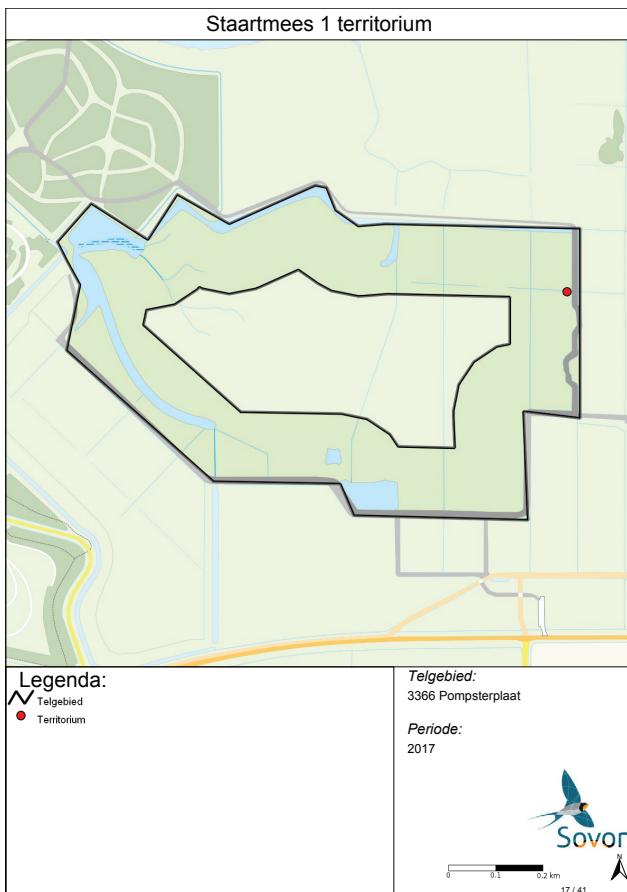
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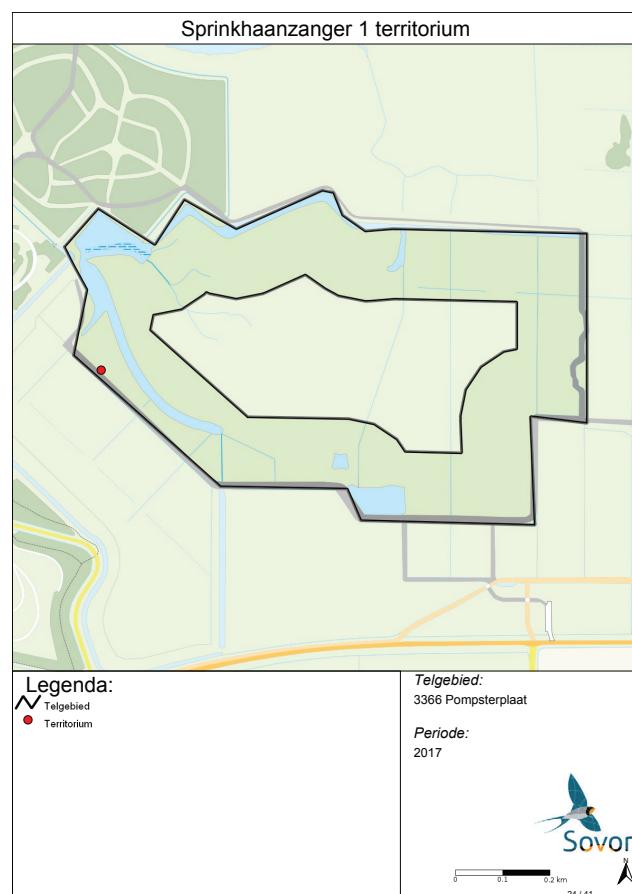
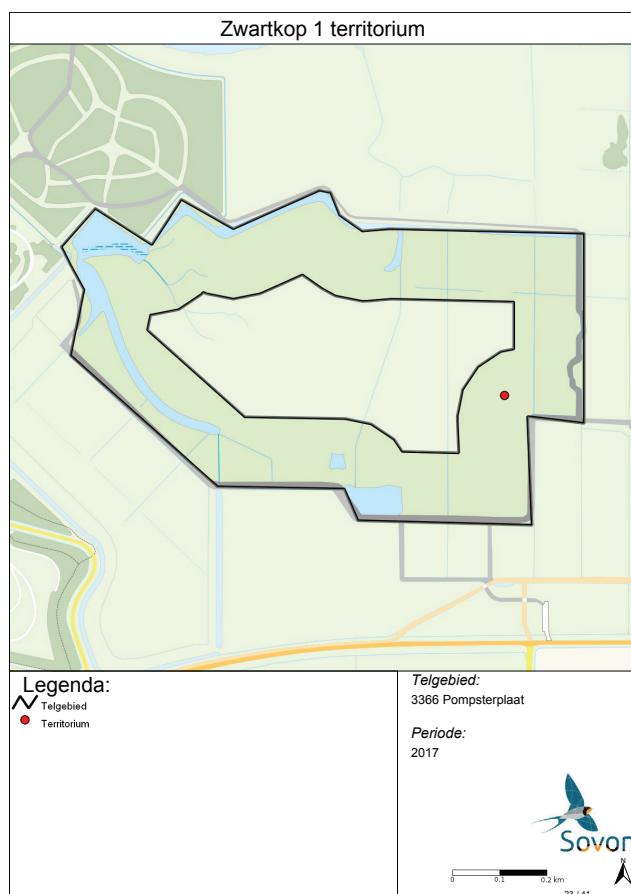
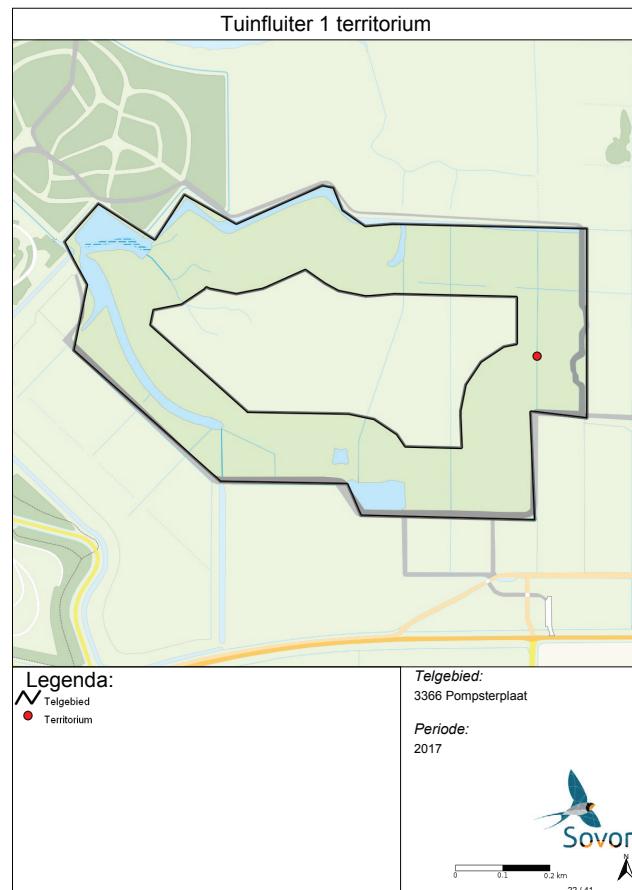
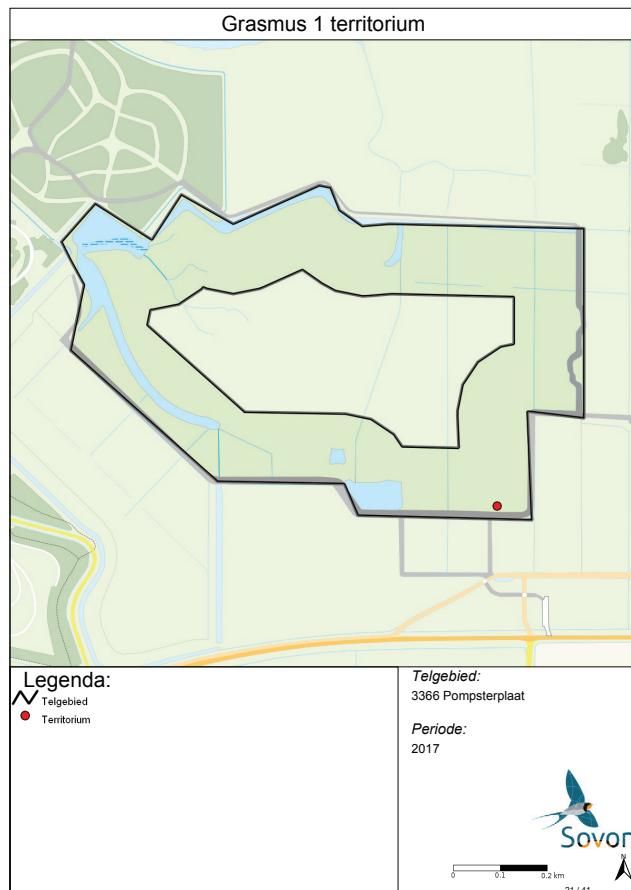


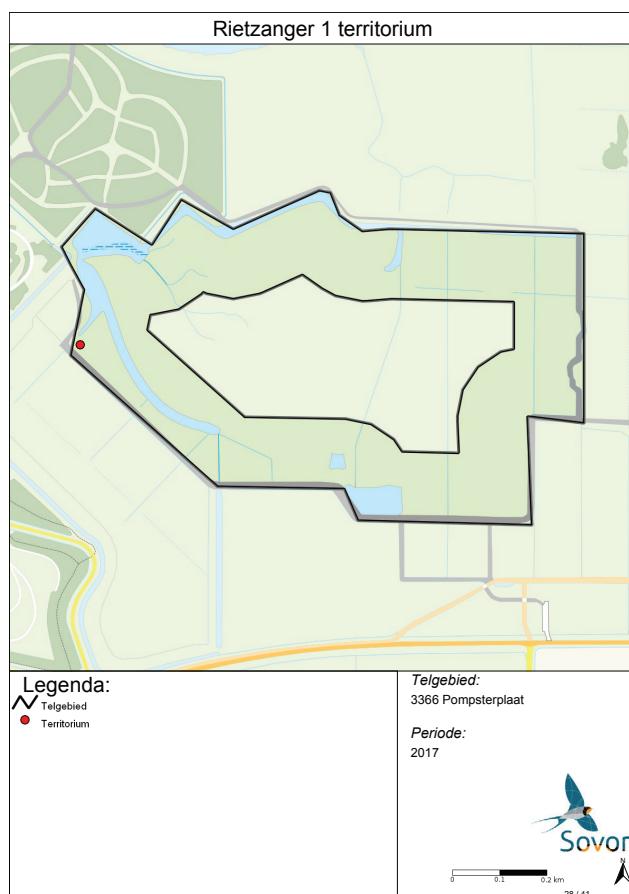
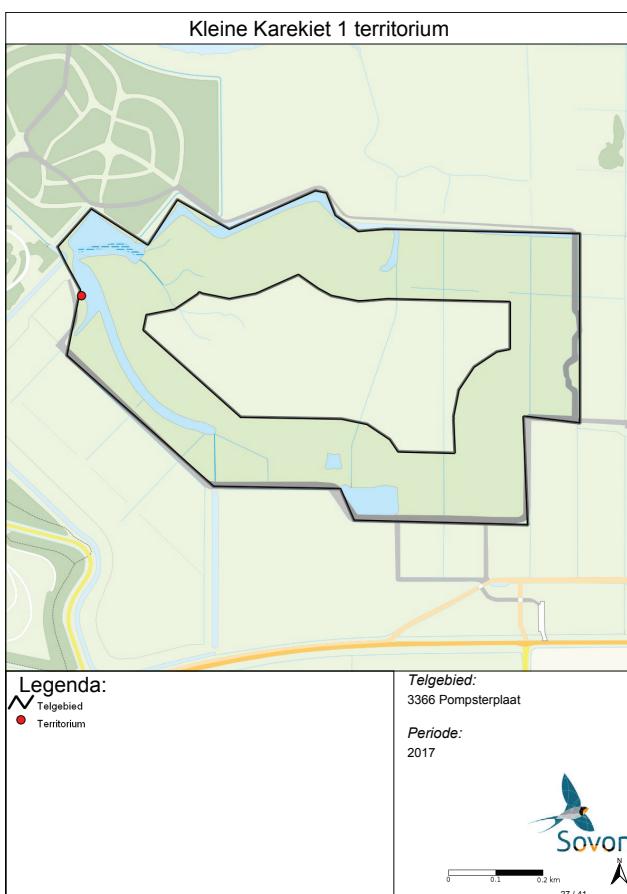
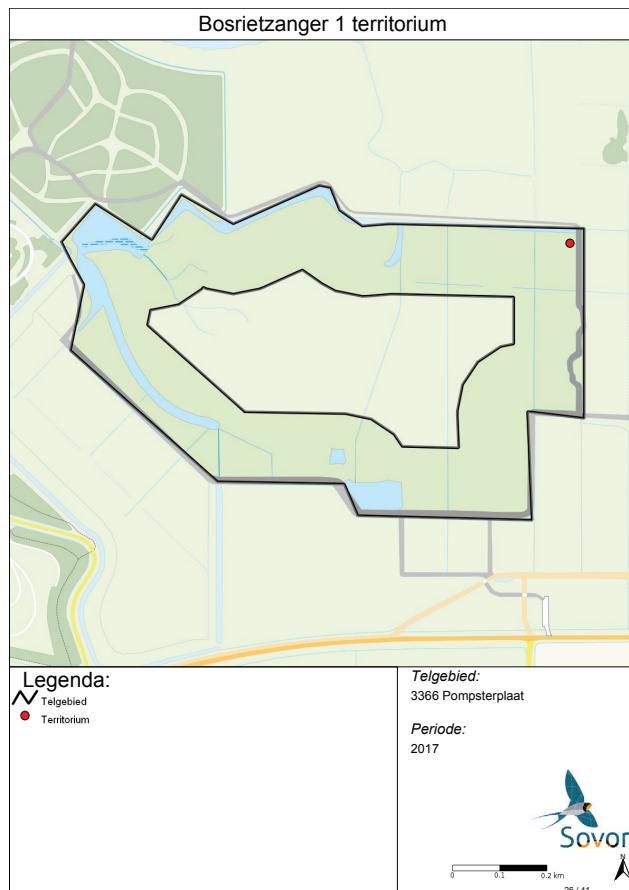
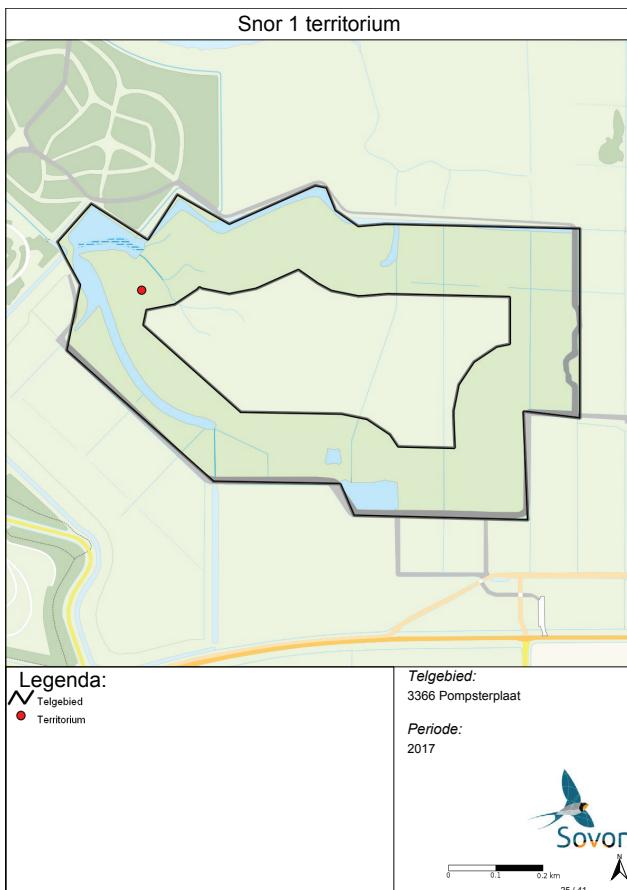


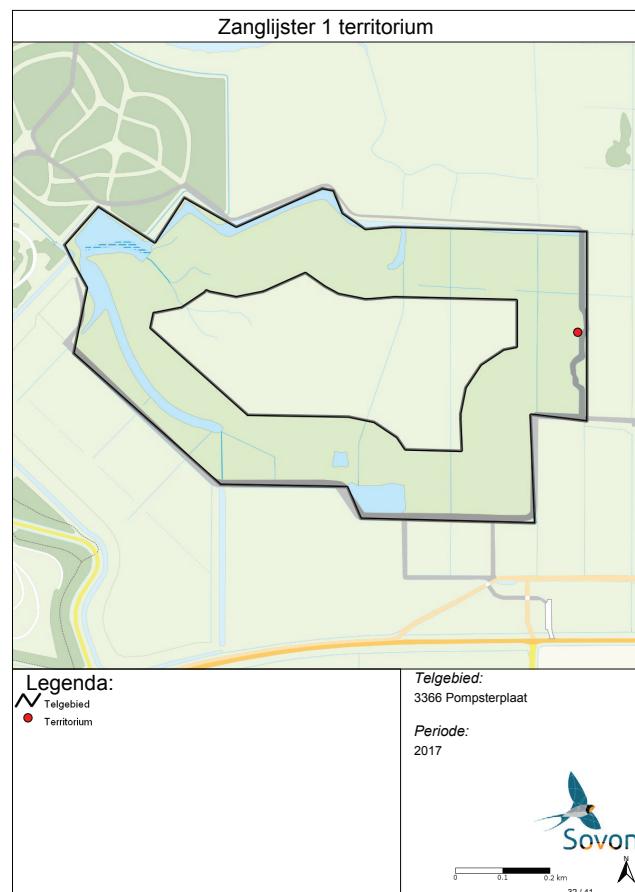
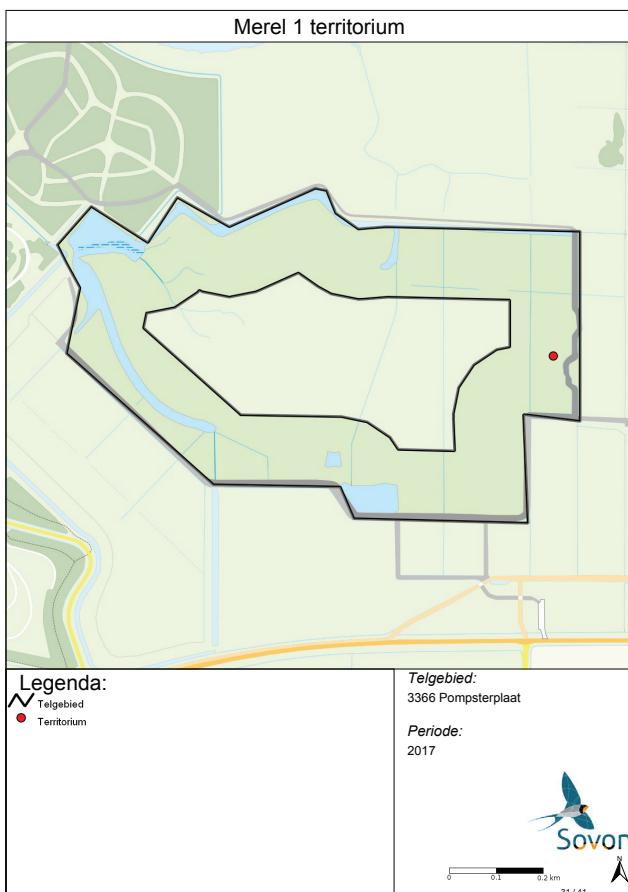
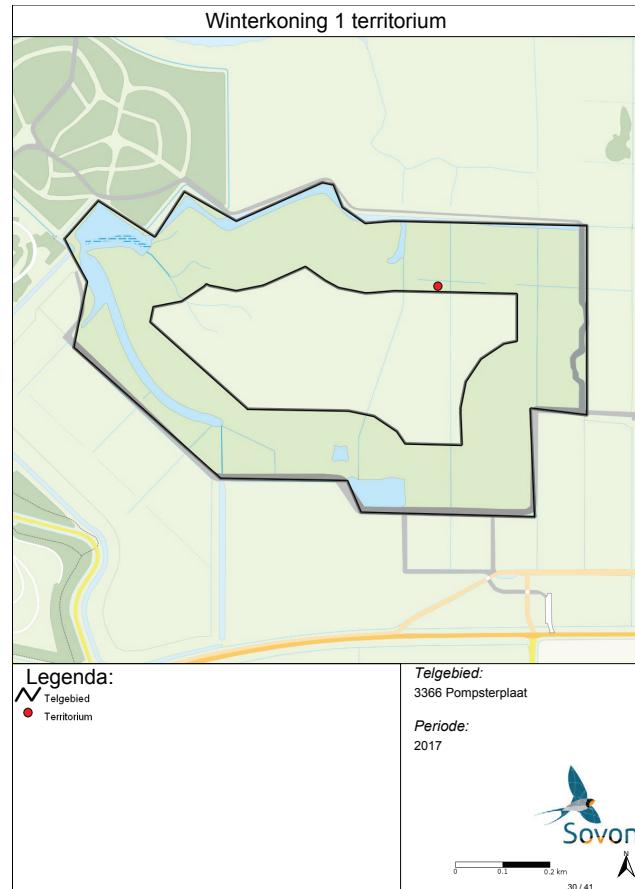
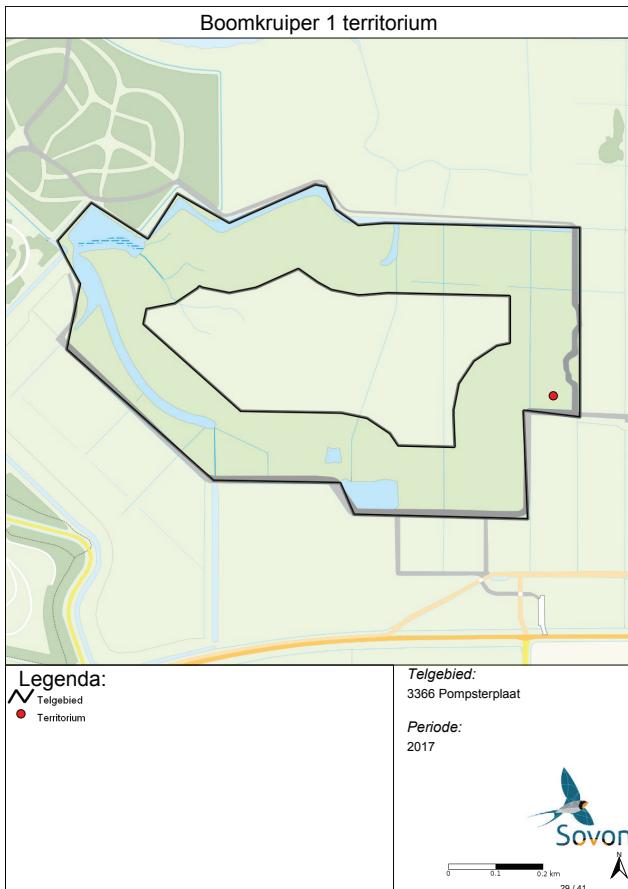


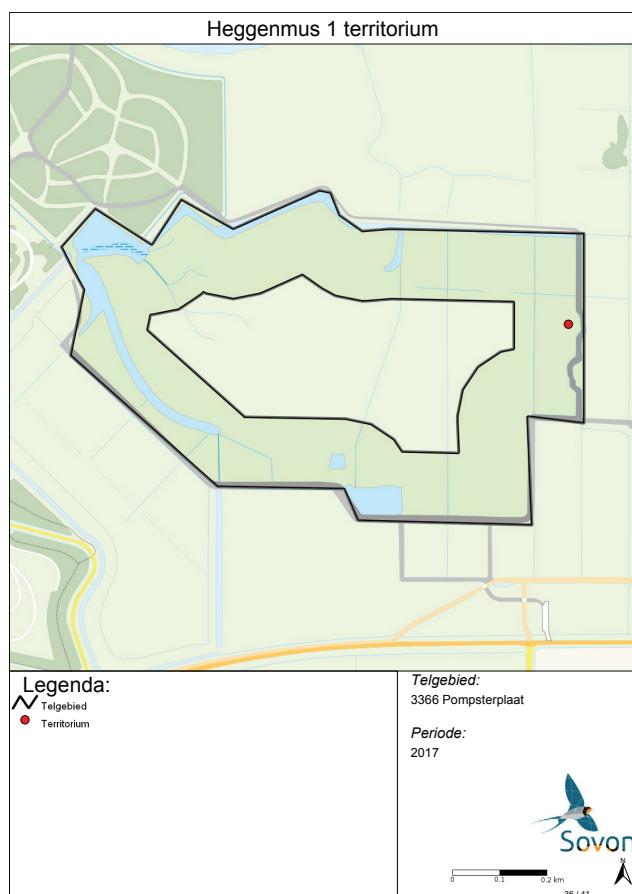
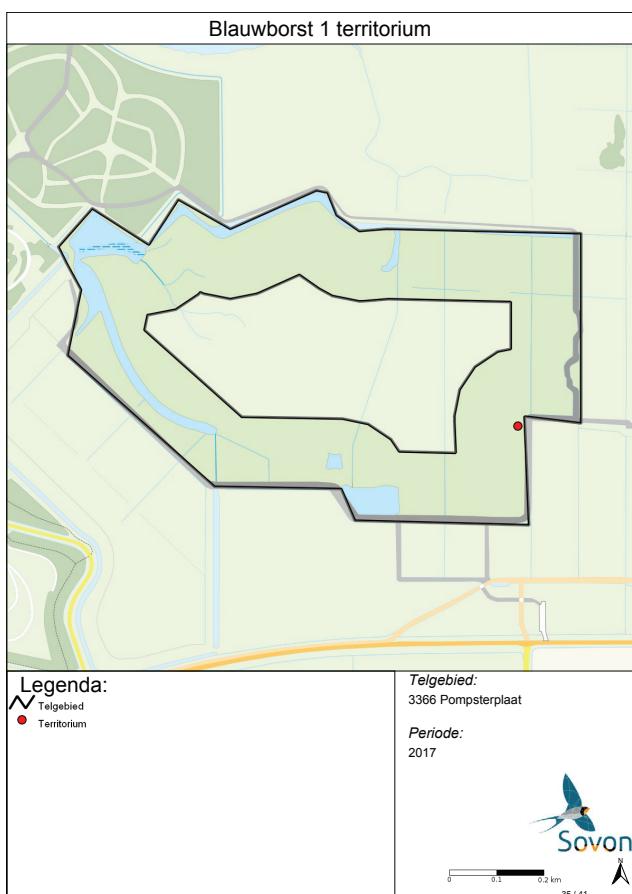
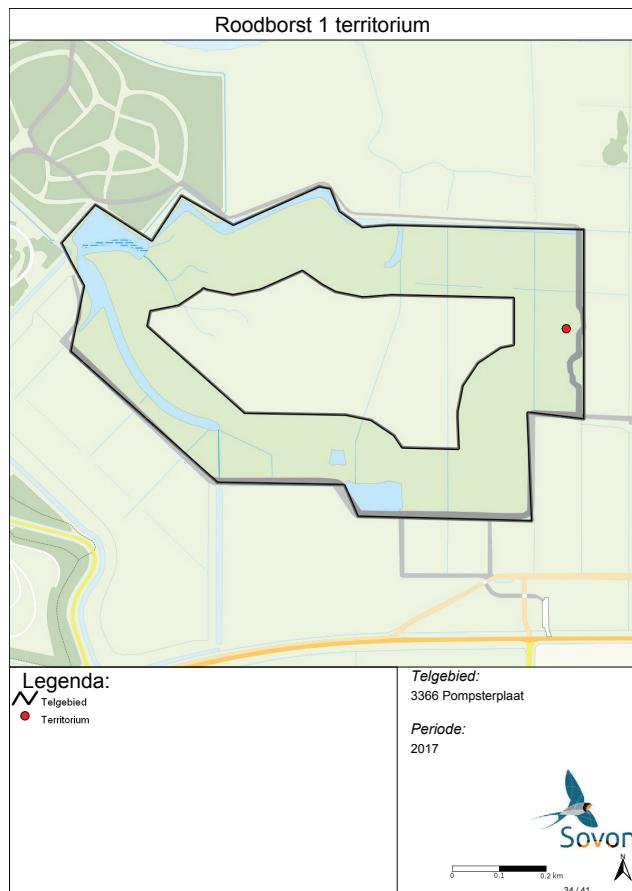
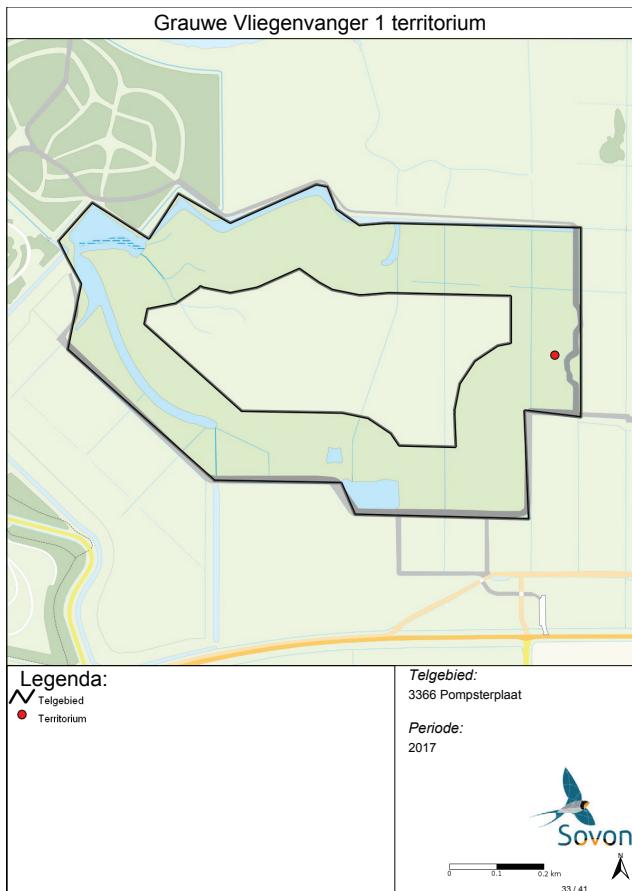


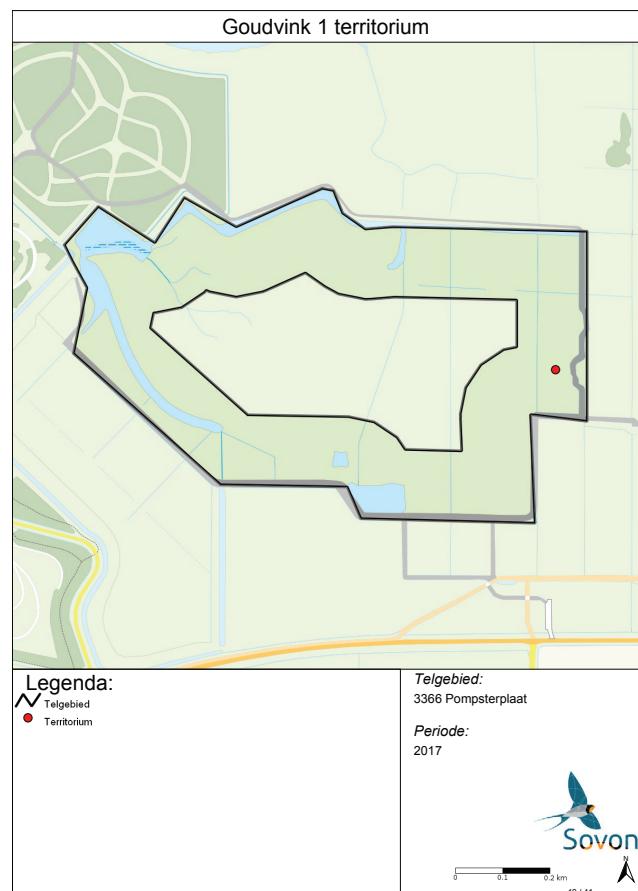
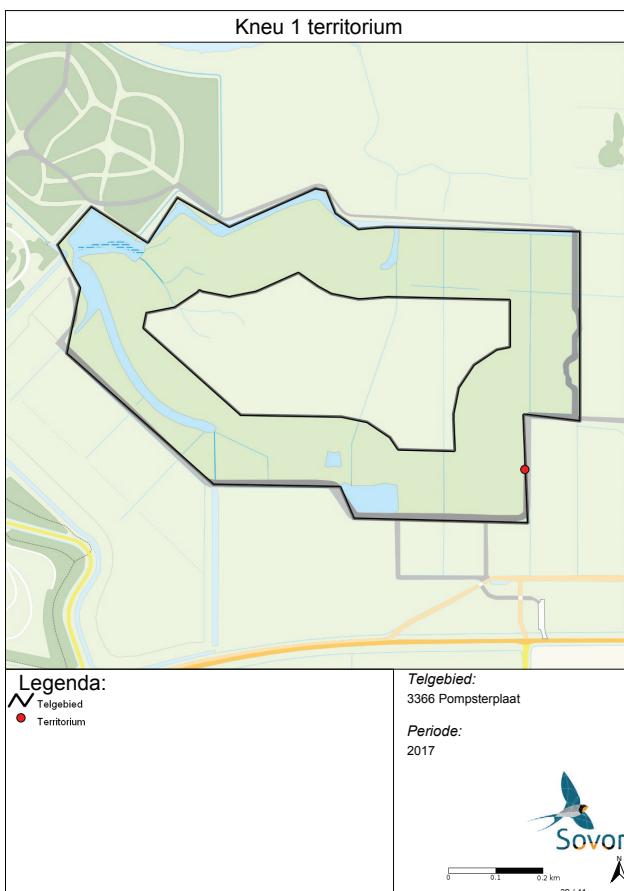
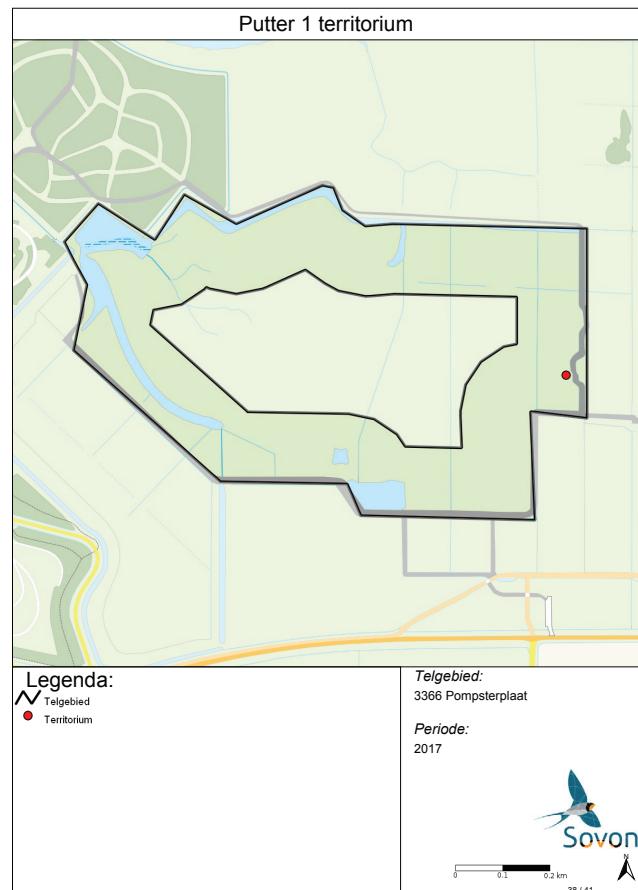
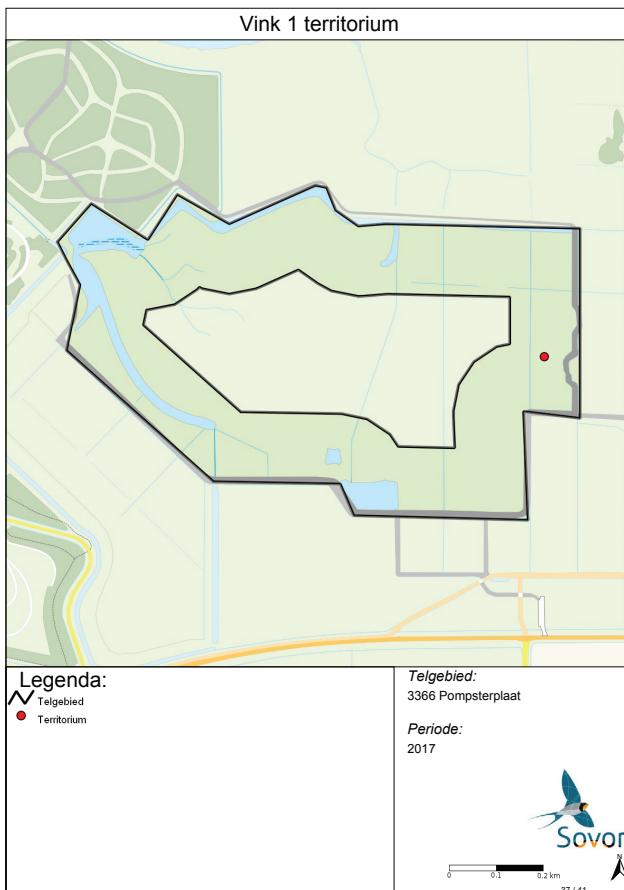


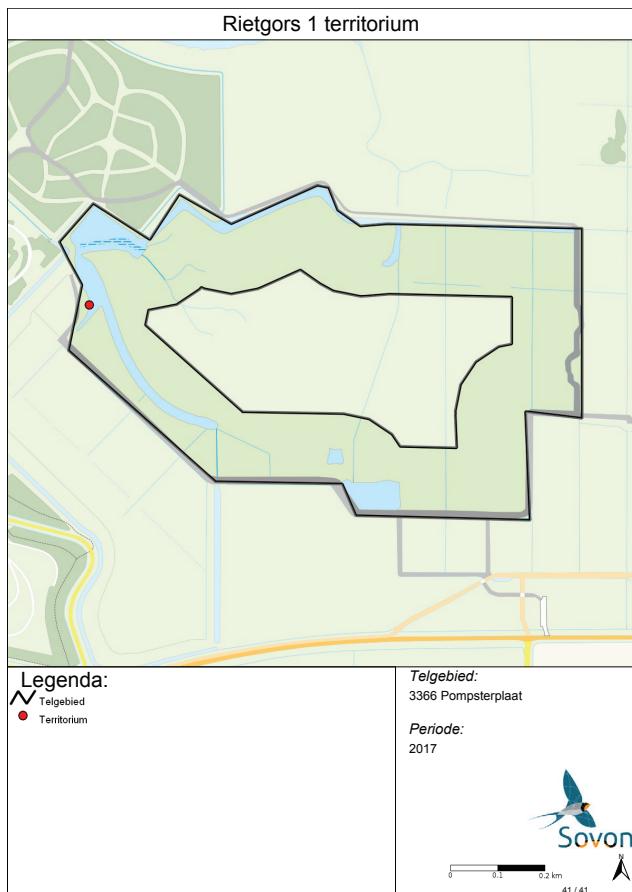




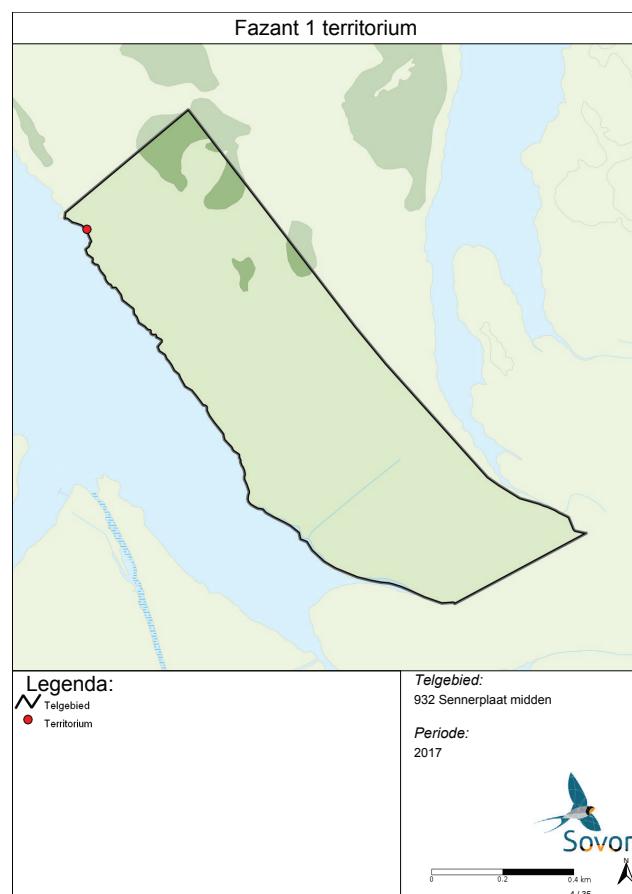
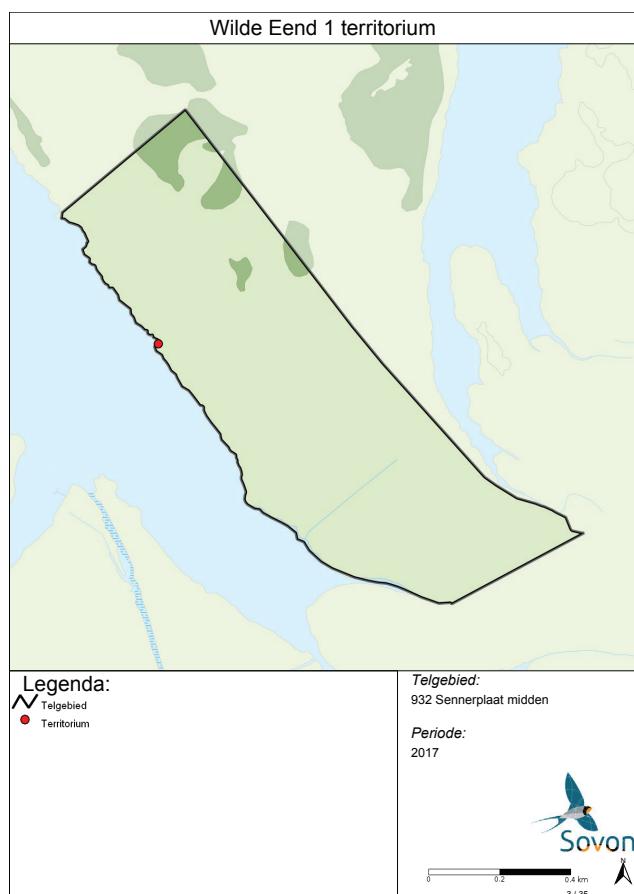
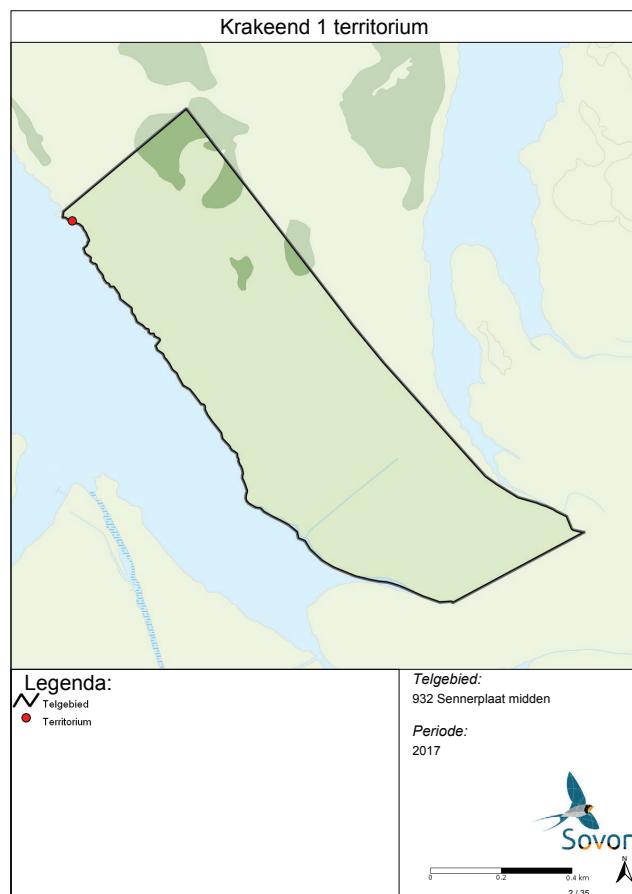
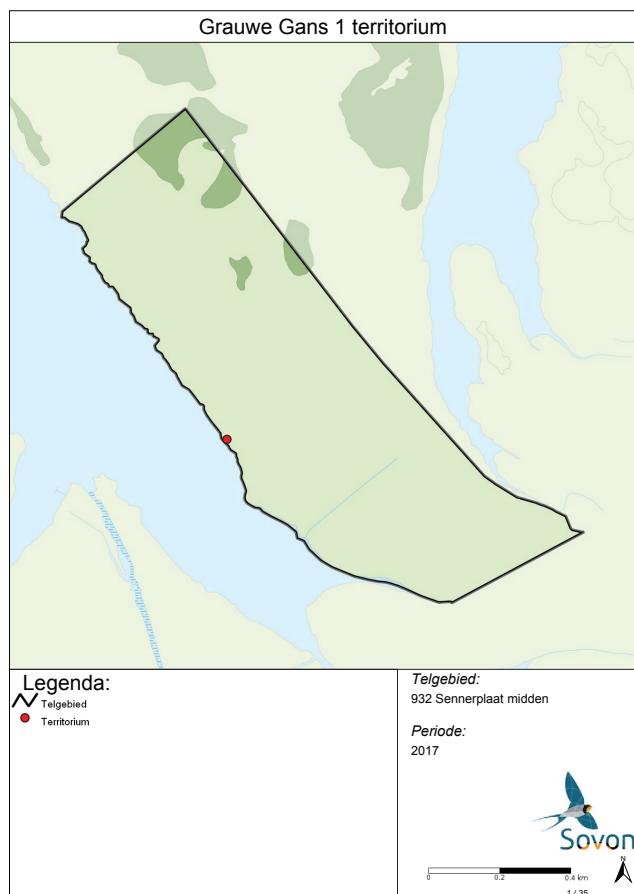


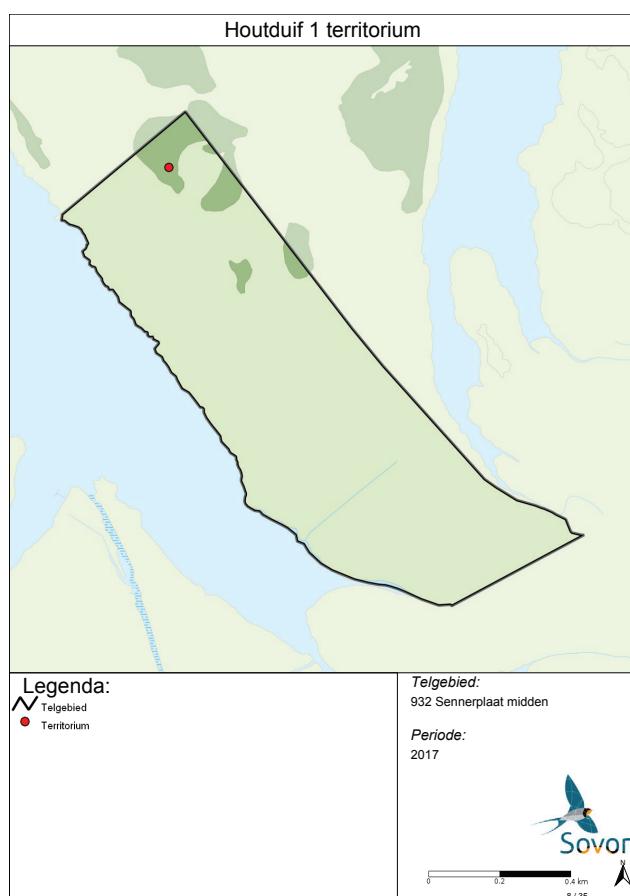
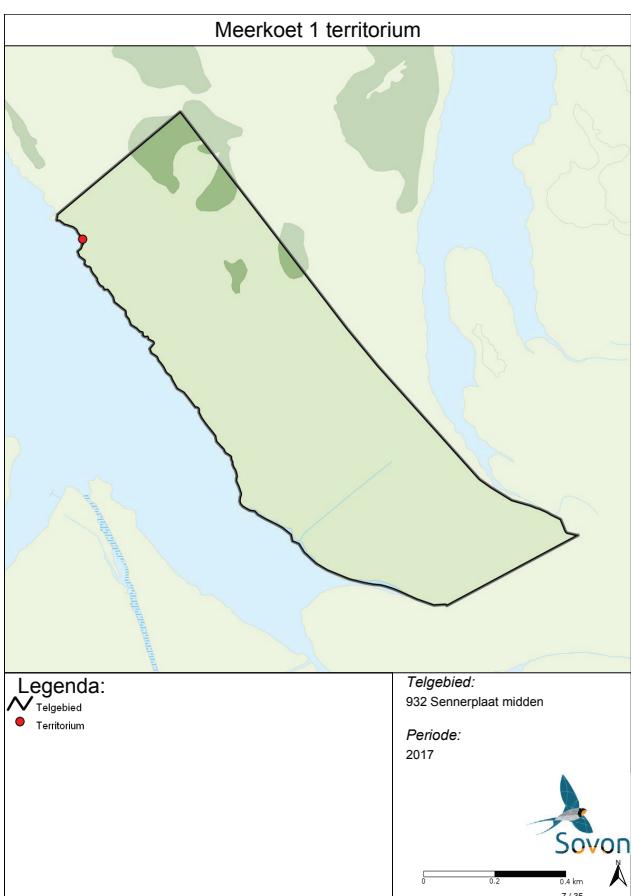
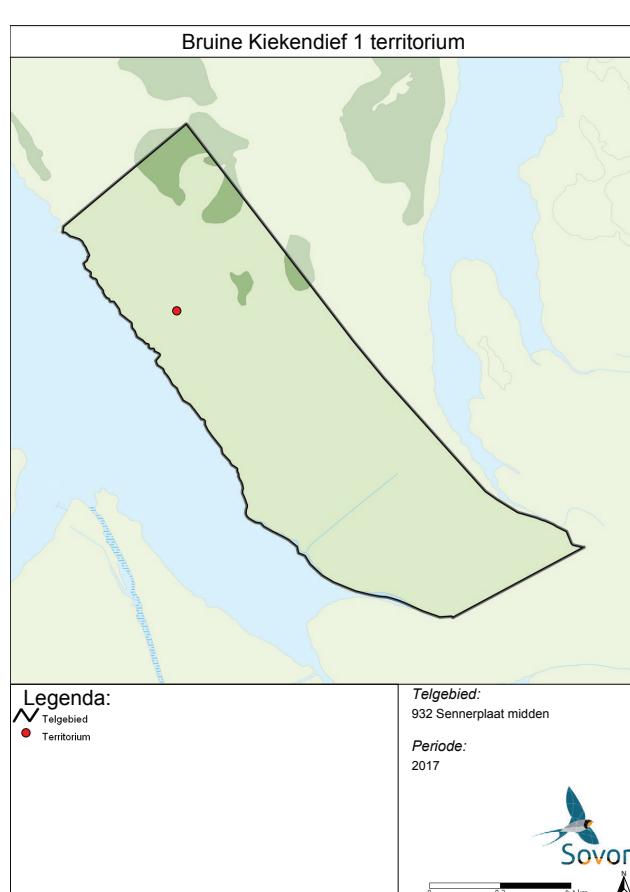
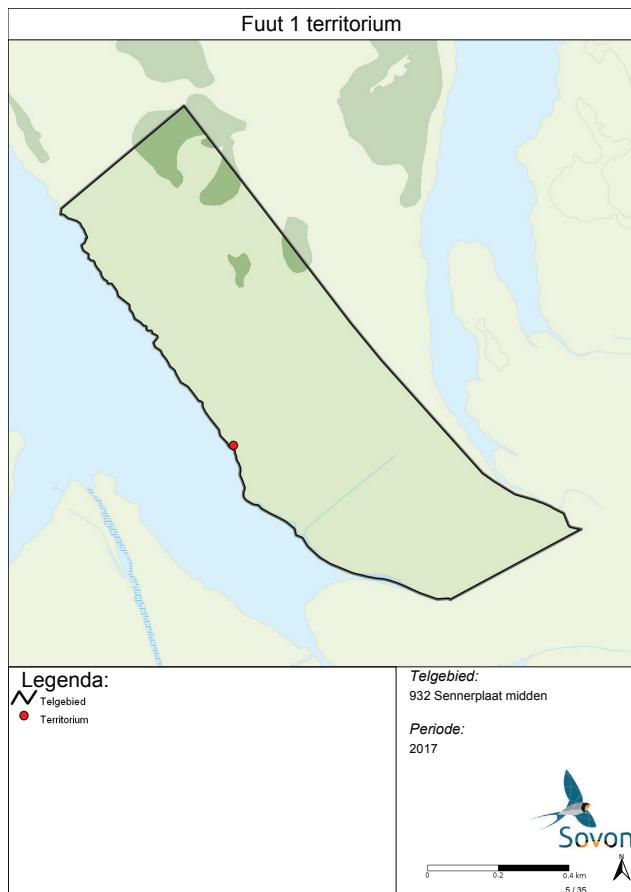


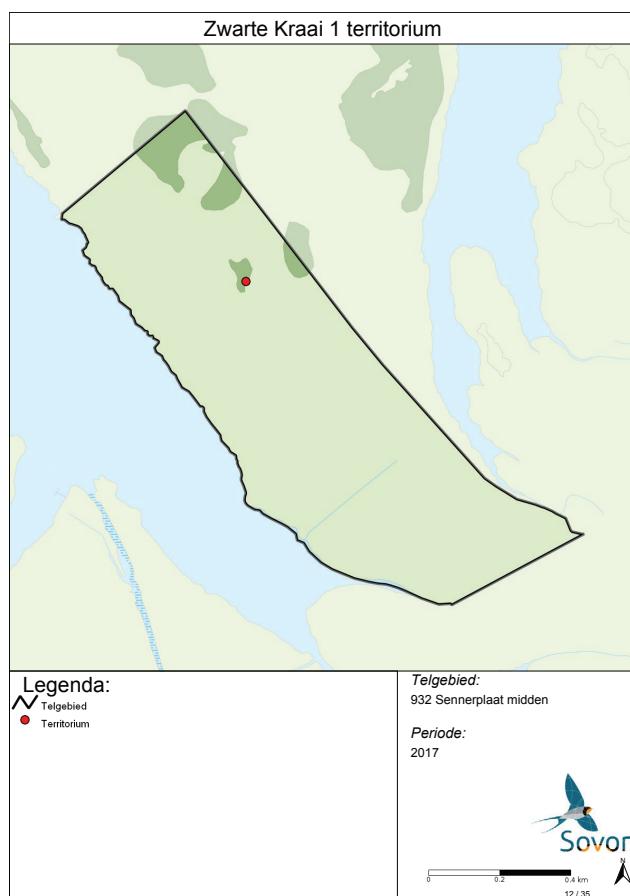
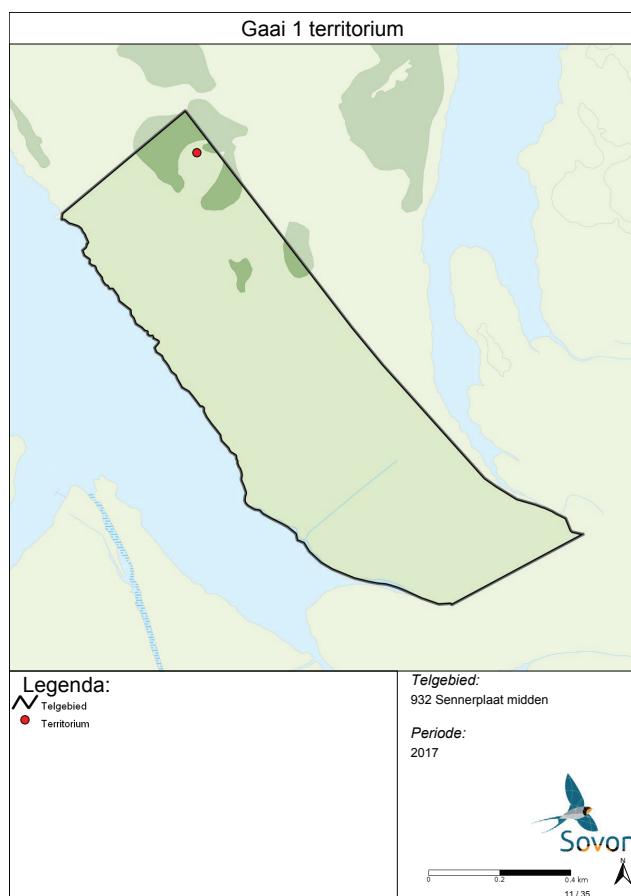
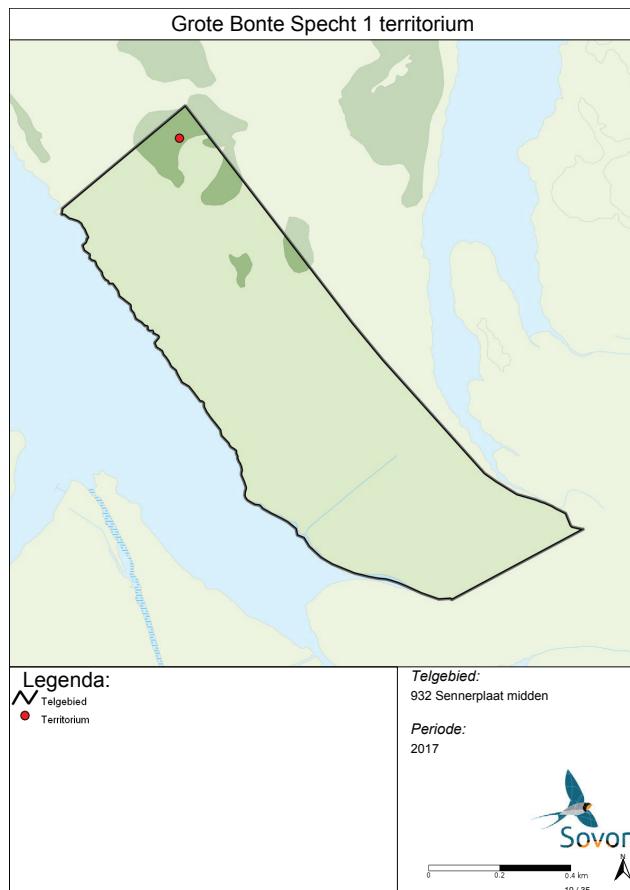
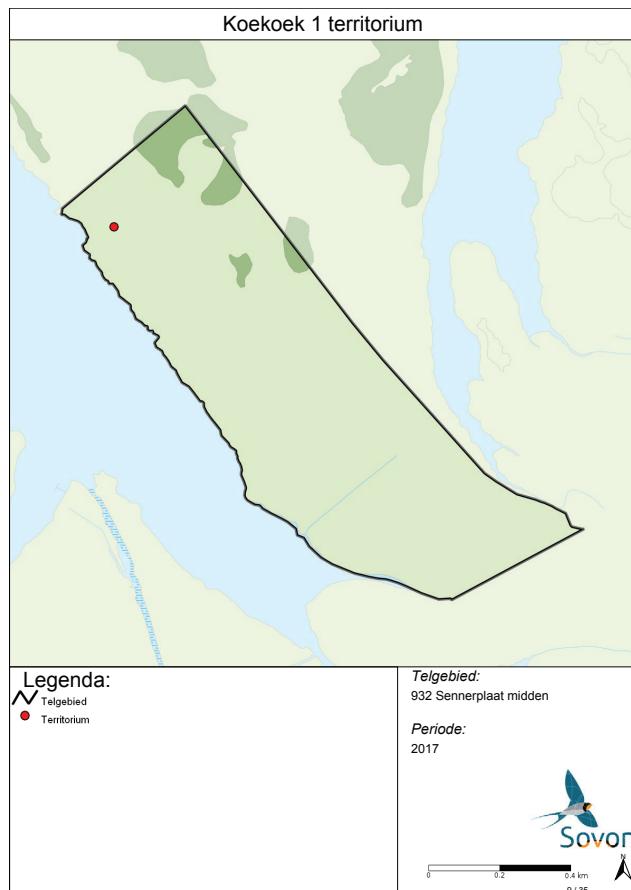


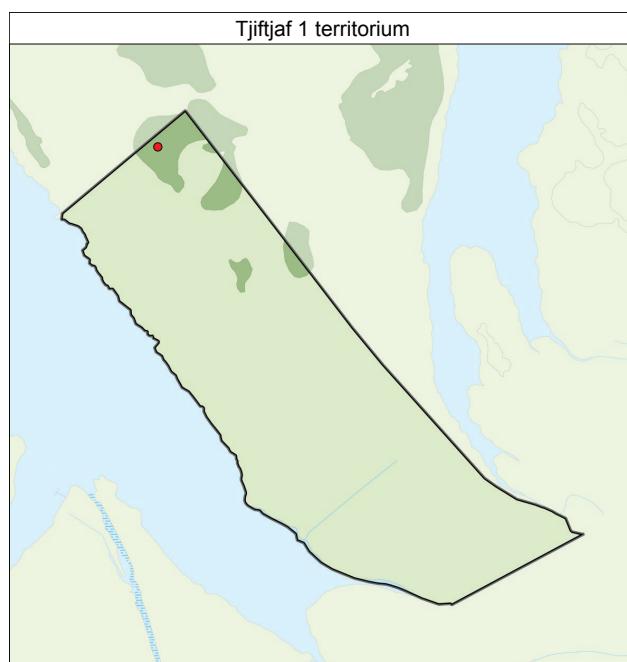
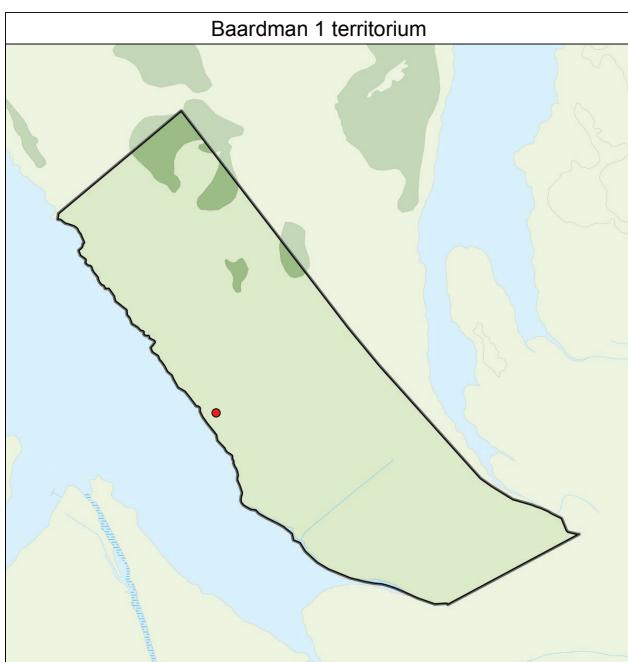
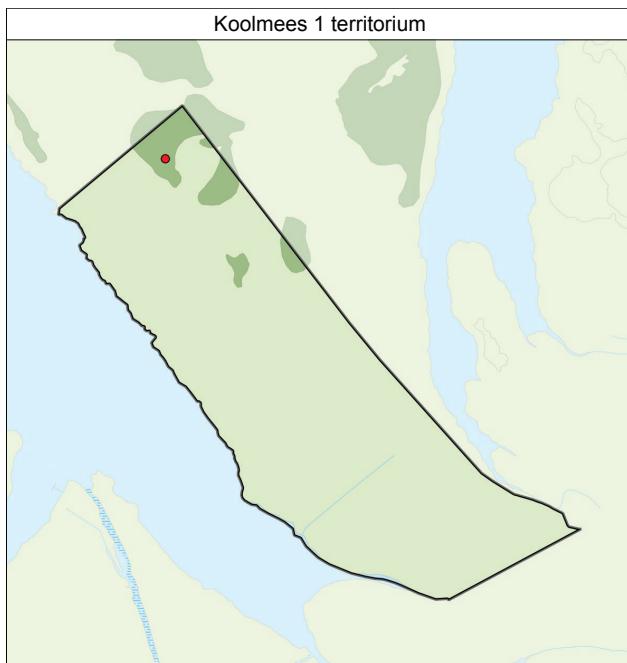
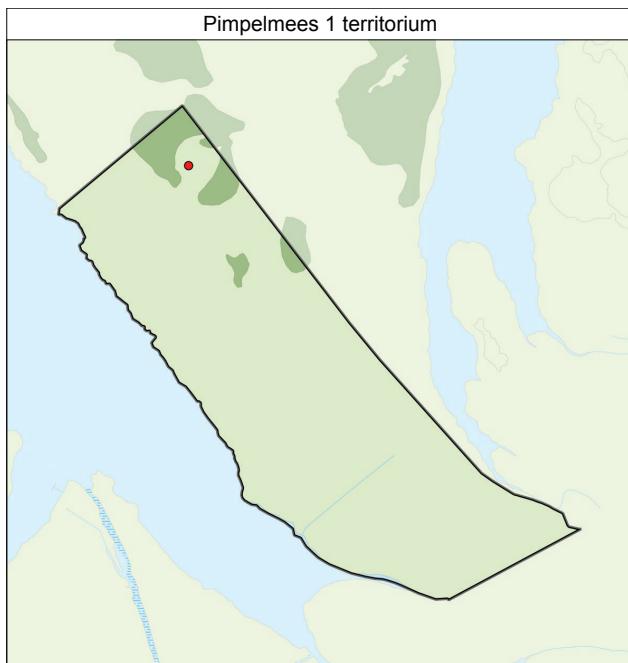


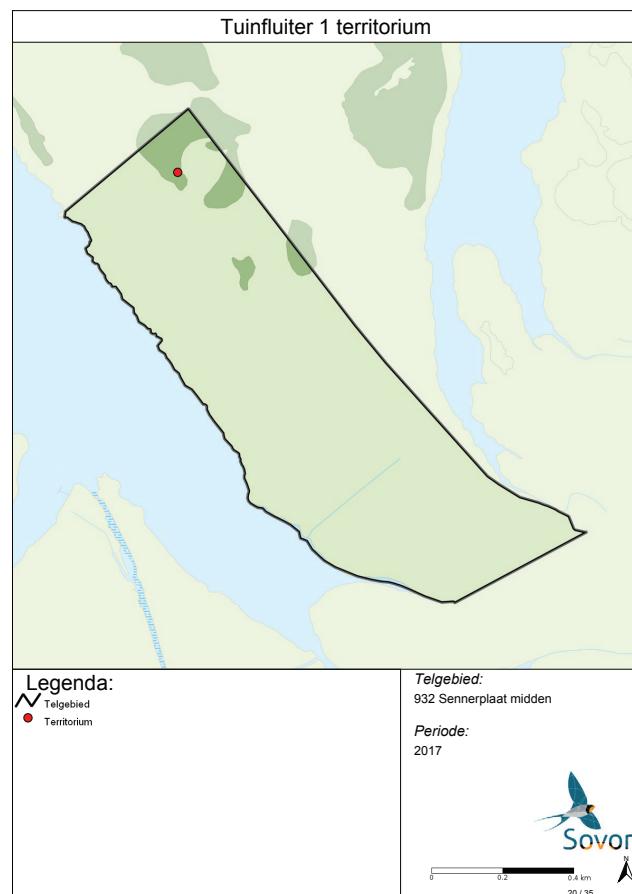
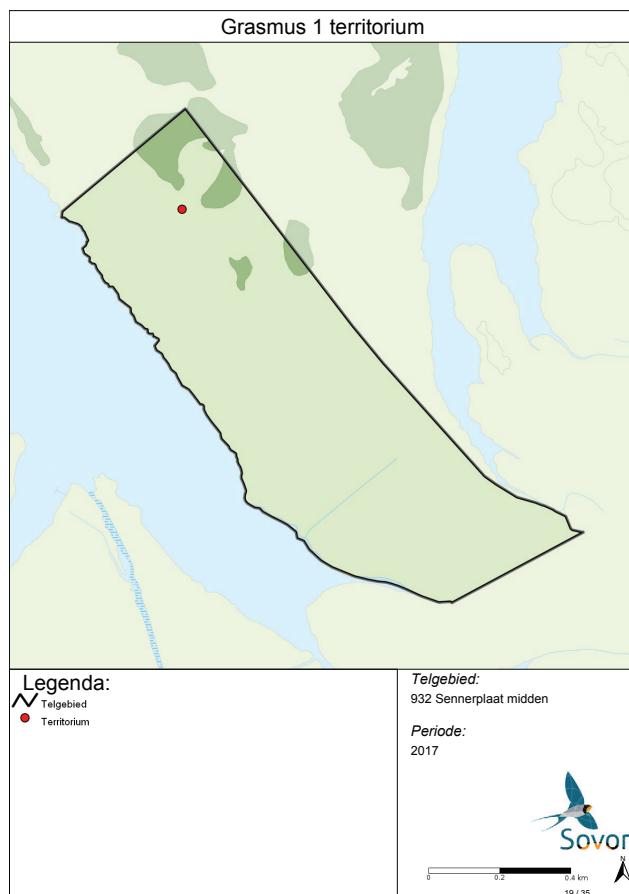
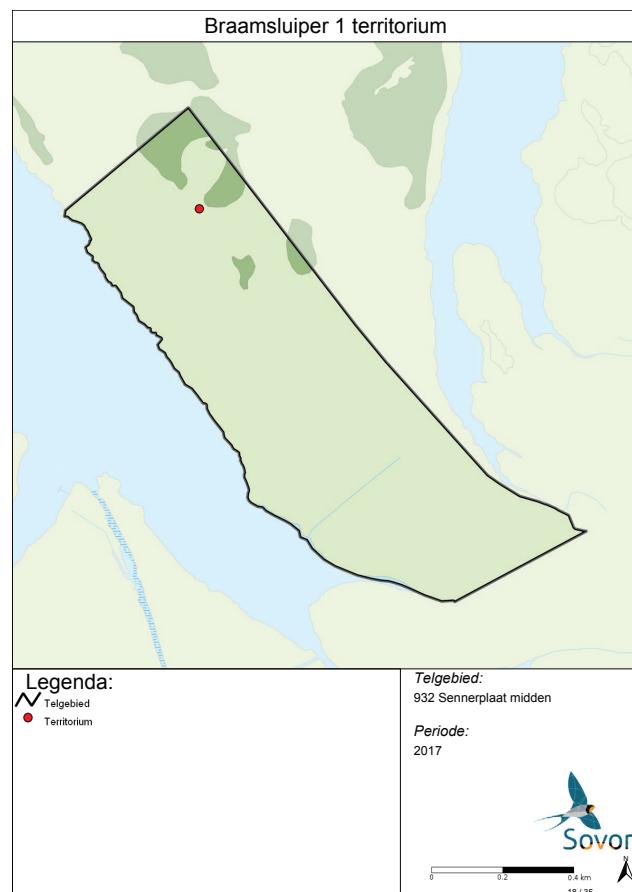
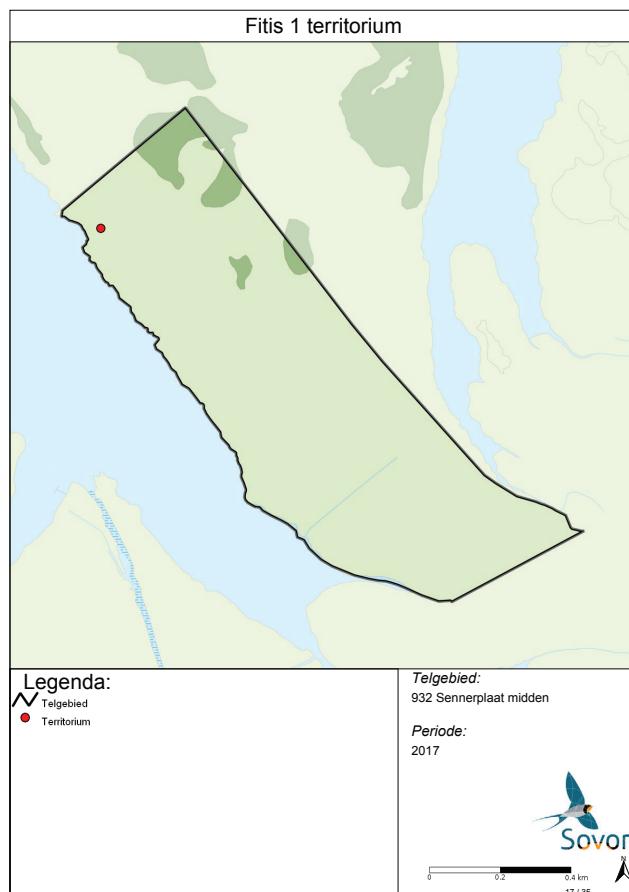
## Bijlage 19b. Sennerplaat midden 2017

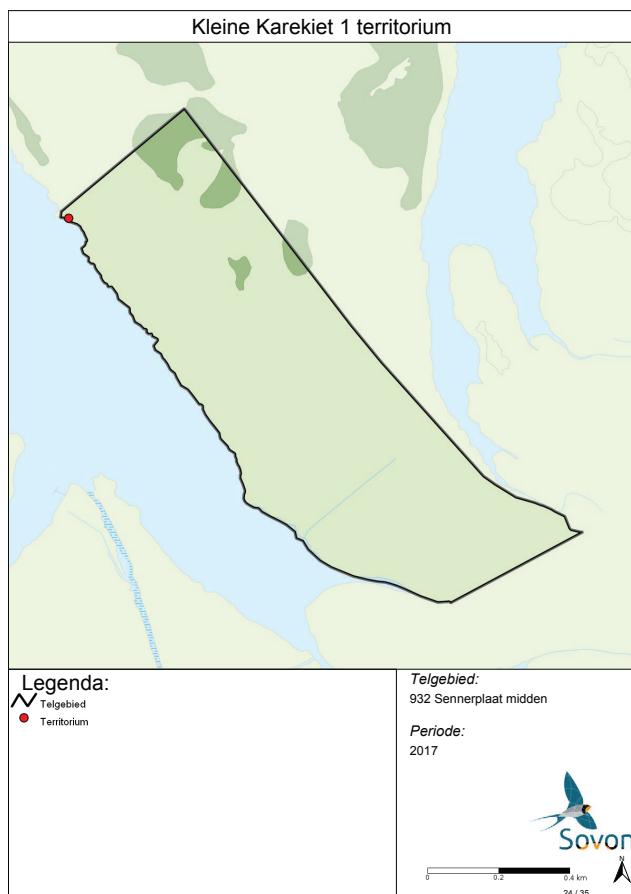
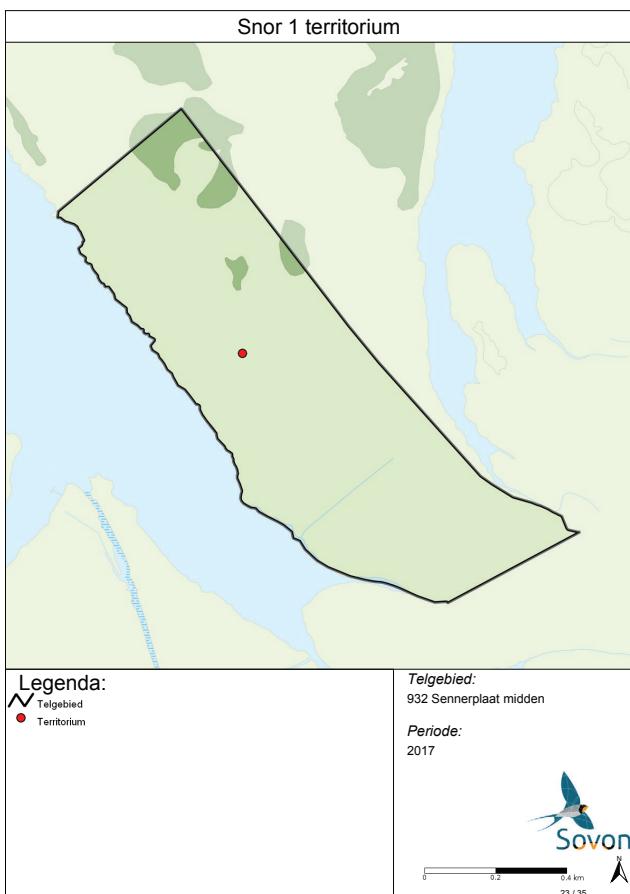
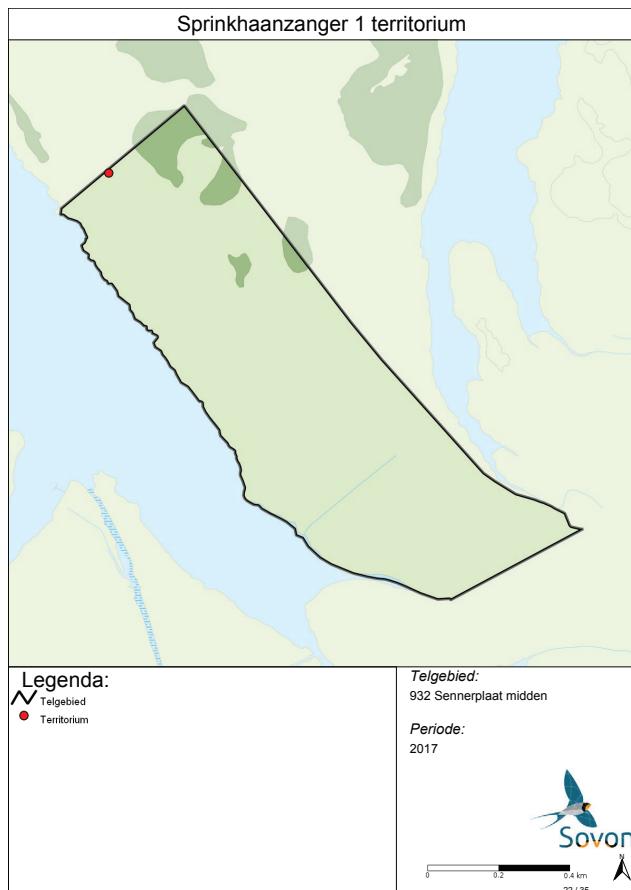
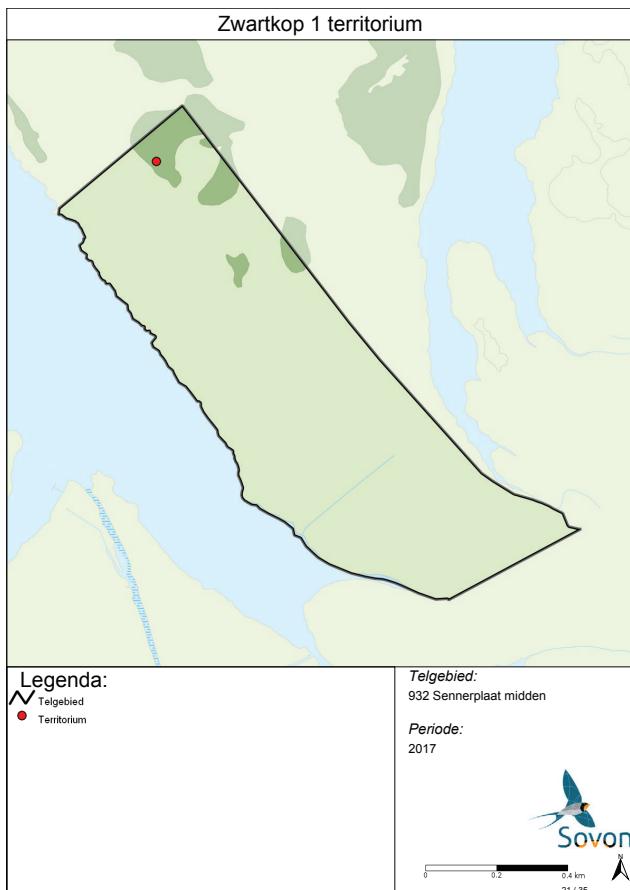


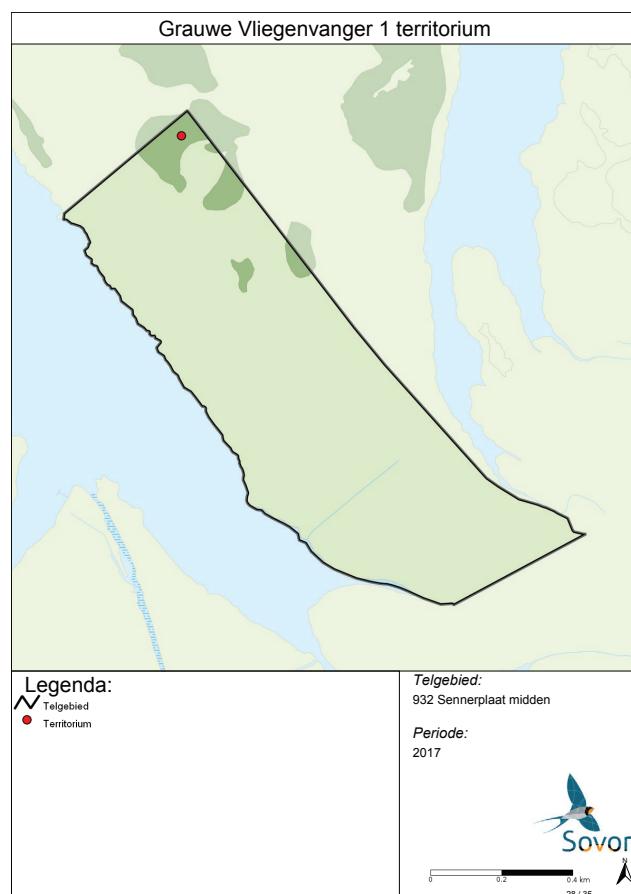
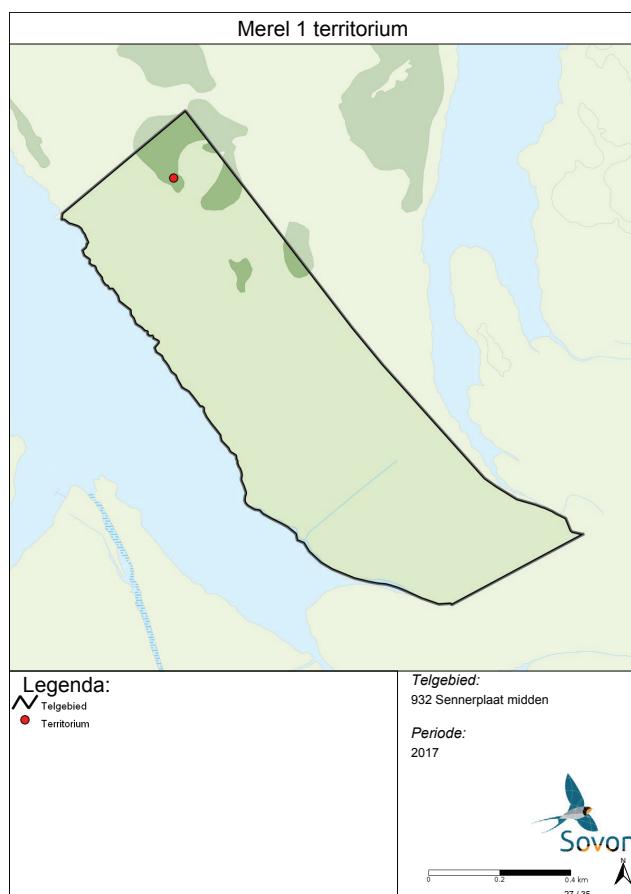
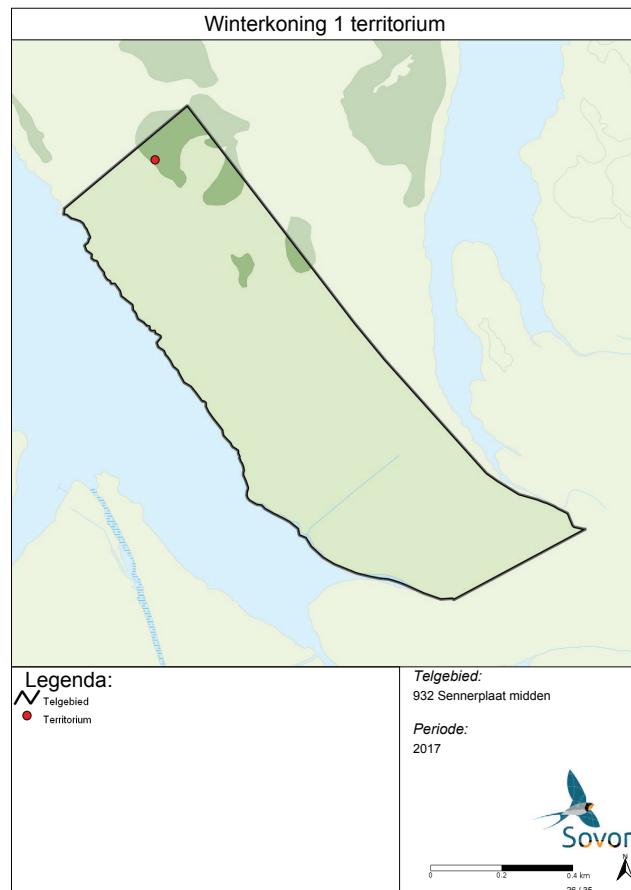
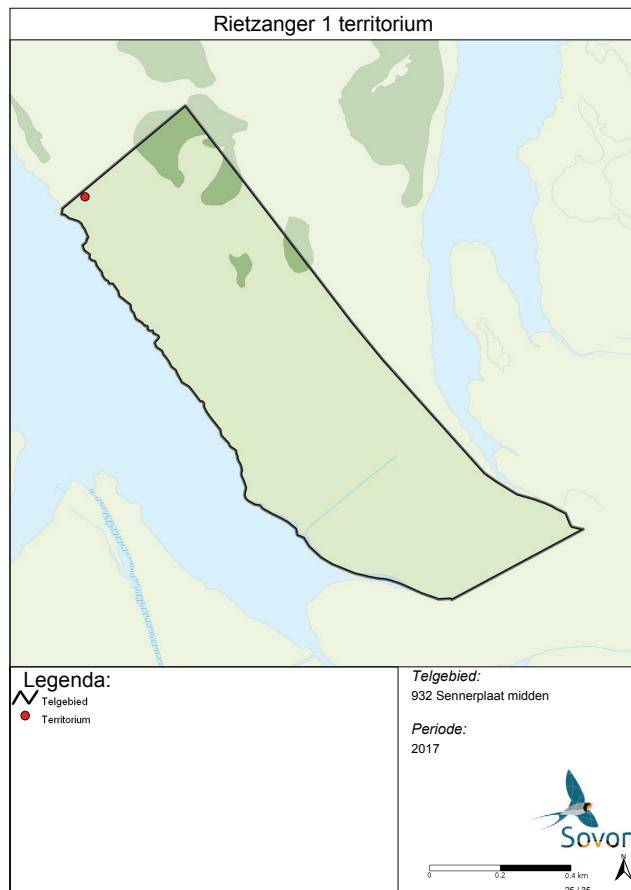


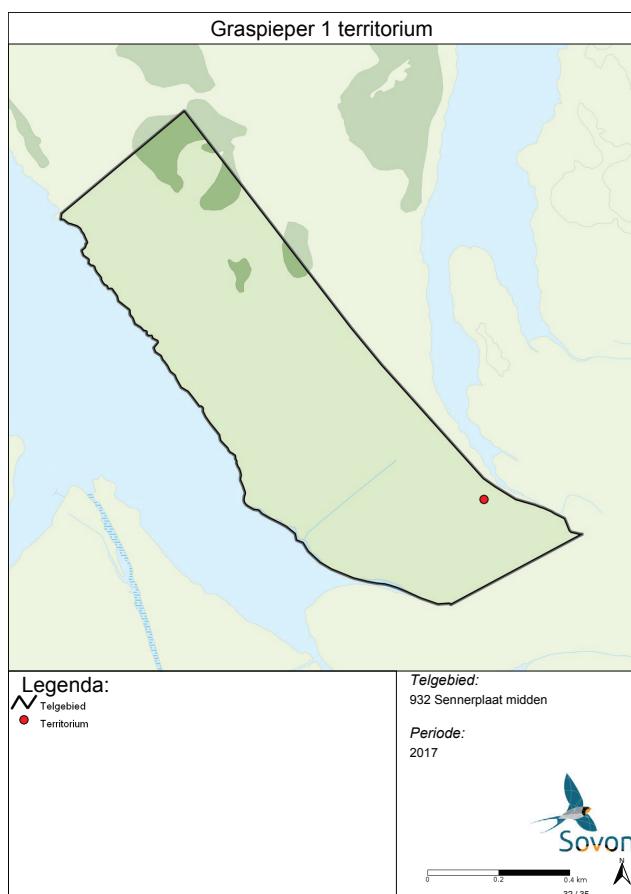
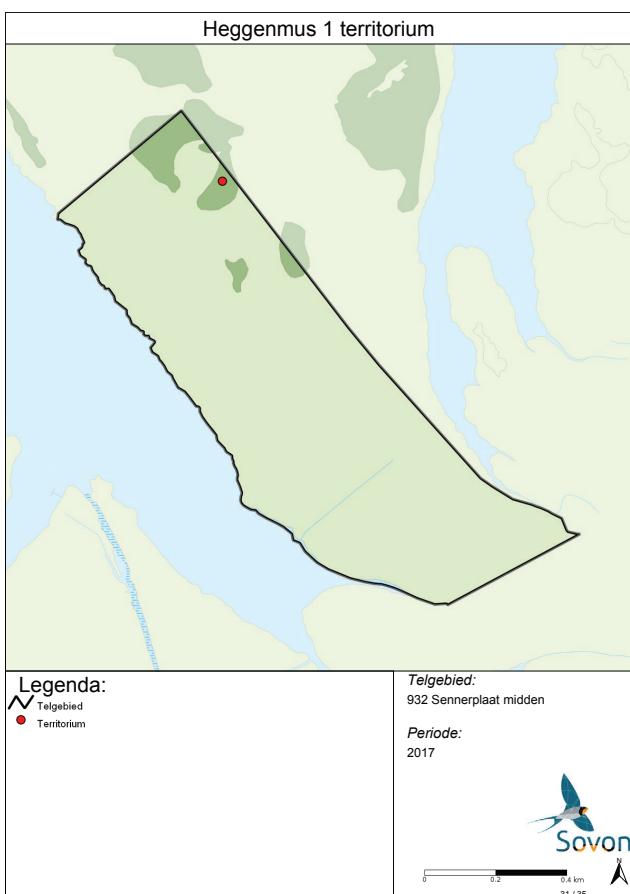
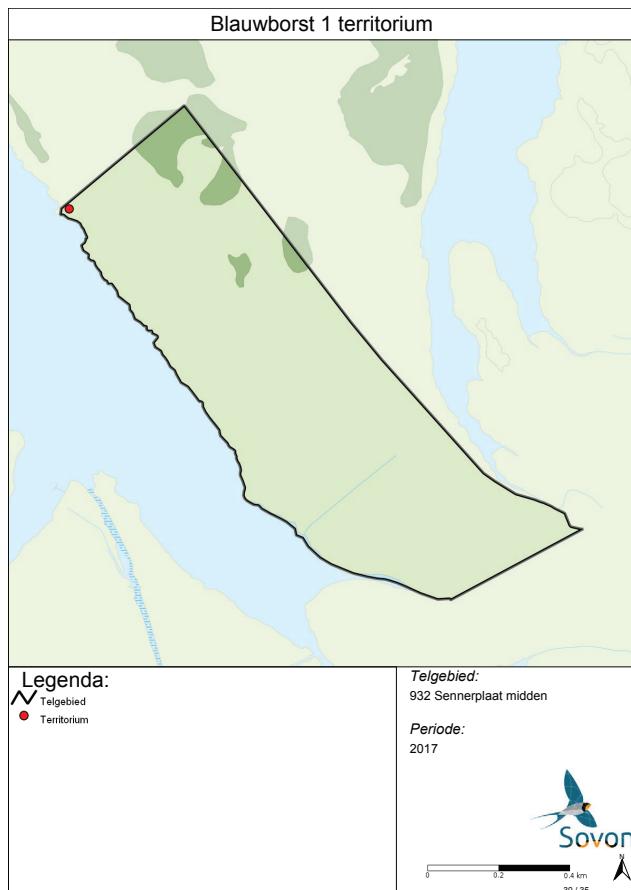
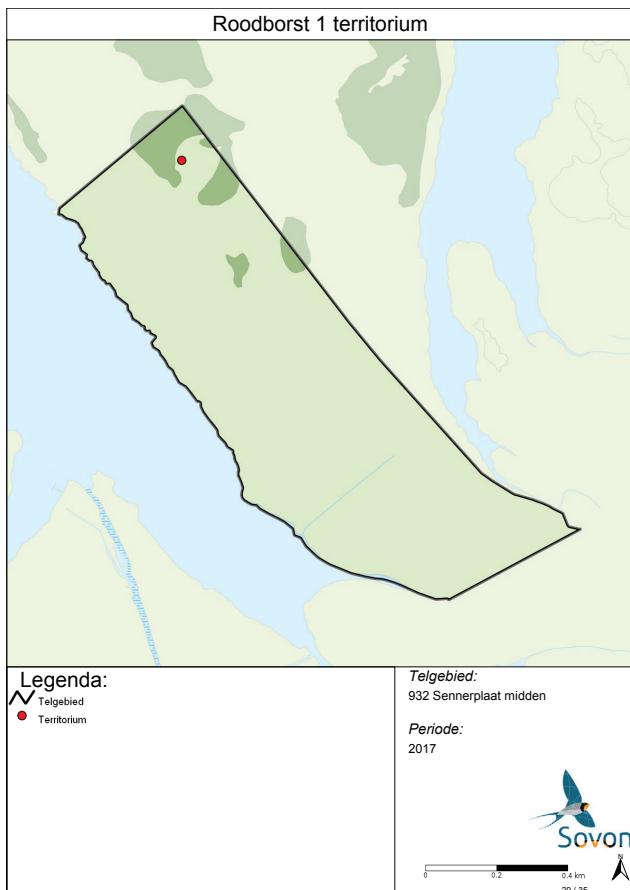


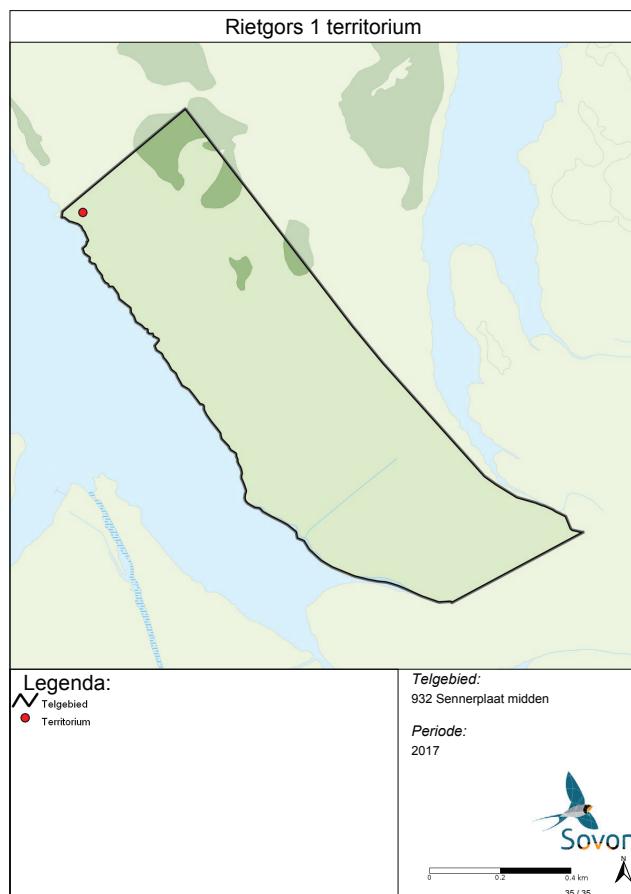
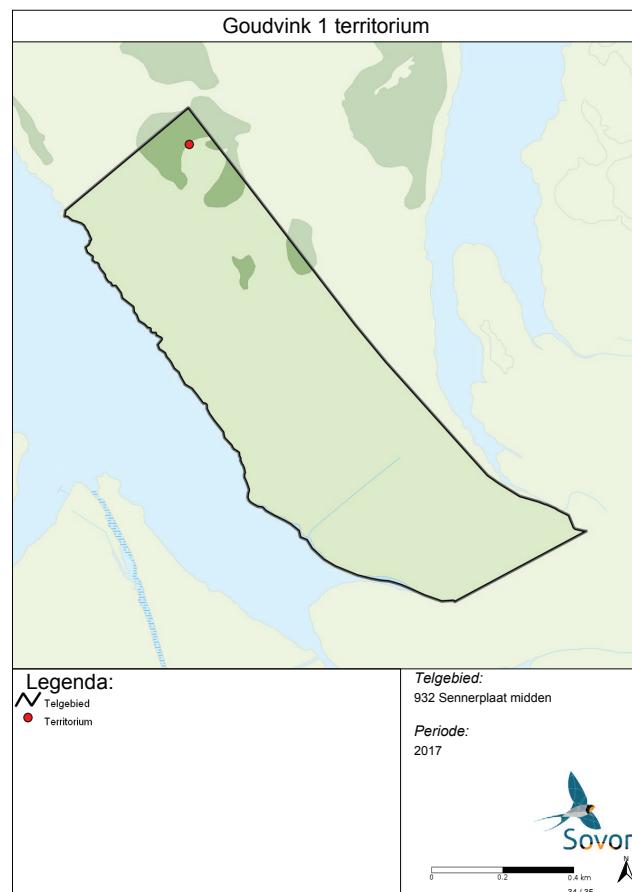
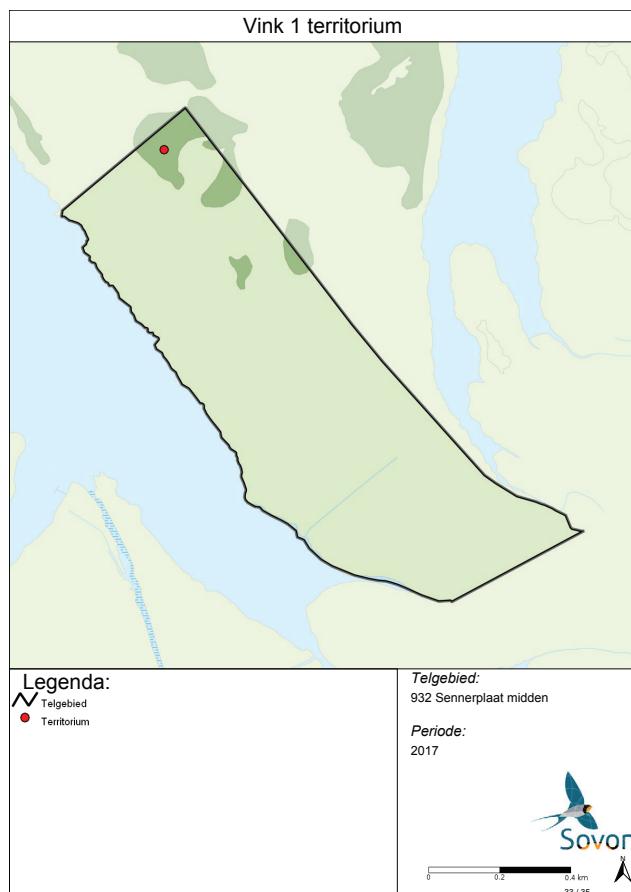




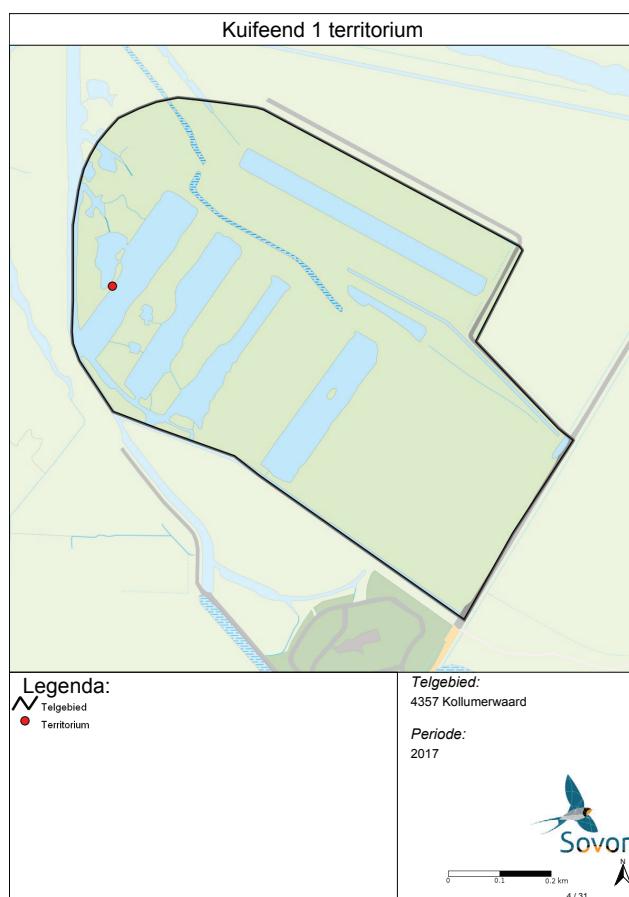
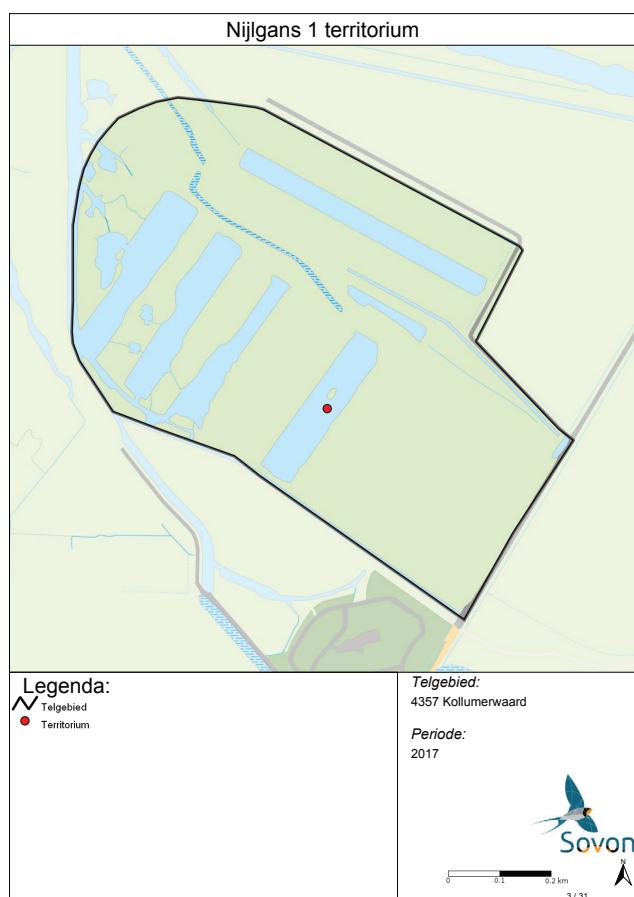
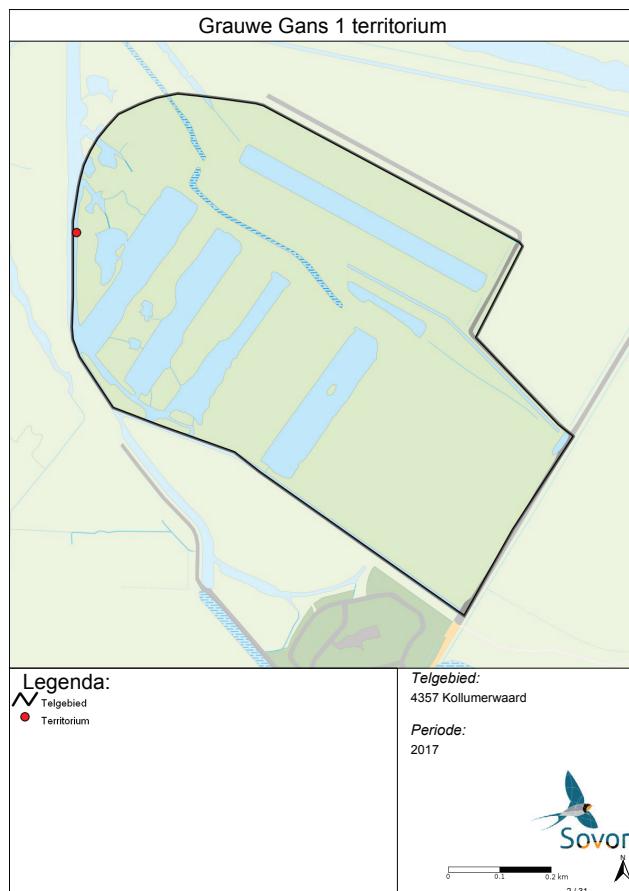
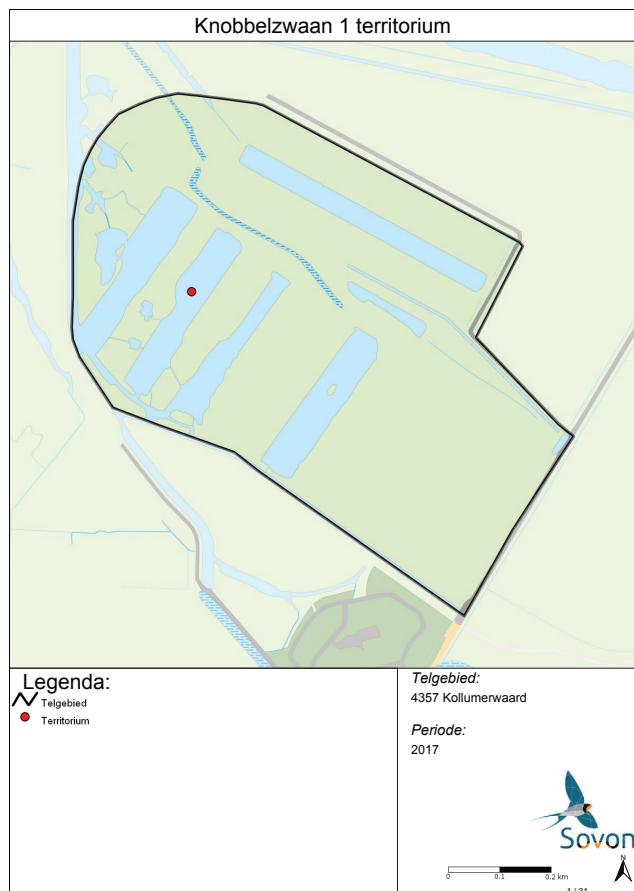


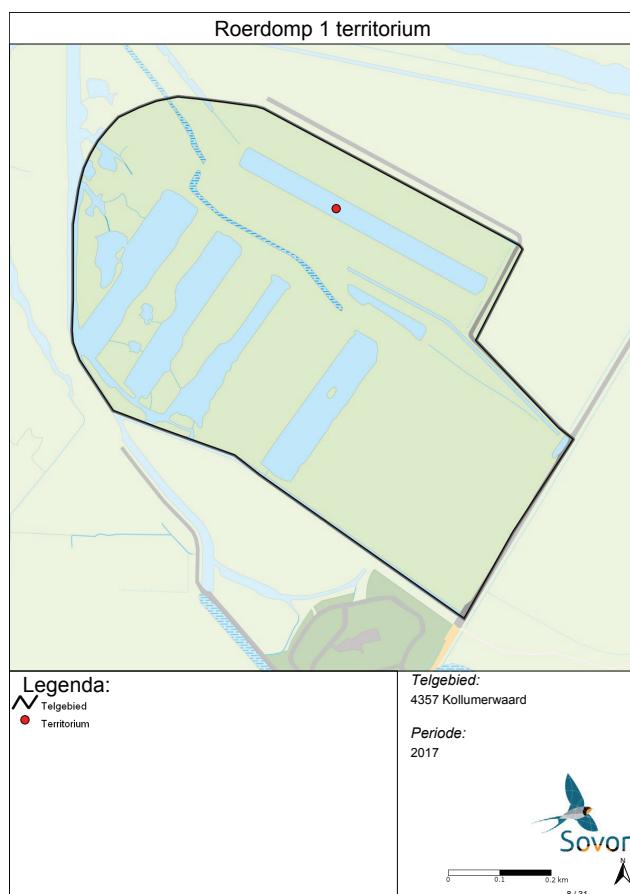
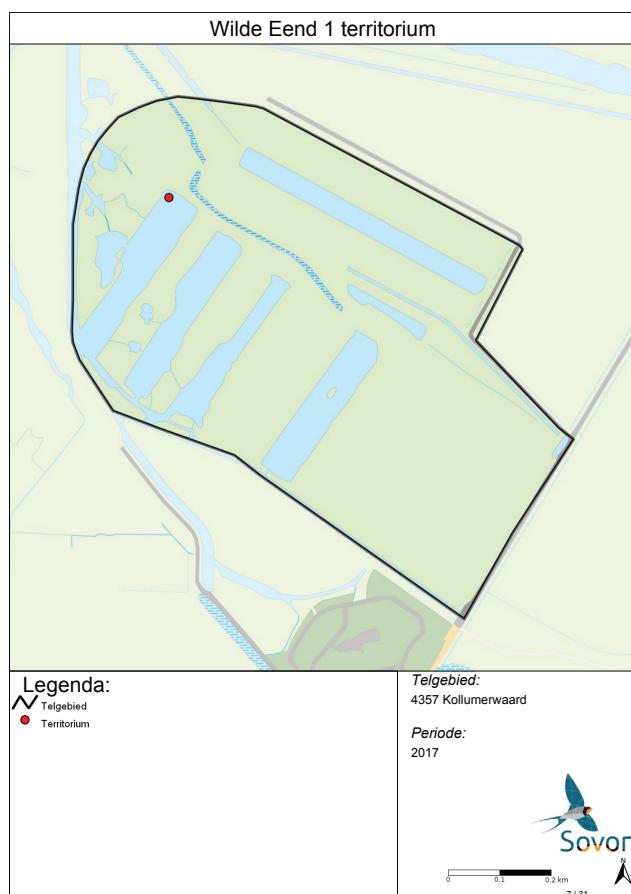
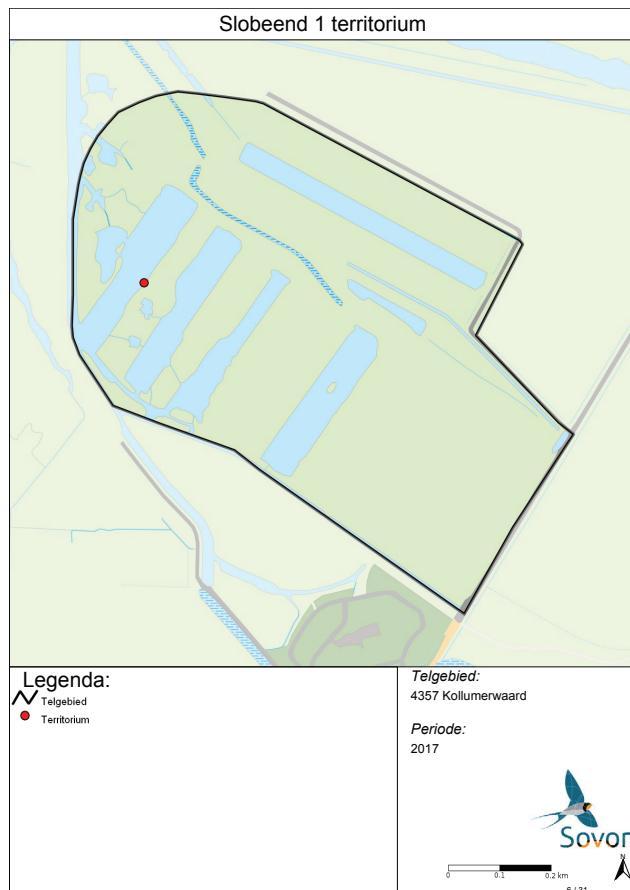
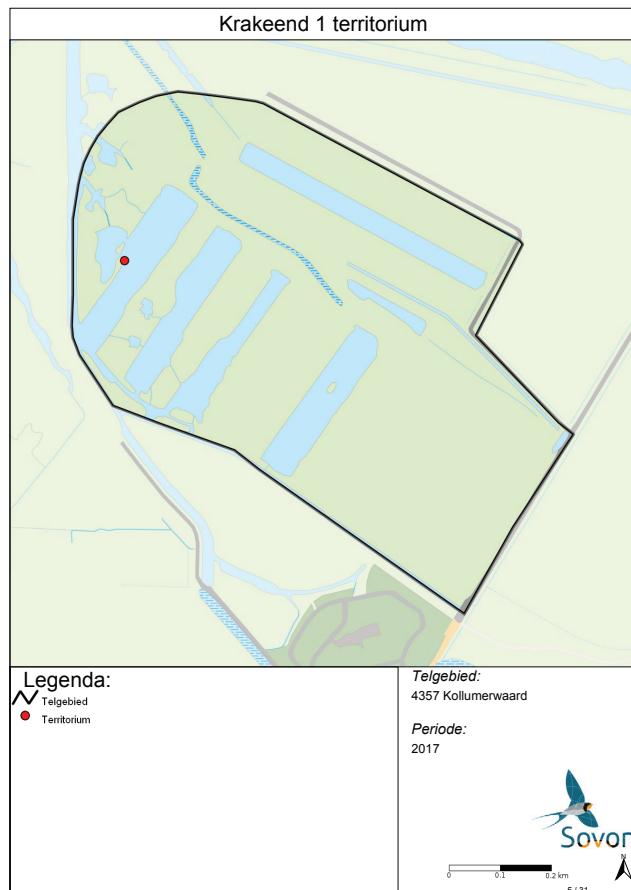


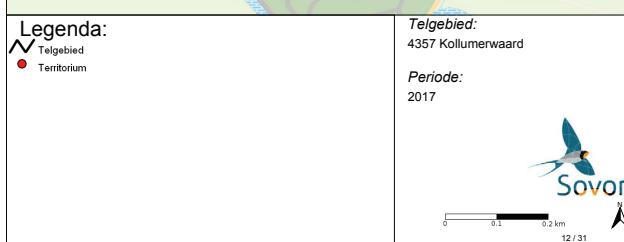
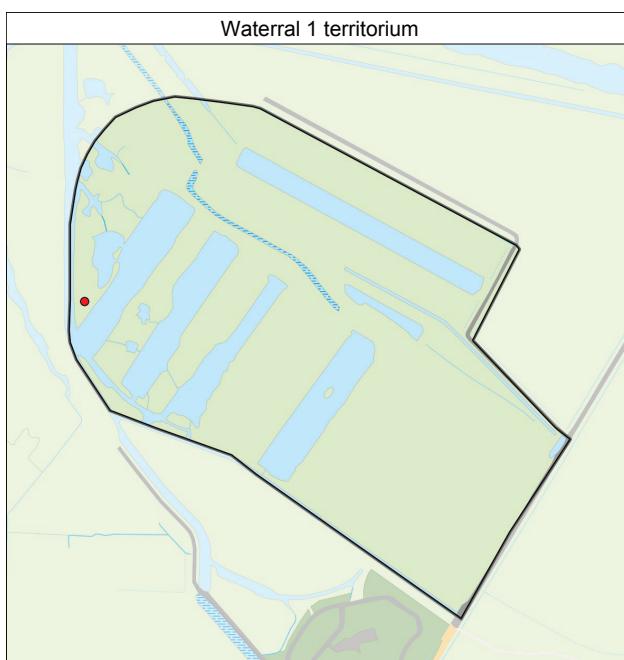
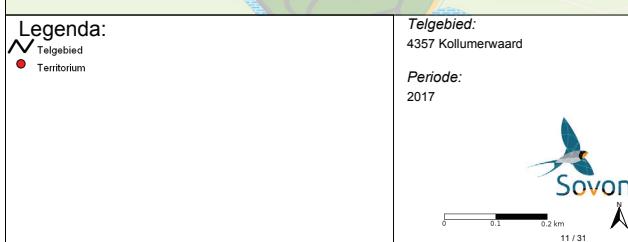
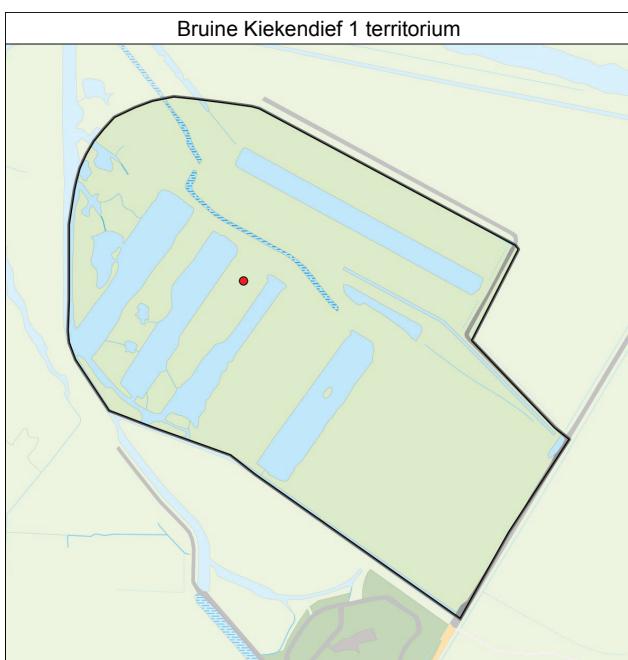
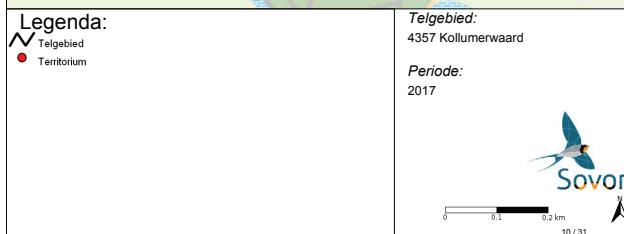
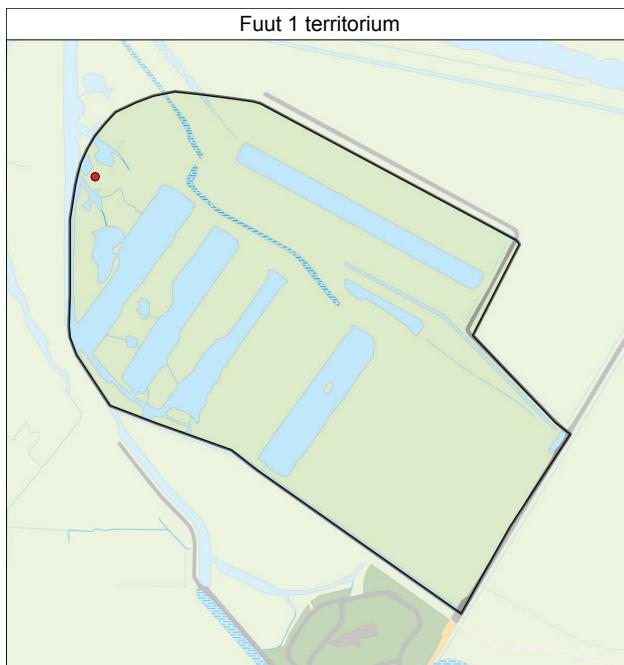
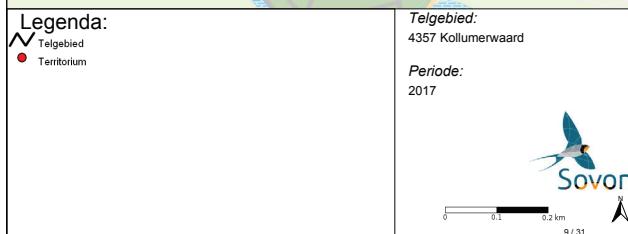
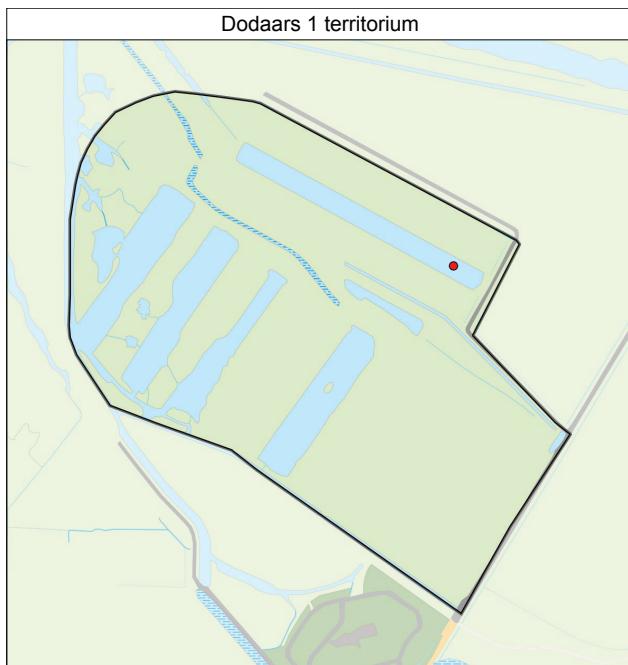


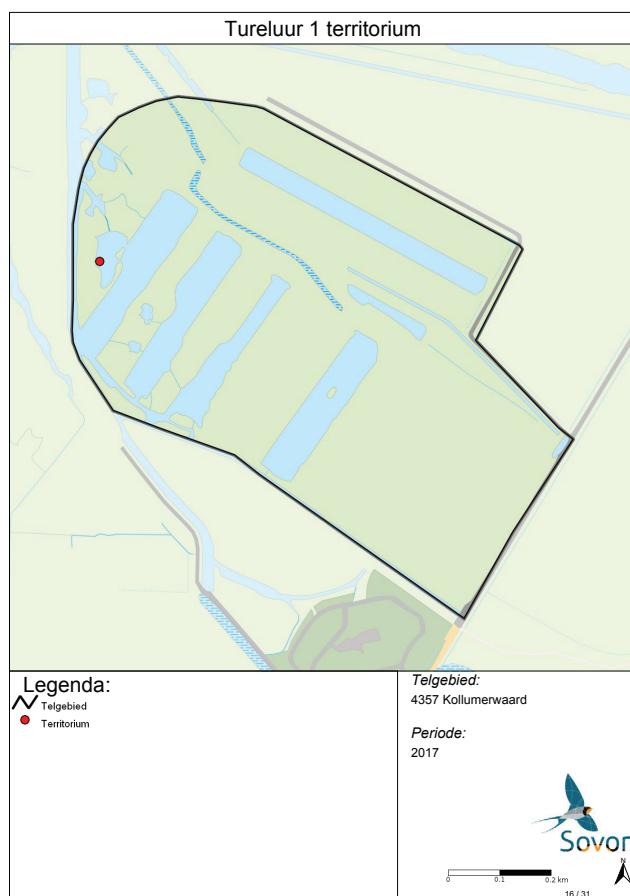
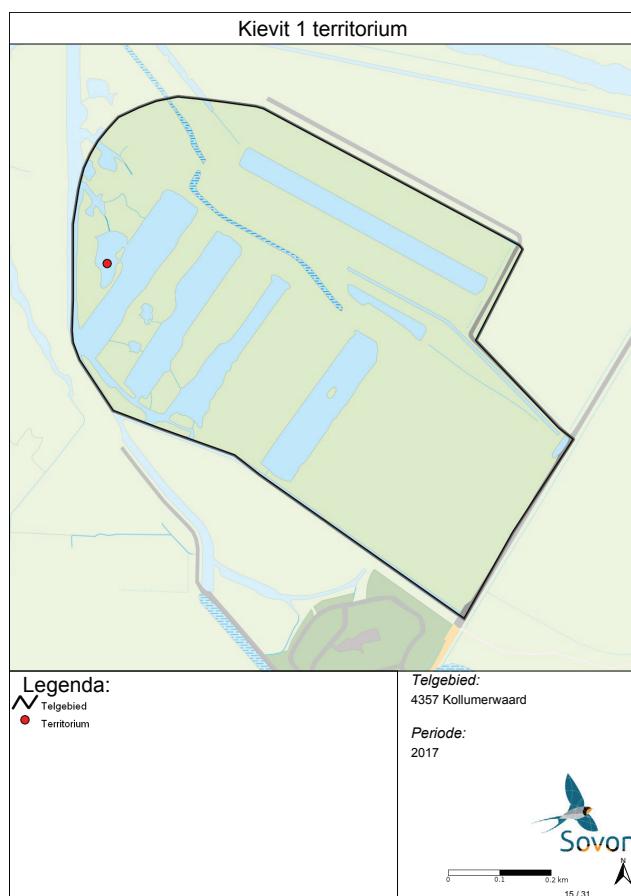
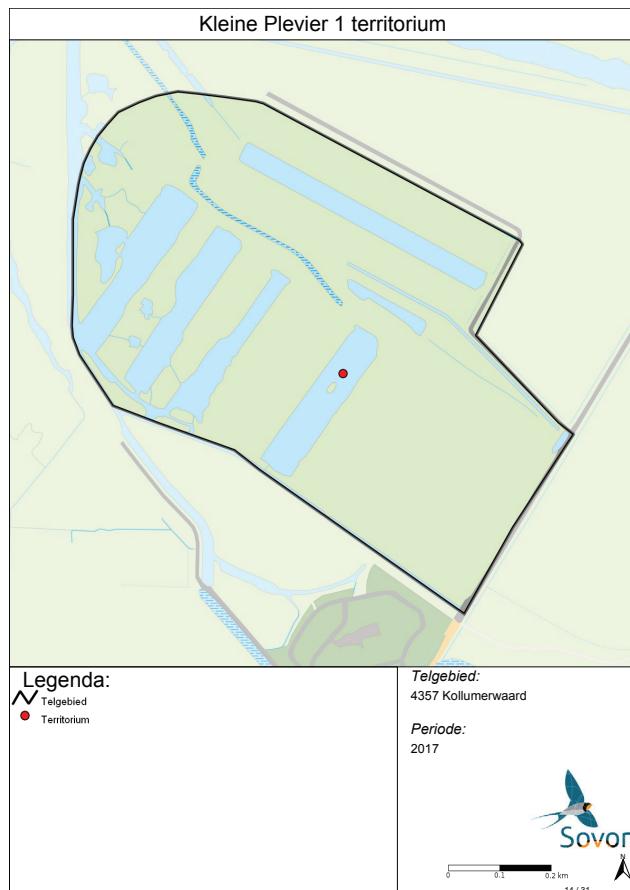
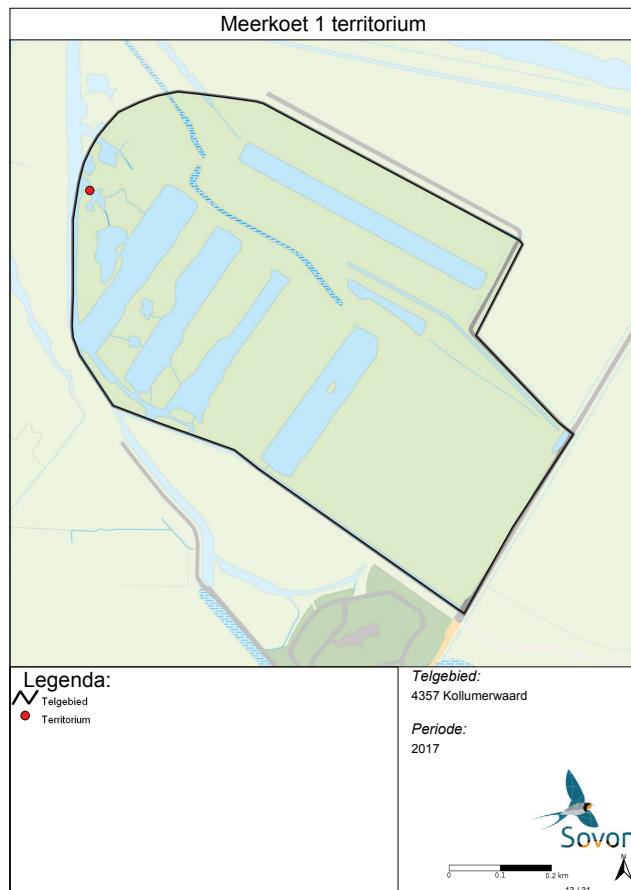


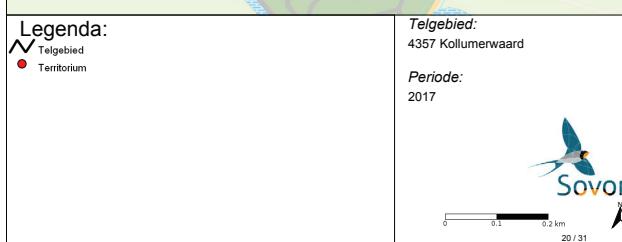
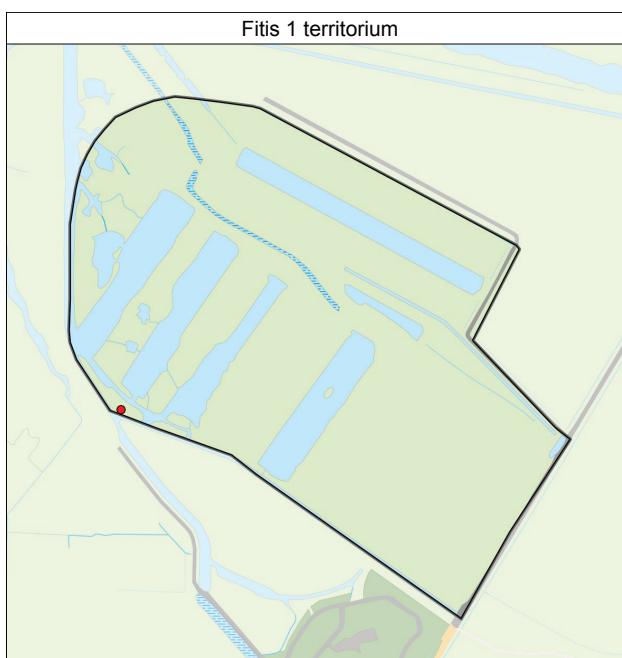
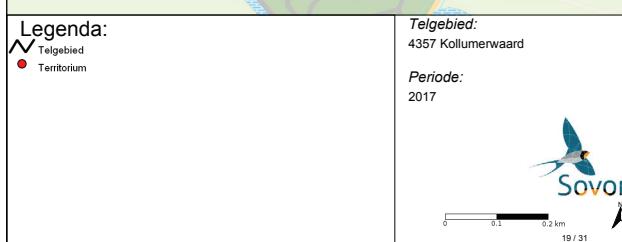
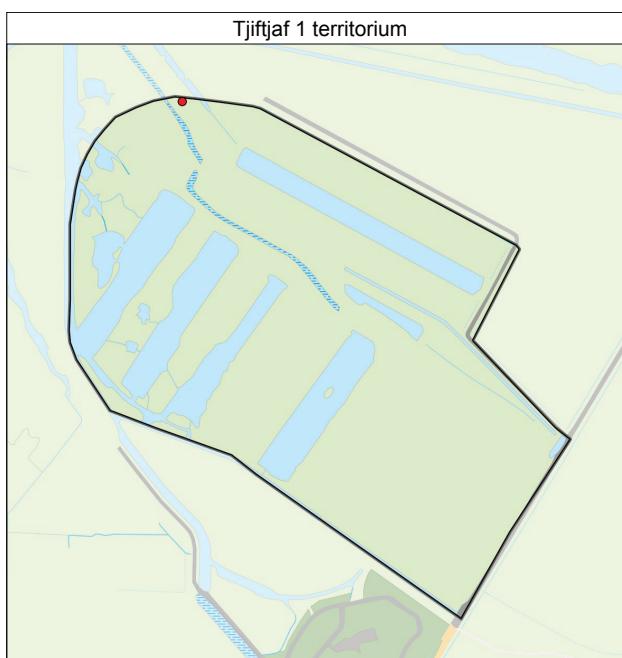
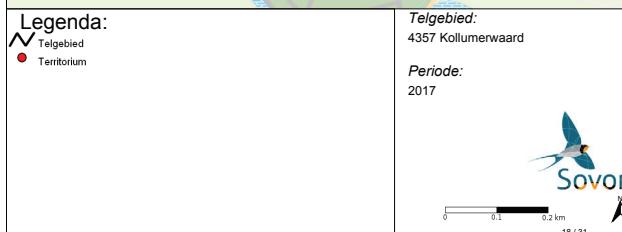
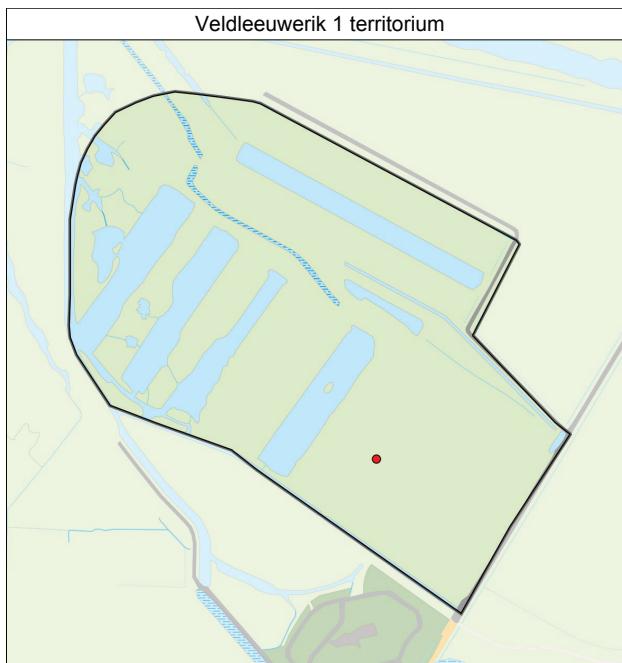
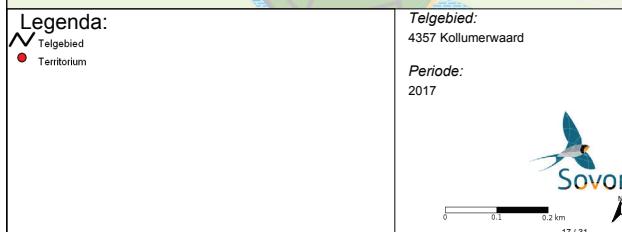
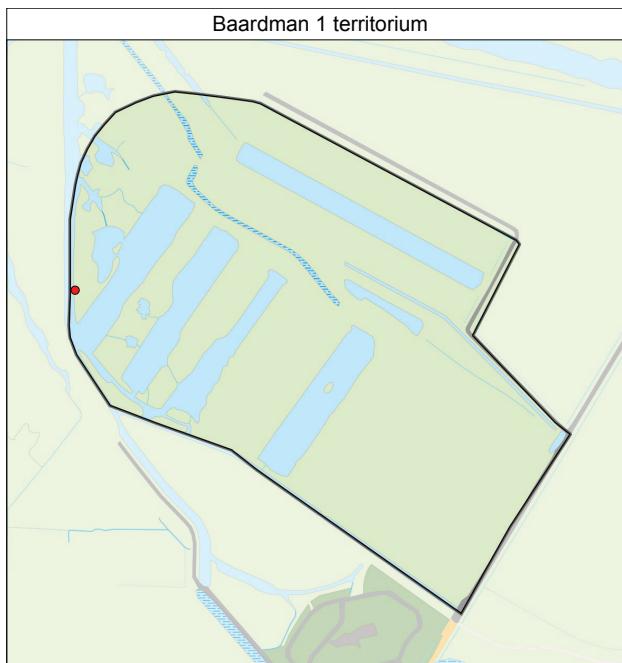
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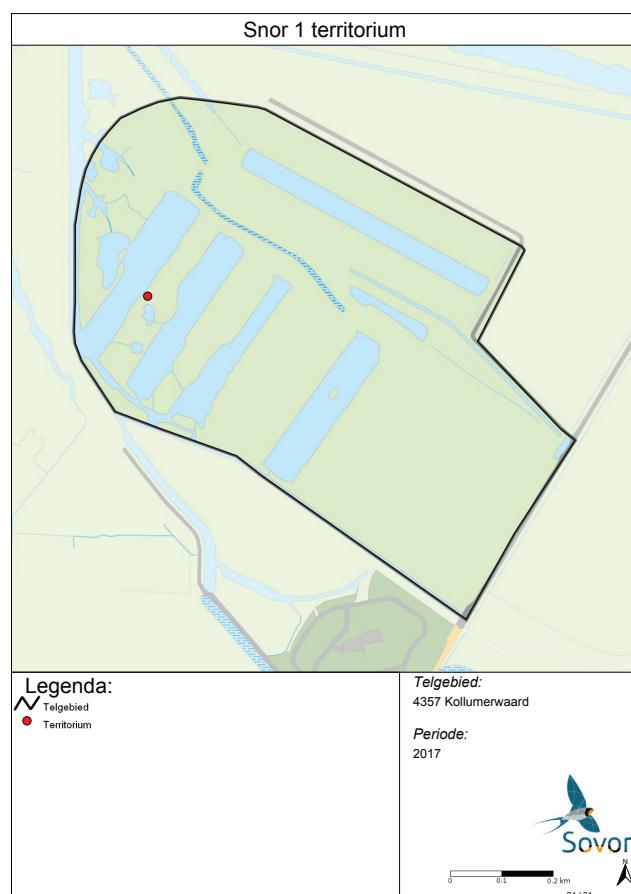
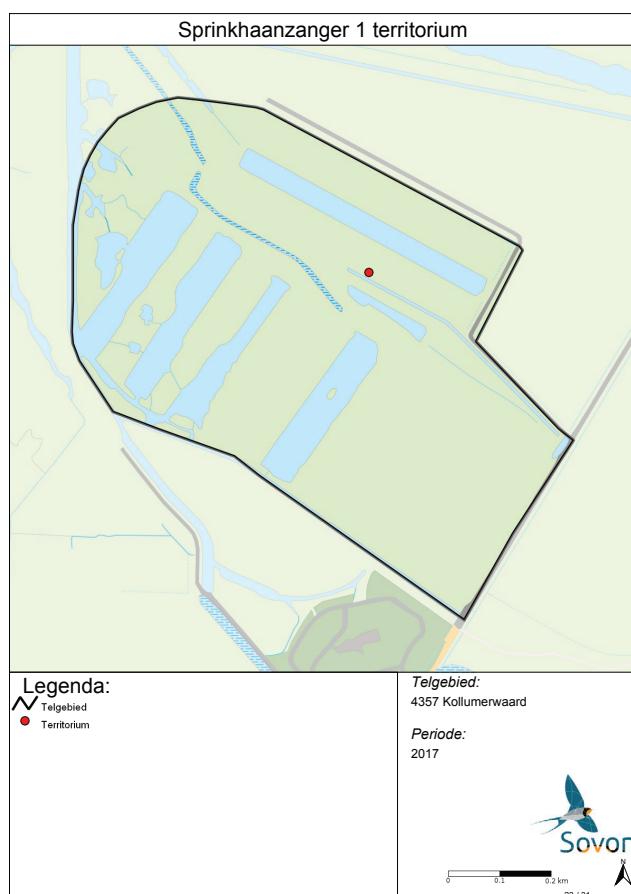
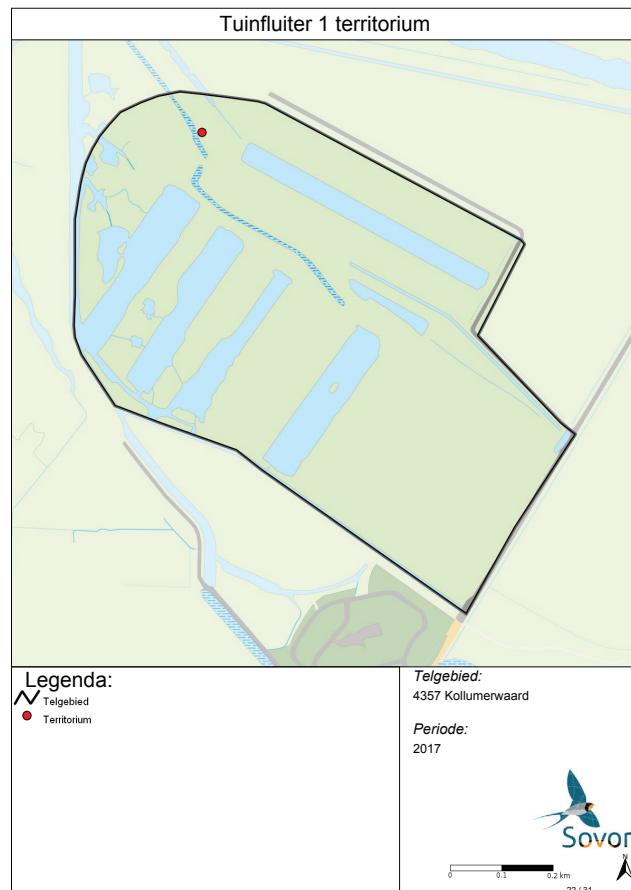
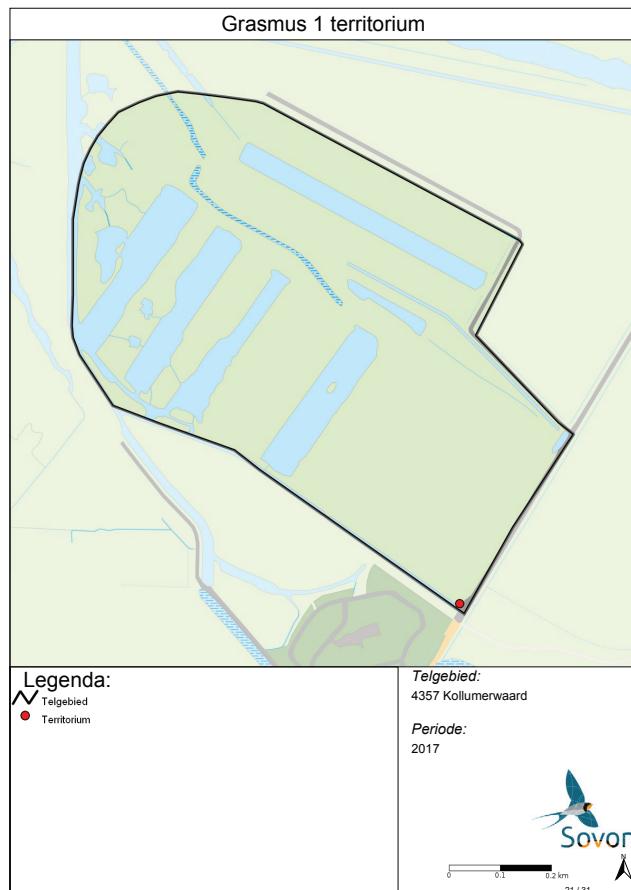


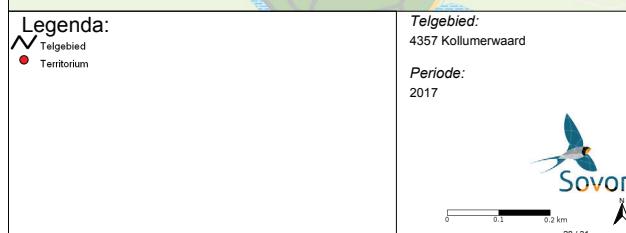
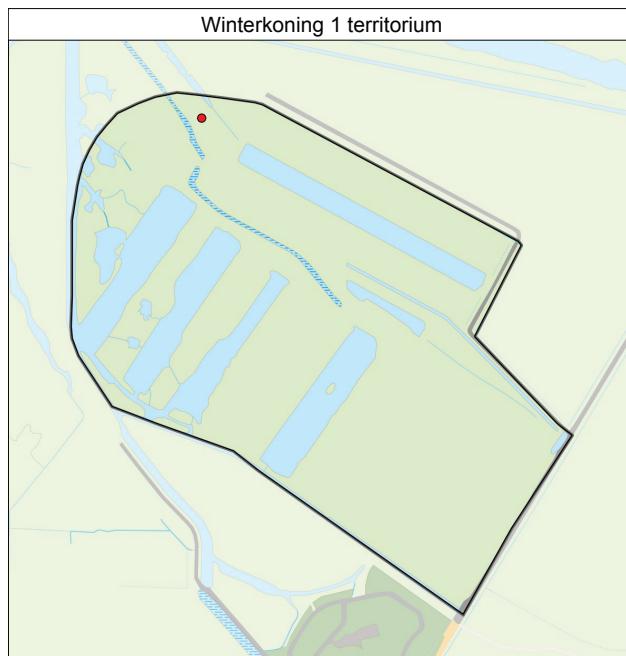
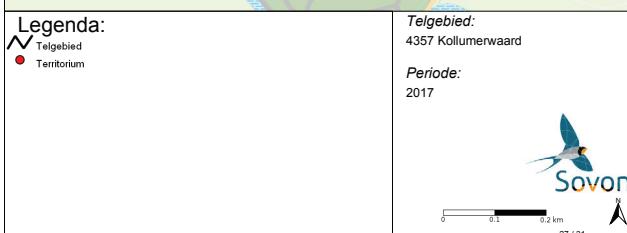
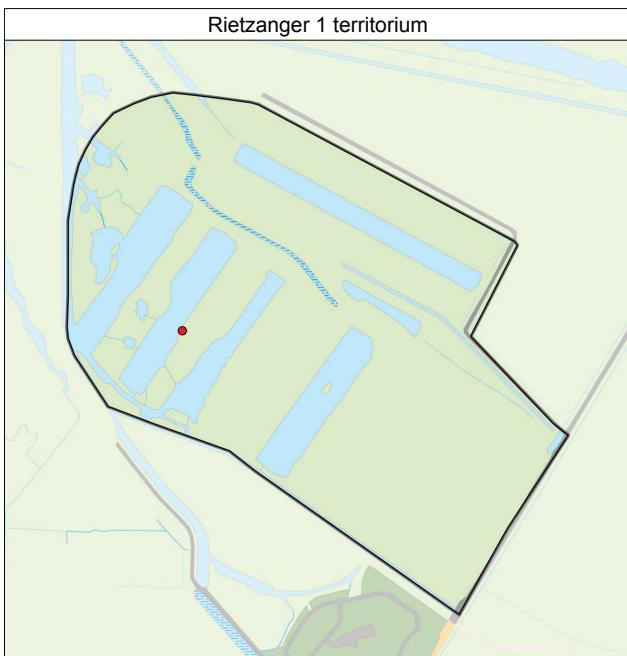
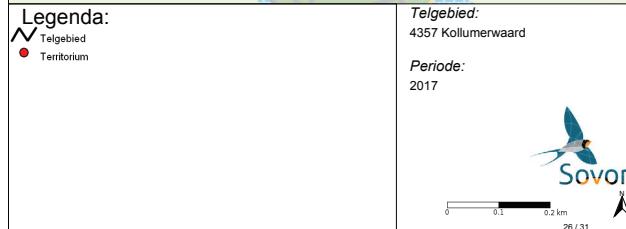
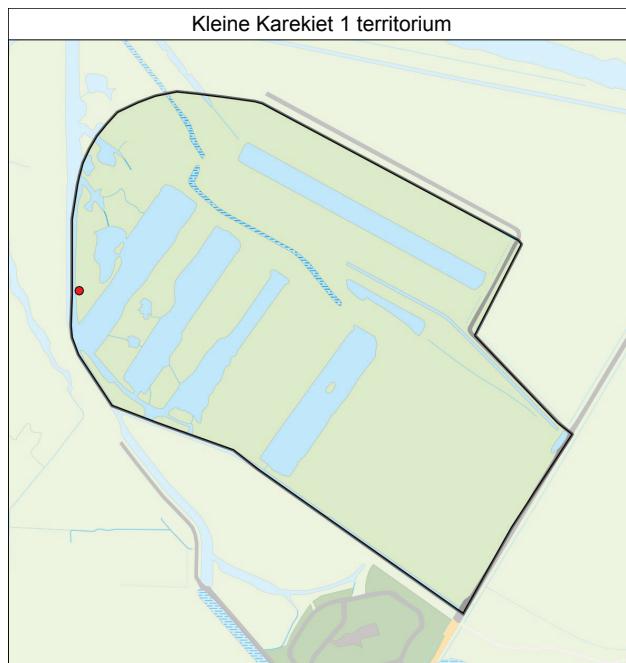
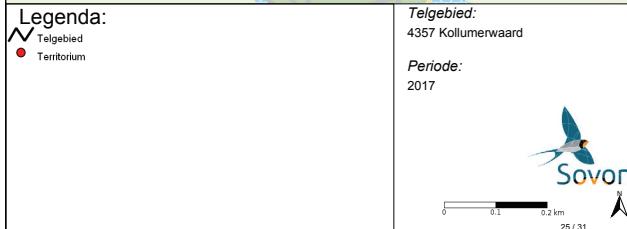
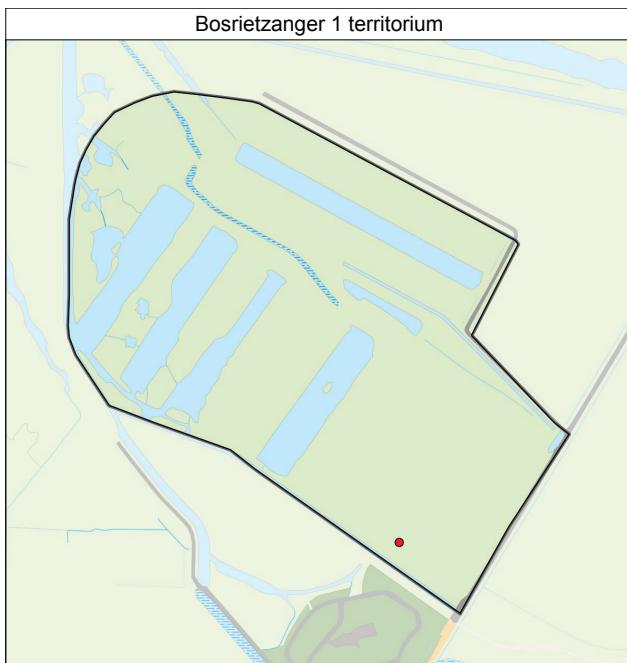


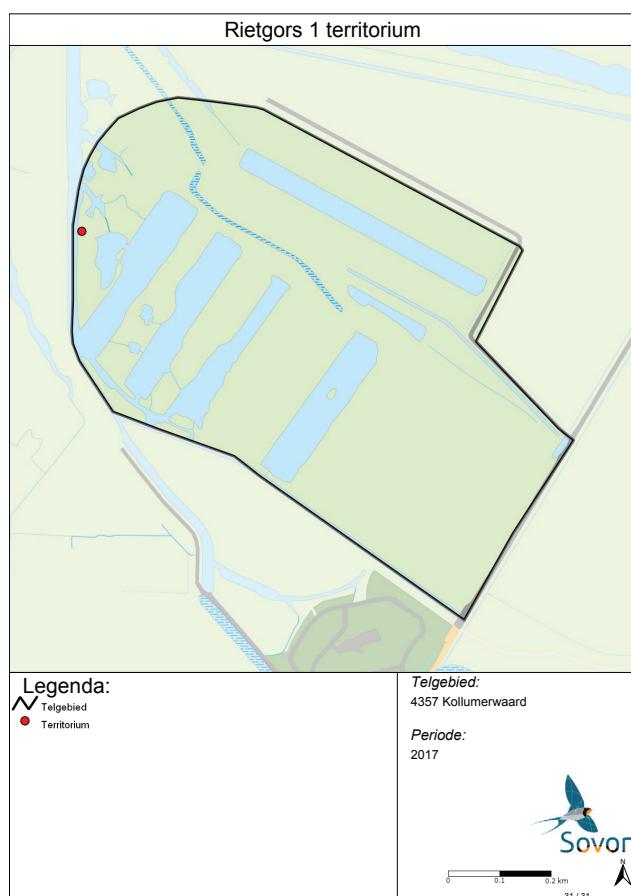
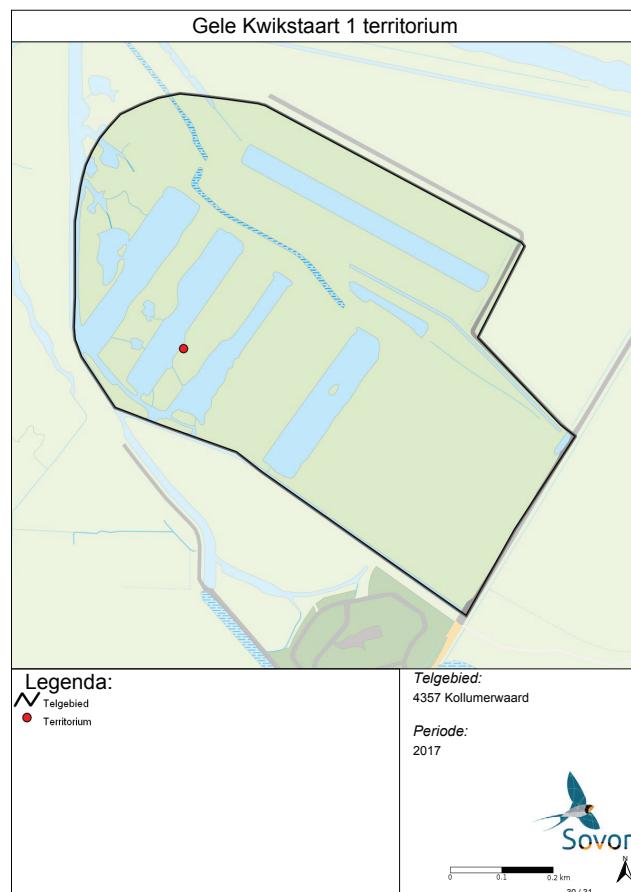
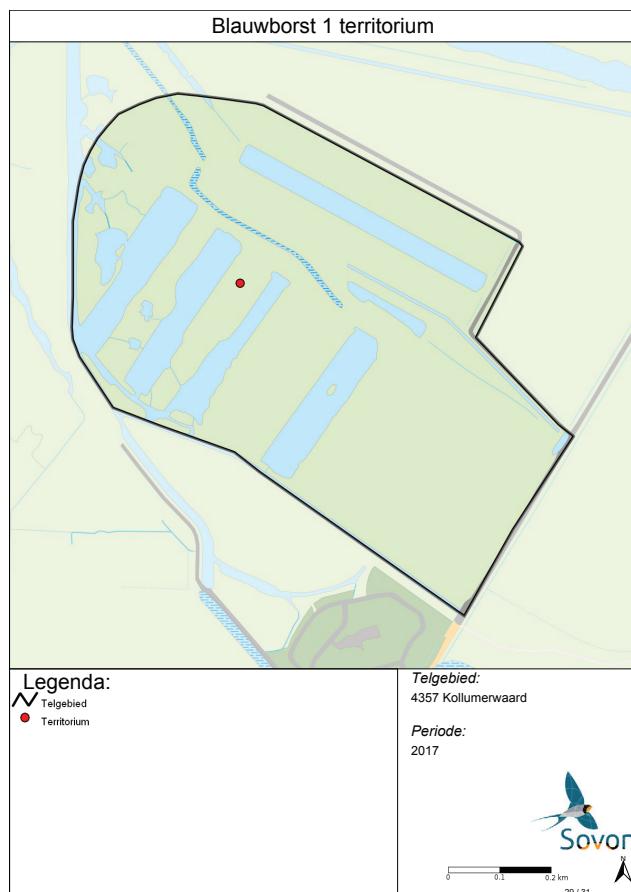




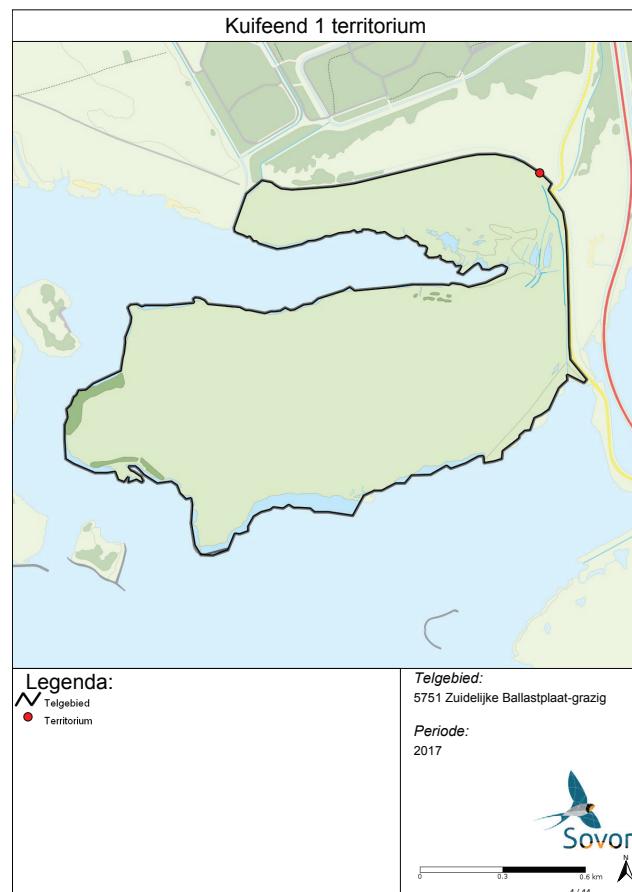
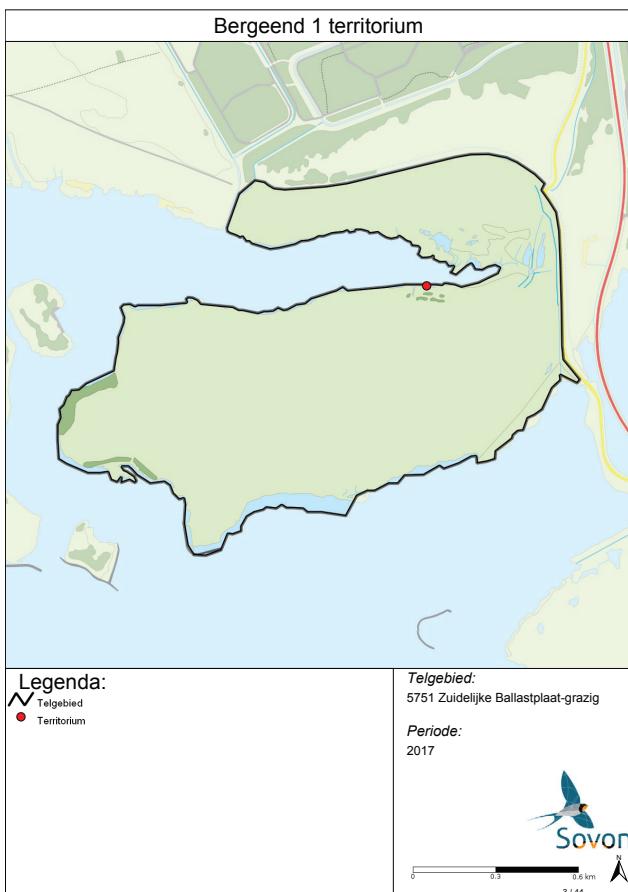
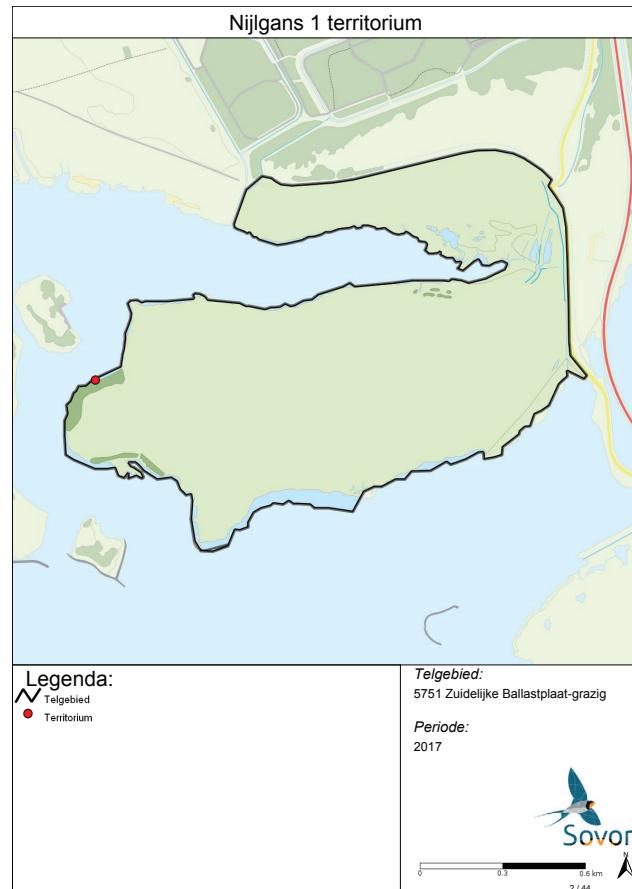
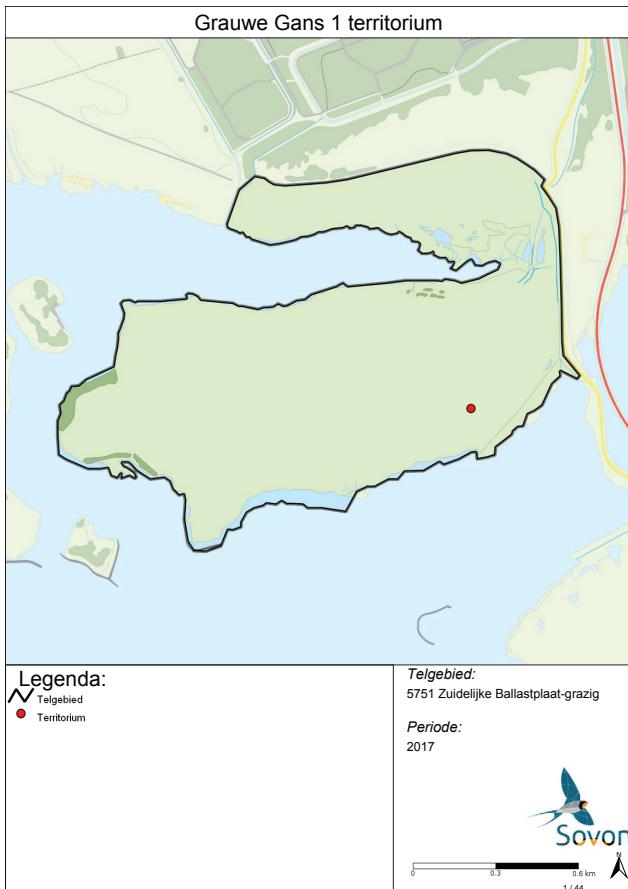


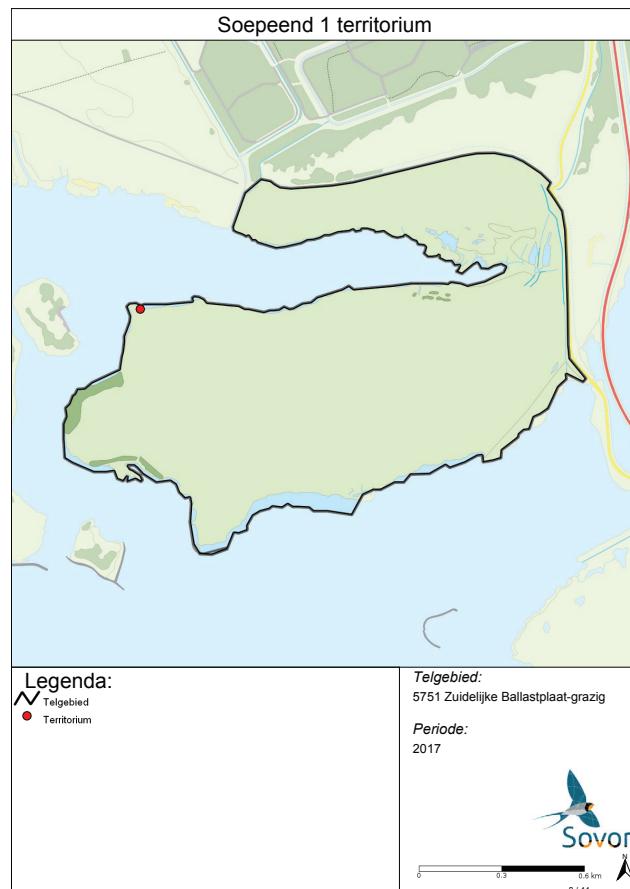
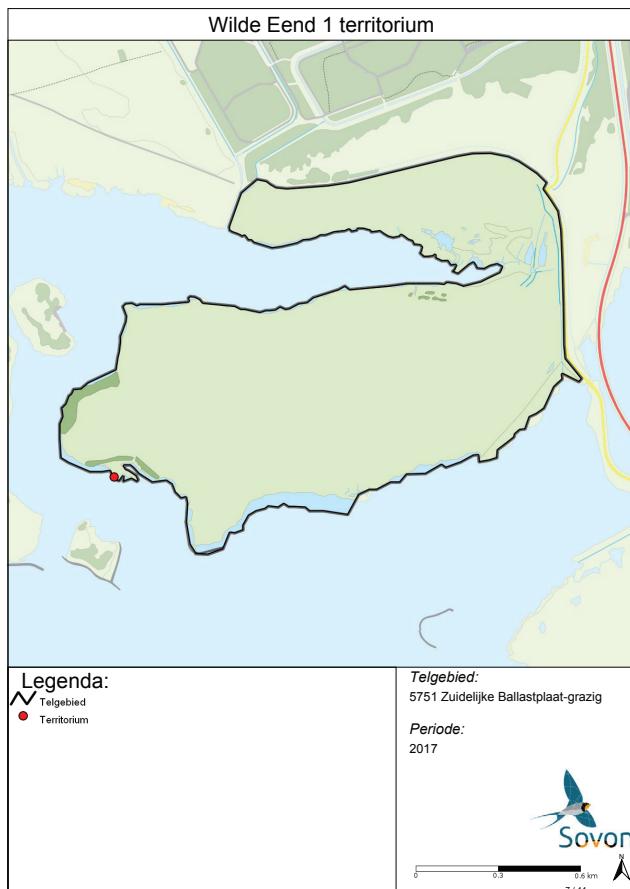
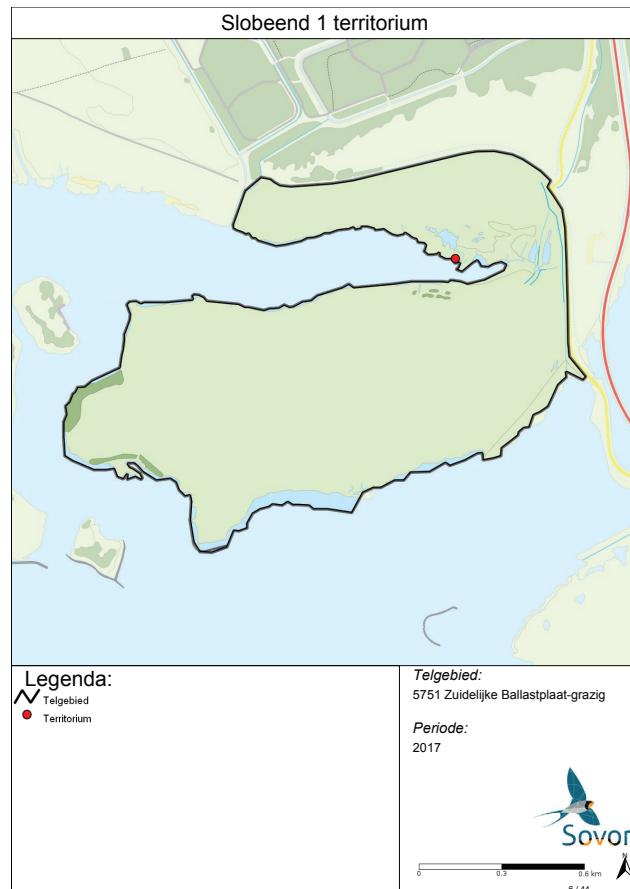
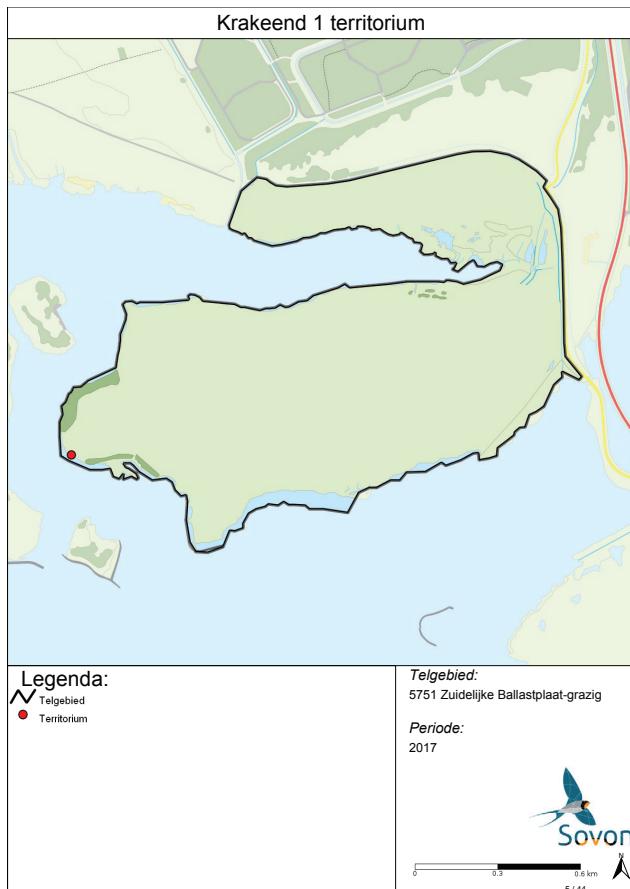


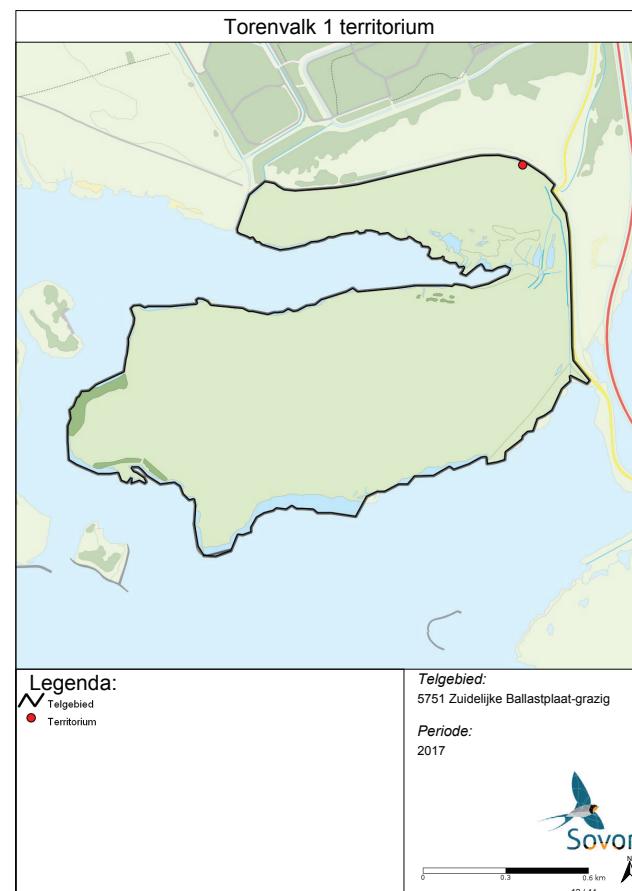
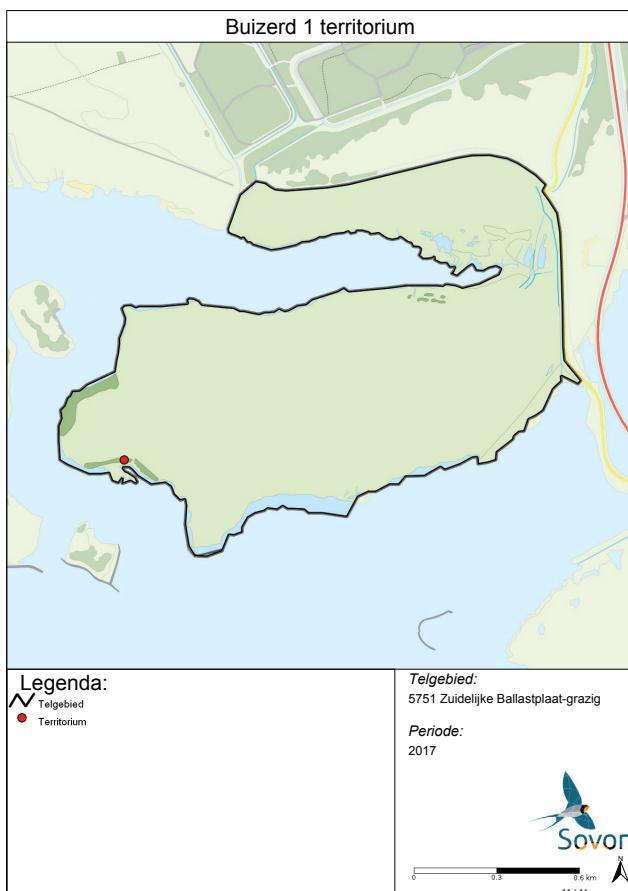
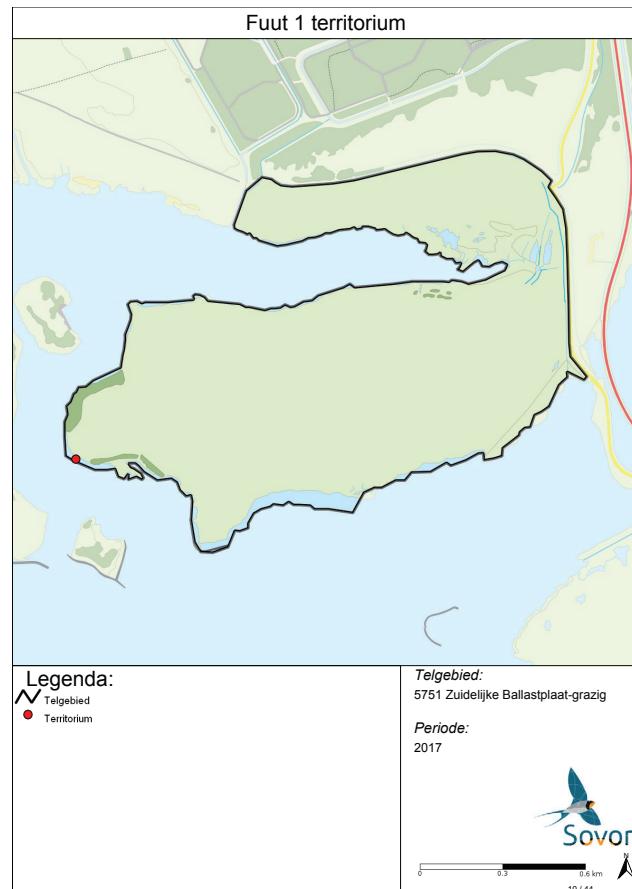
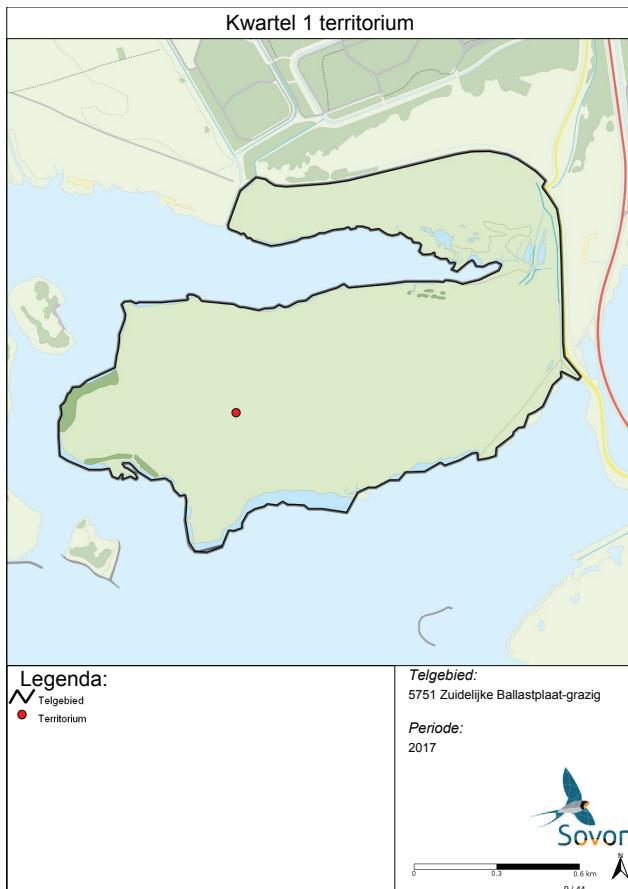


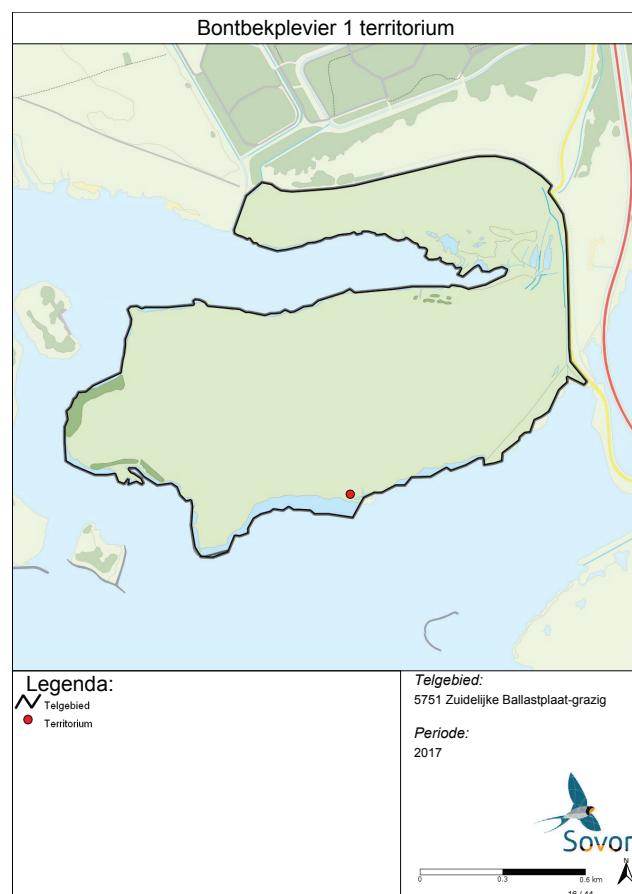
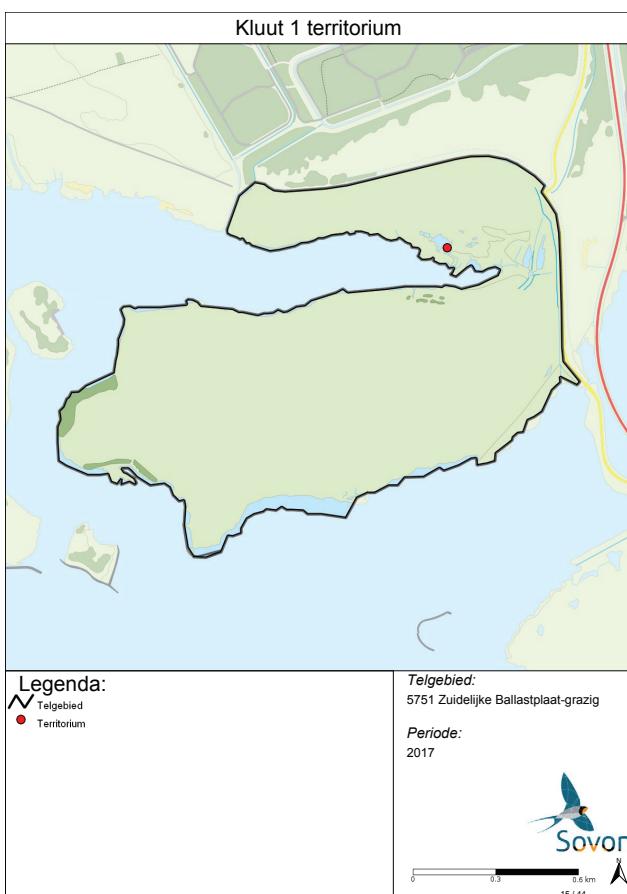
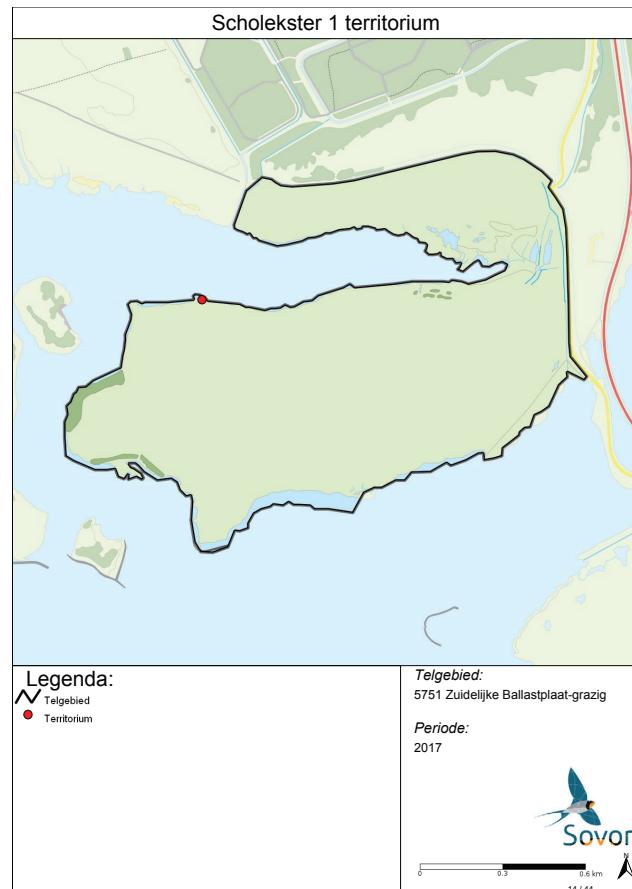
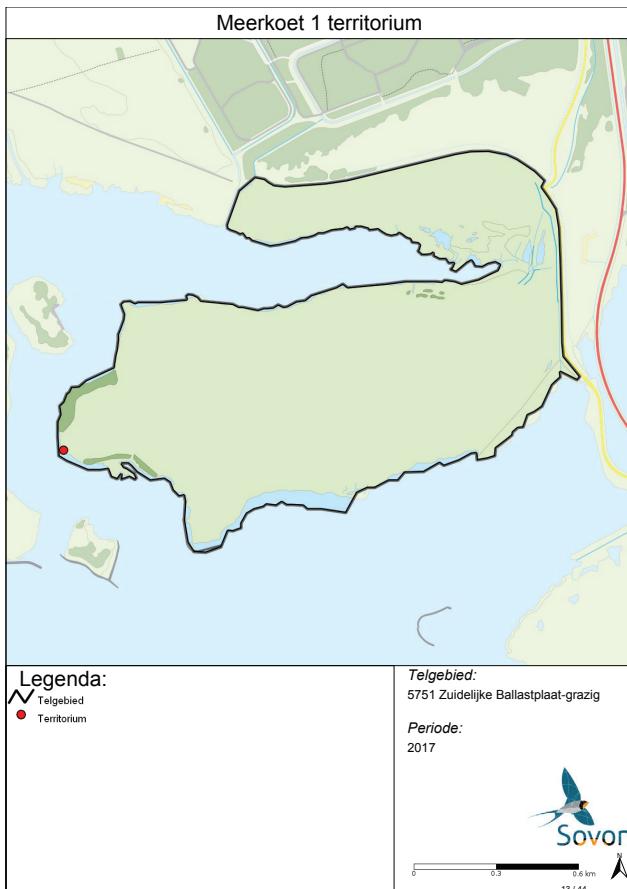


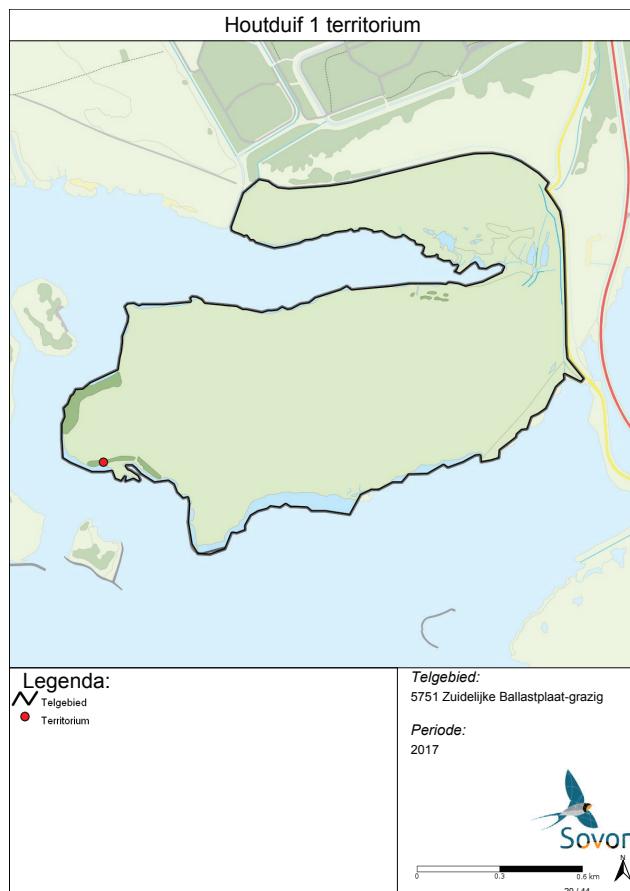
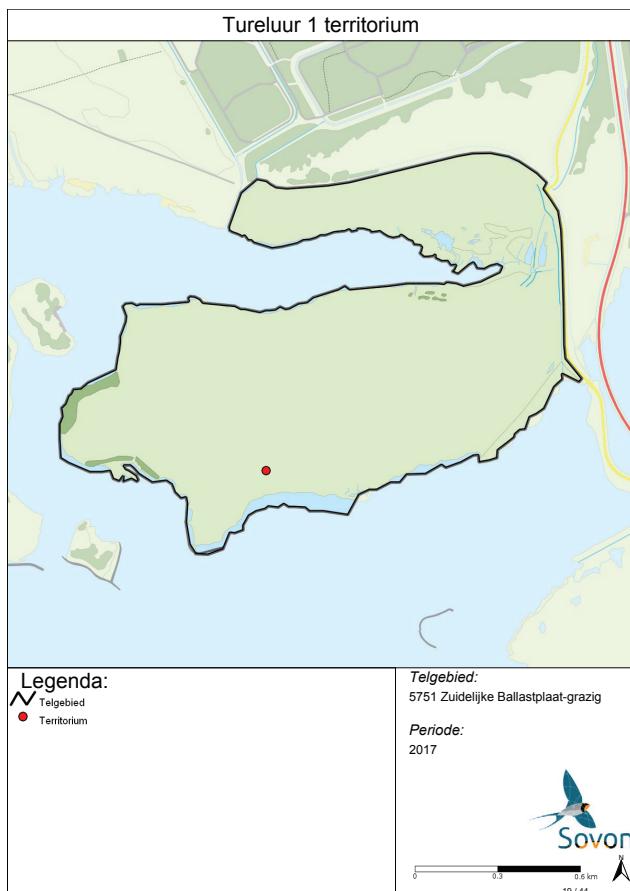
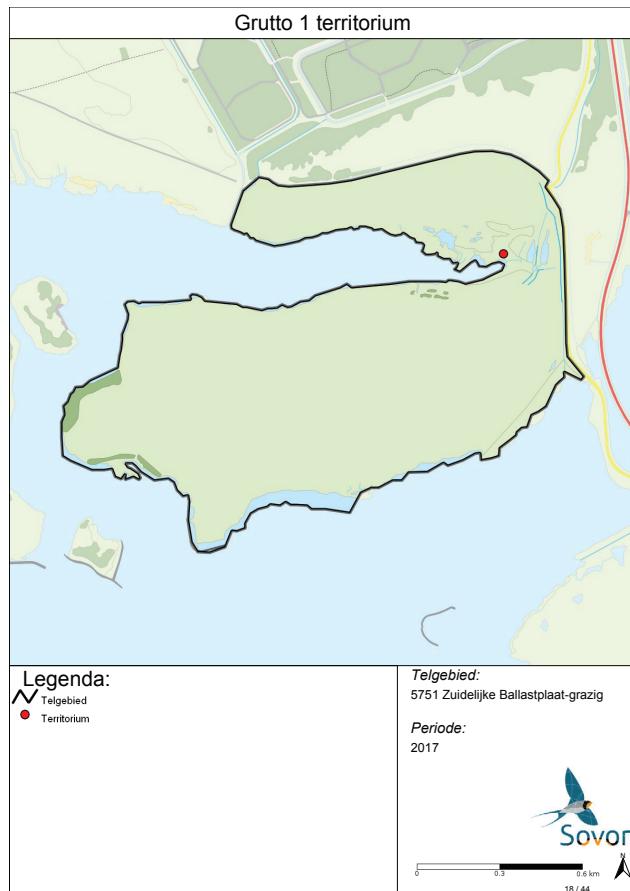
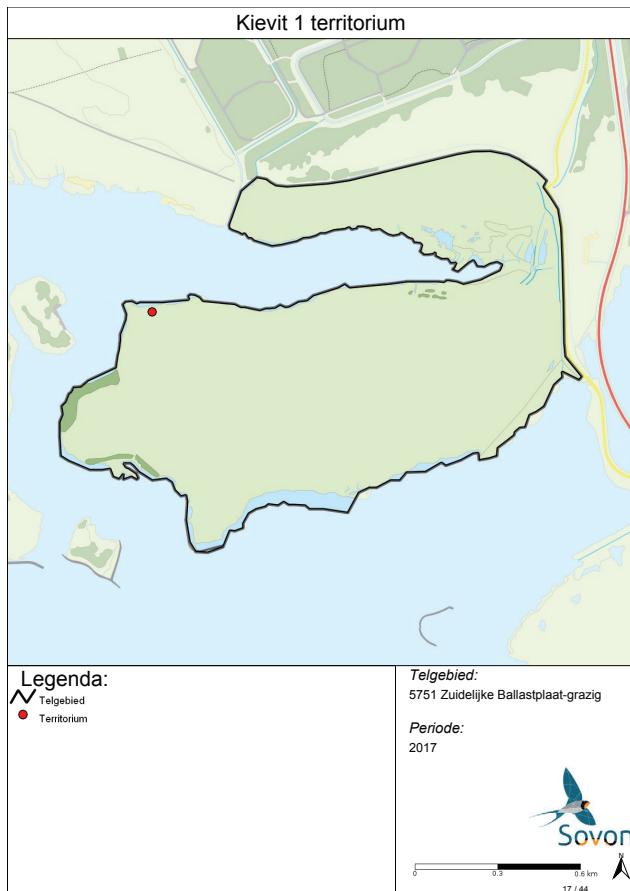
## Bijlage 19d. Zuidelijke Ballastplaat grazig 2017

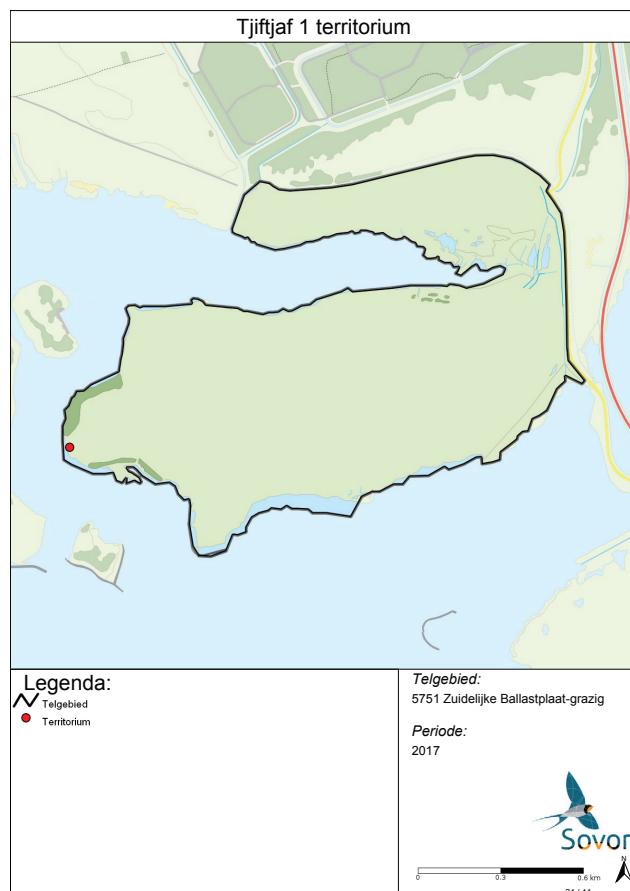
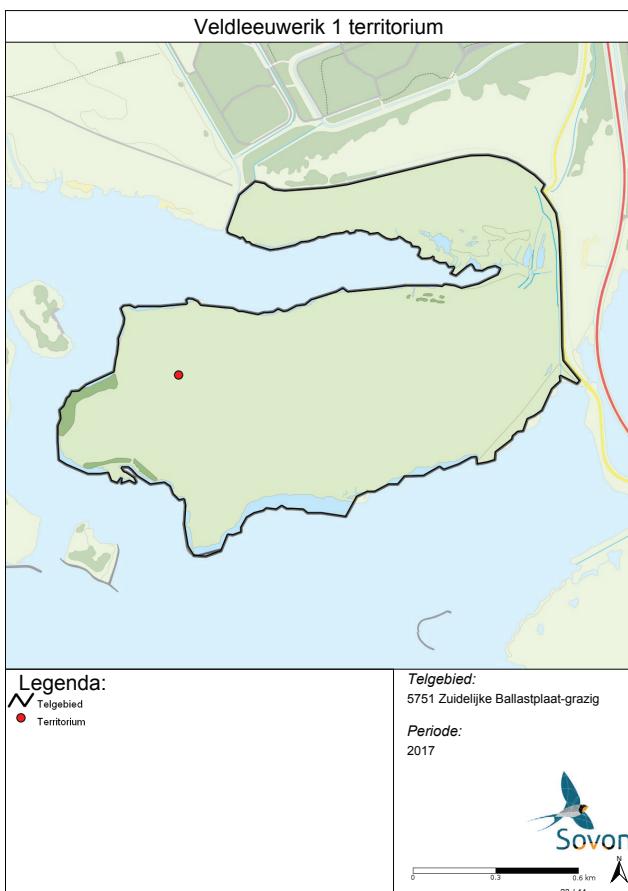
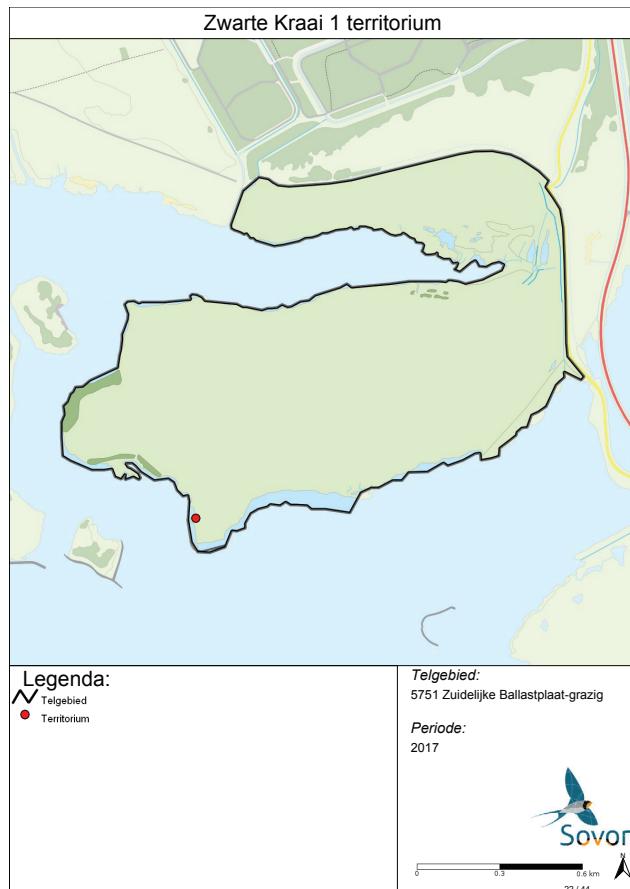
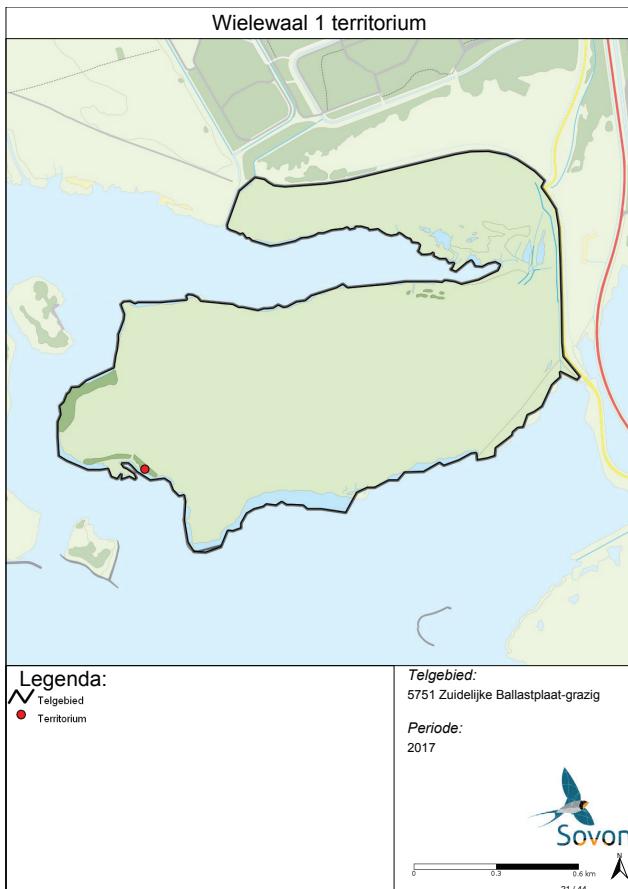


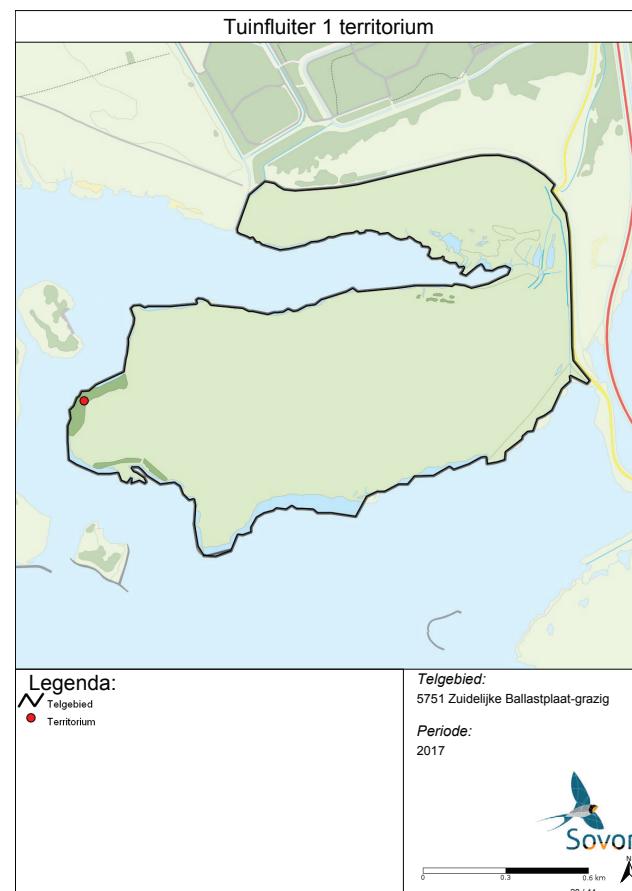
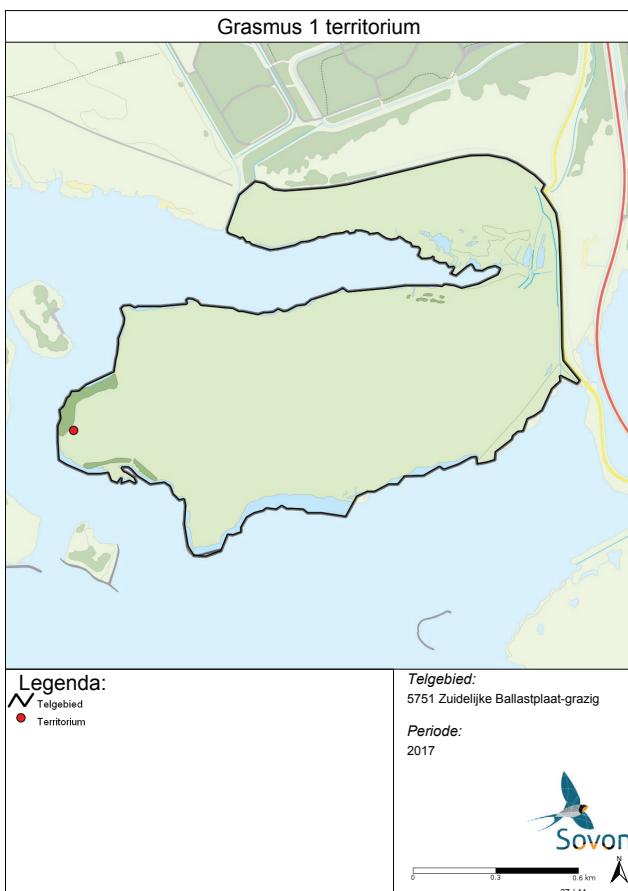
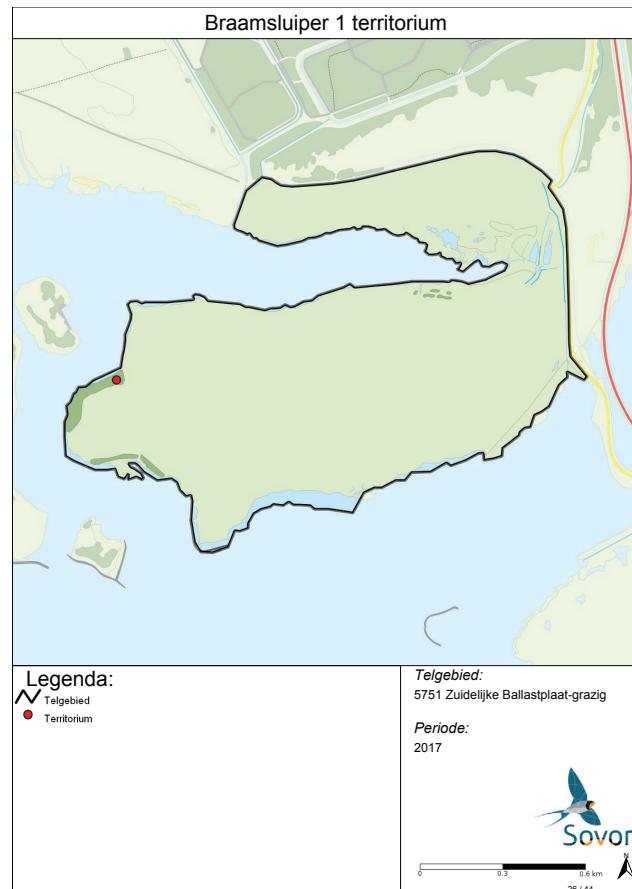
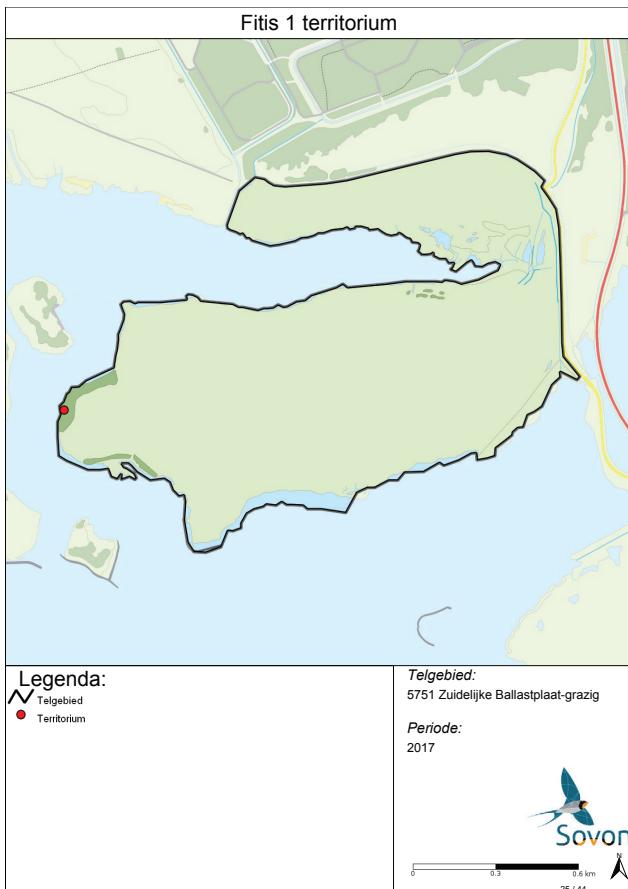


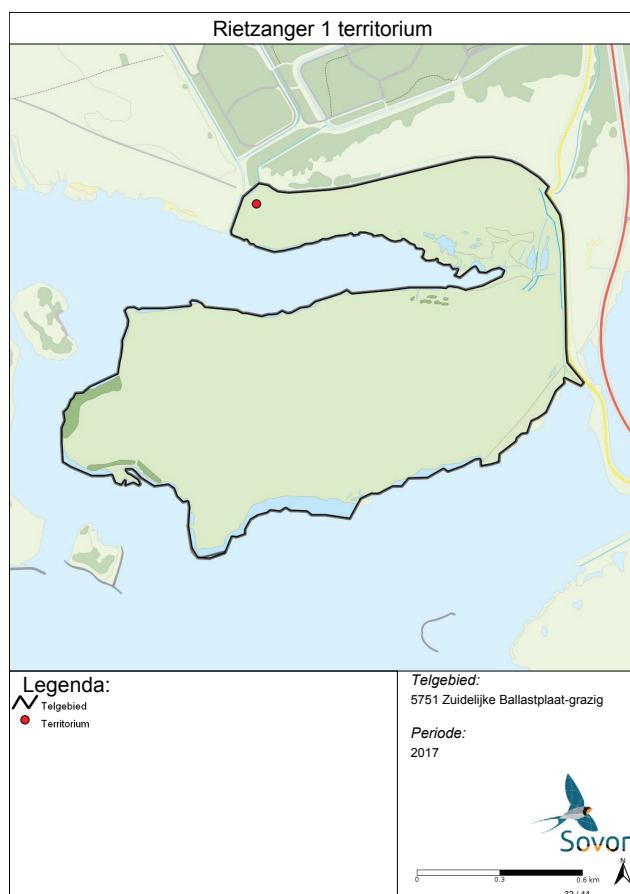
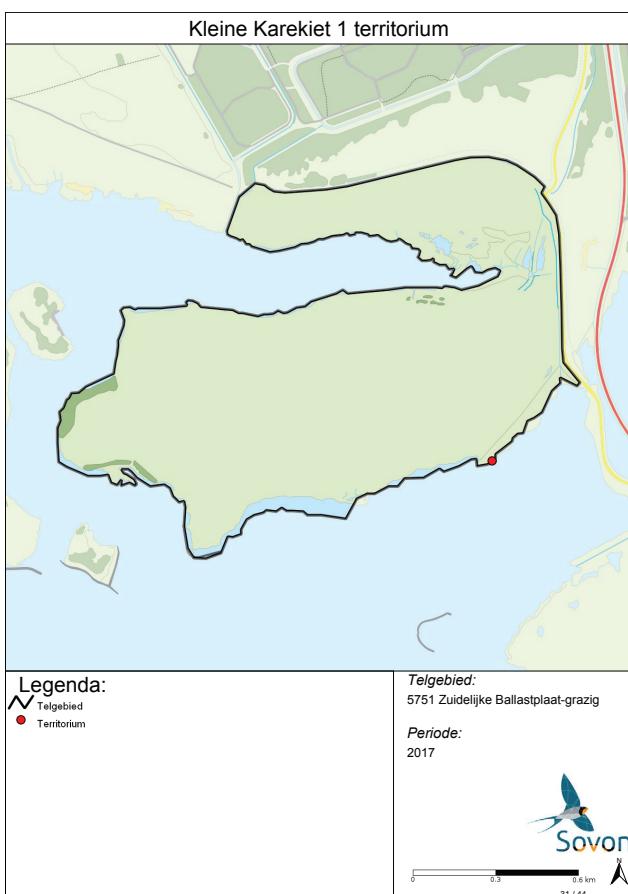
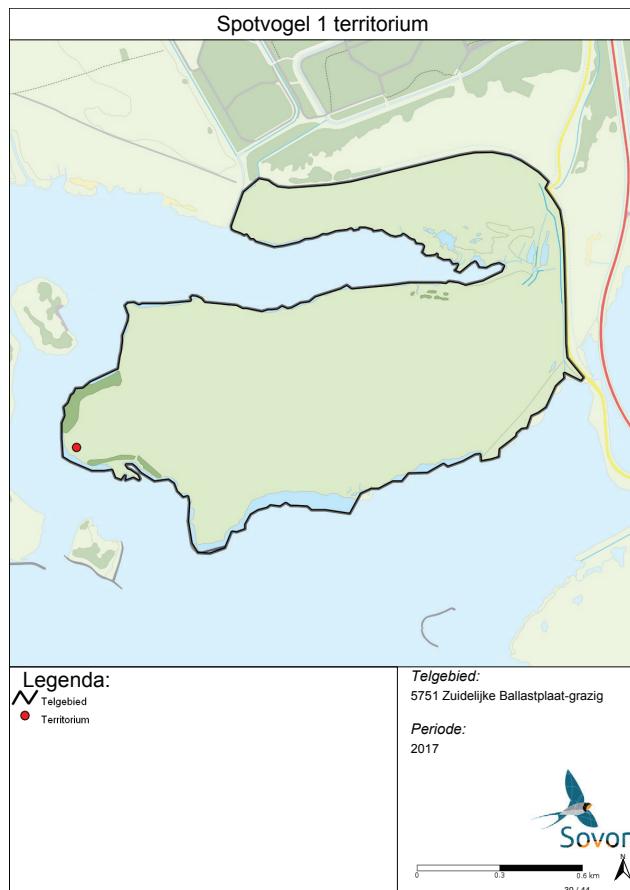
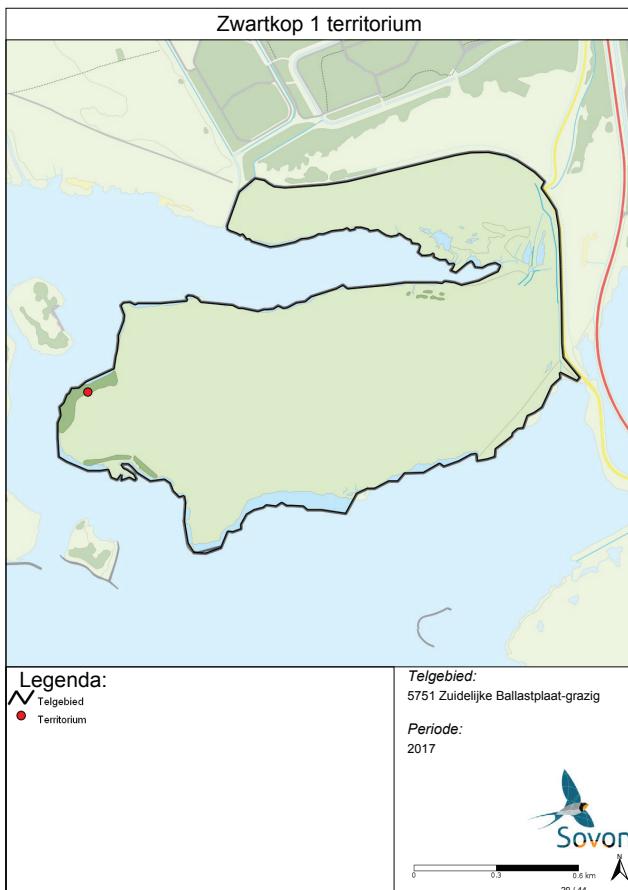


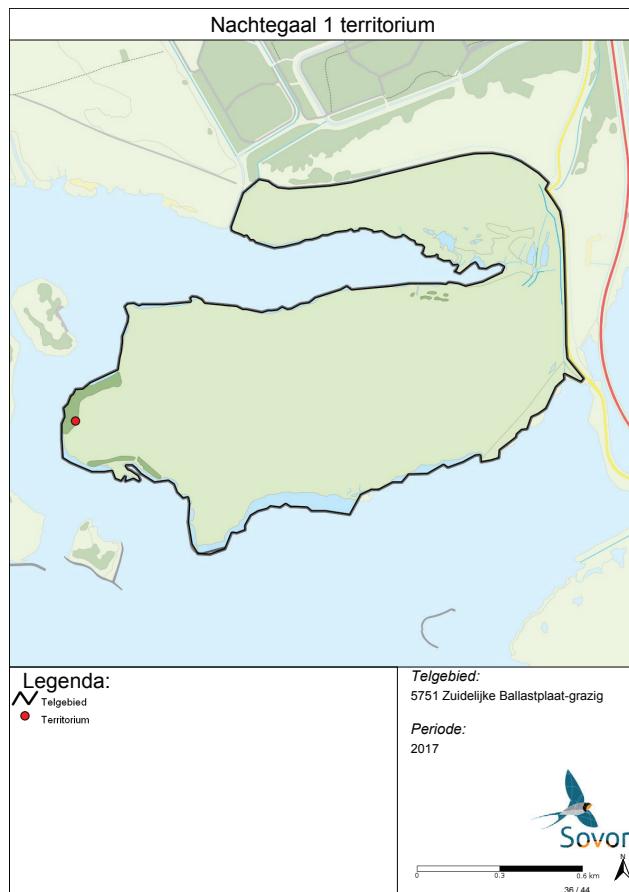
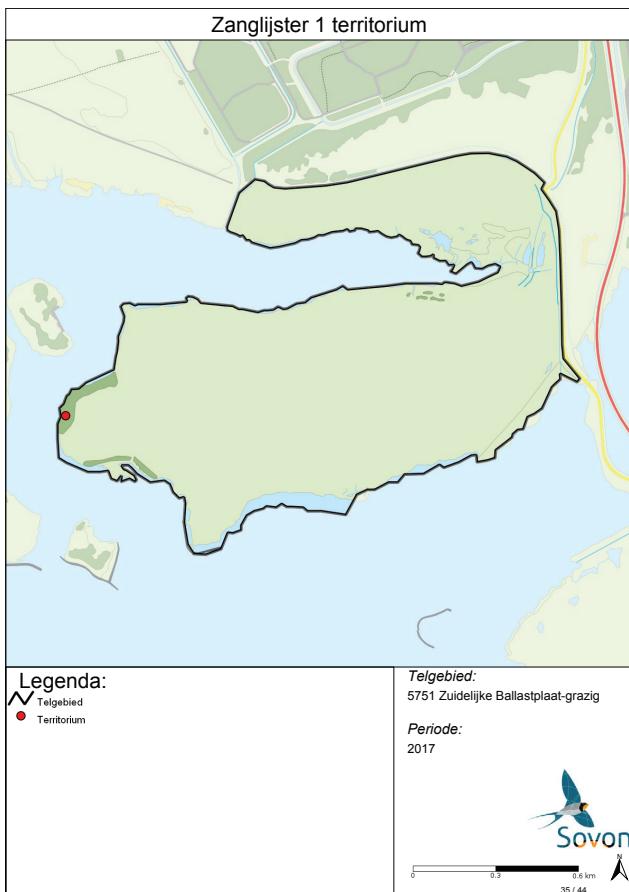
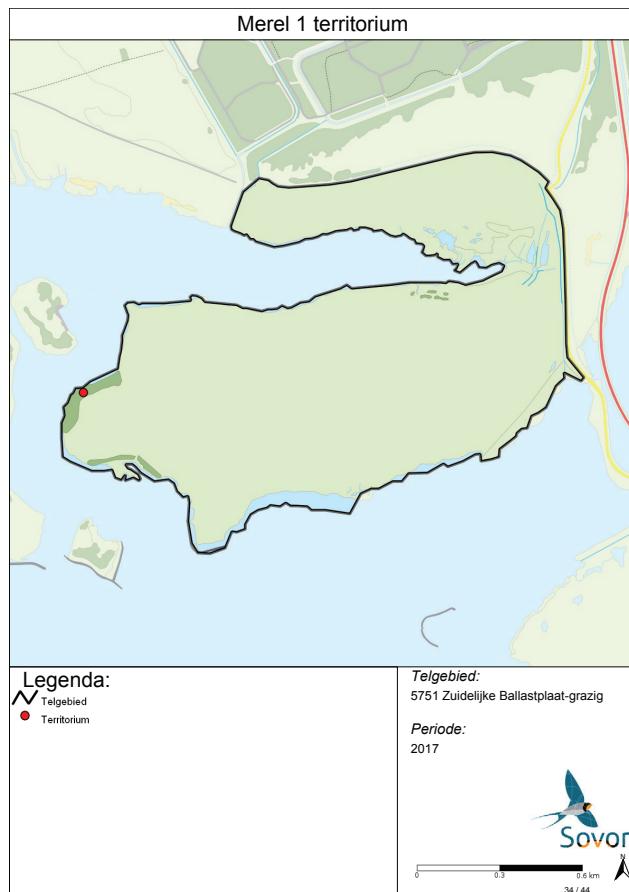
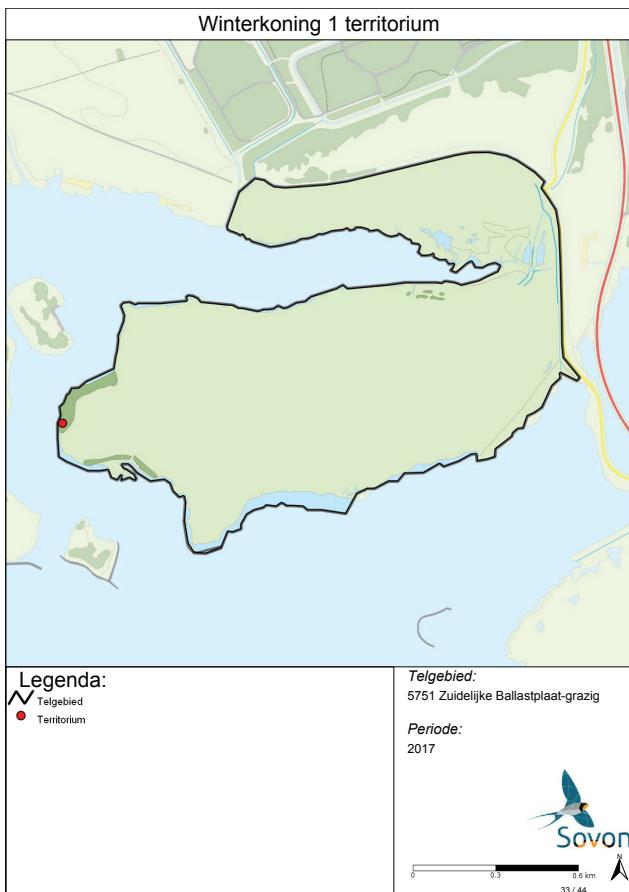


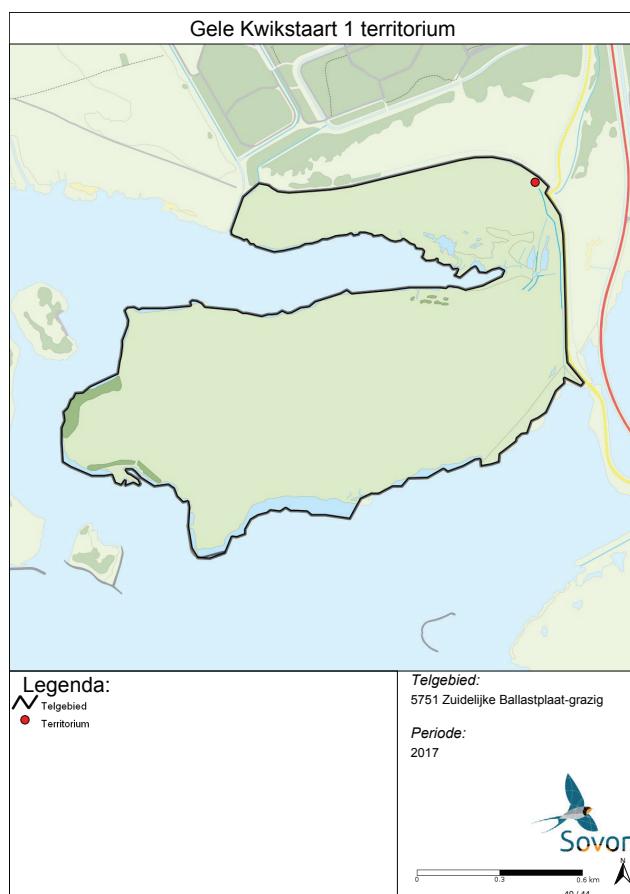
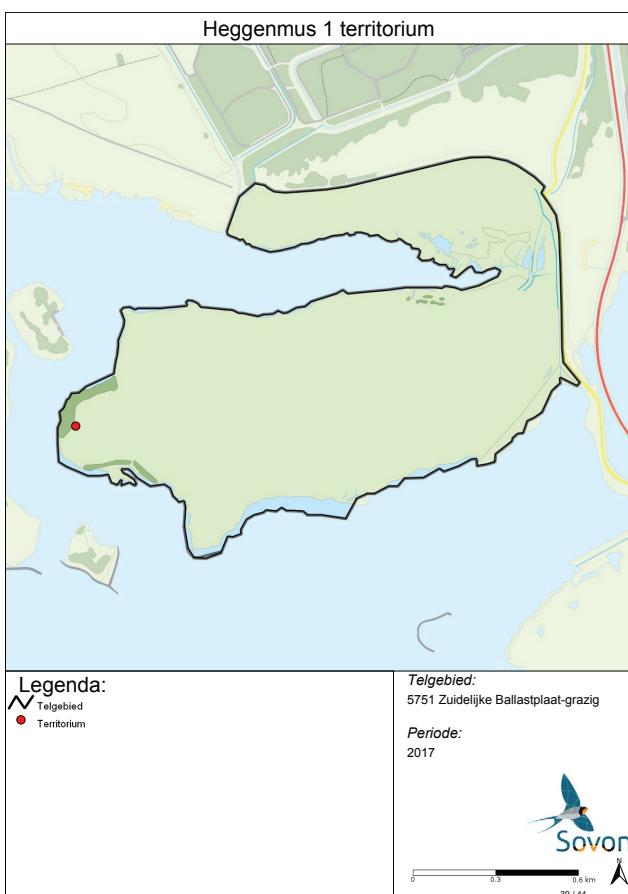
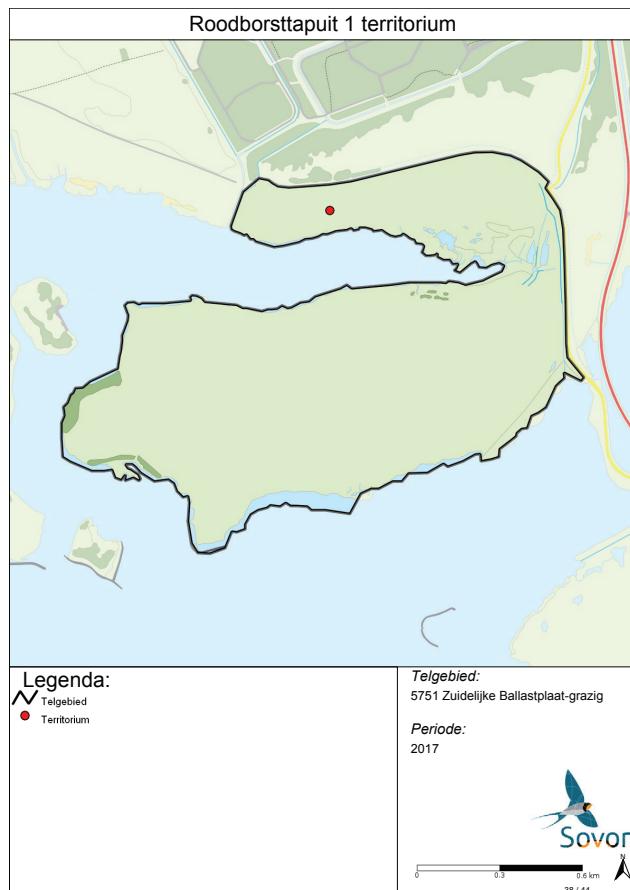
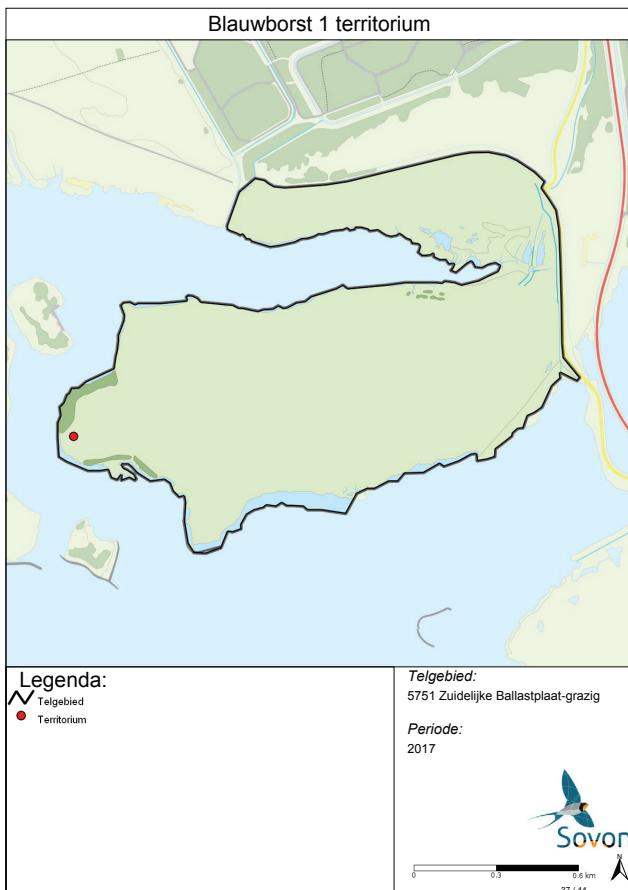


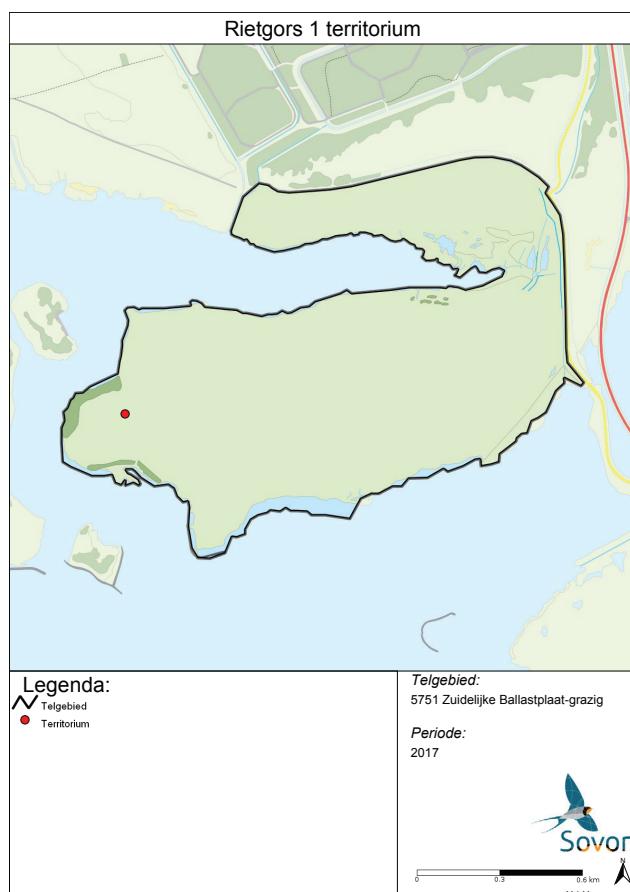
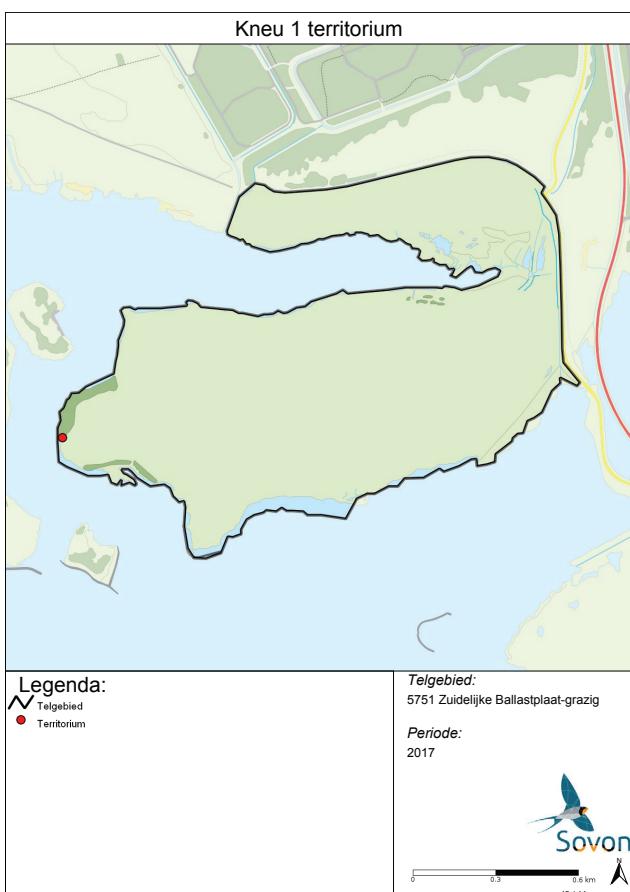
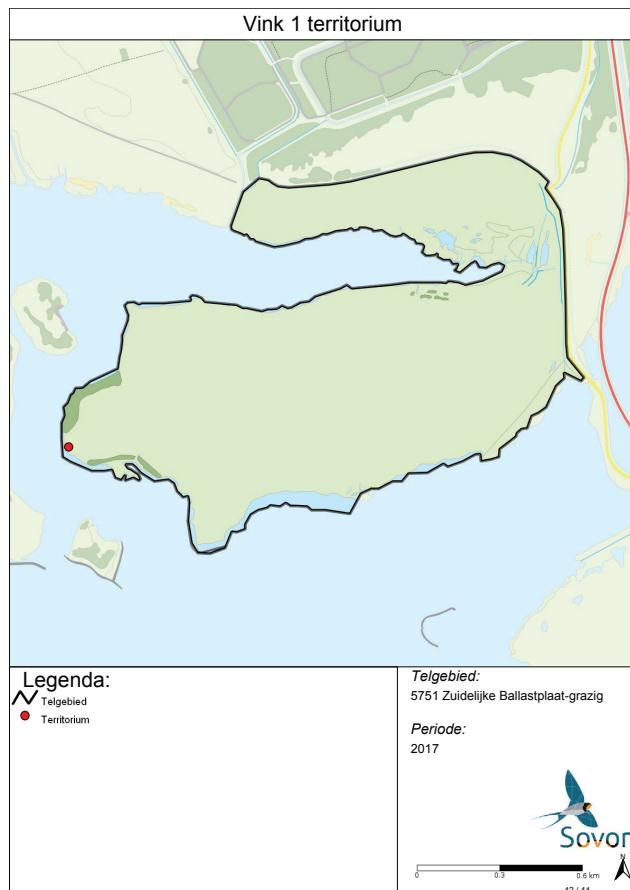
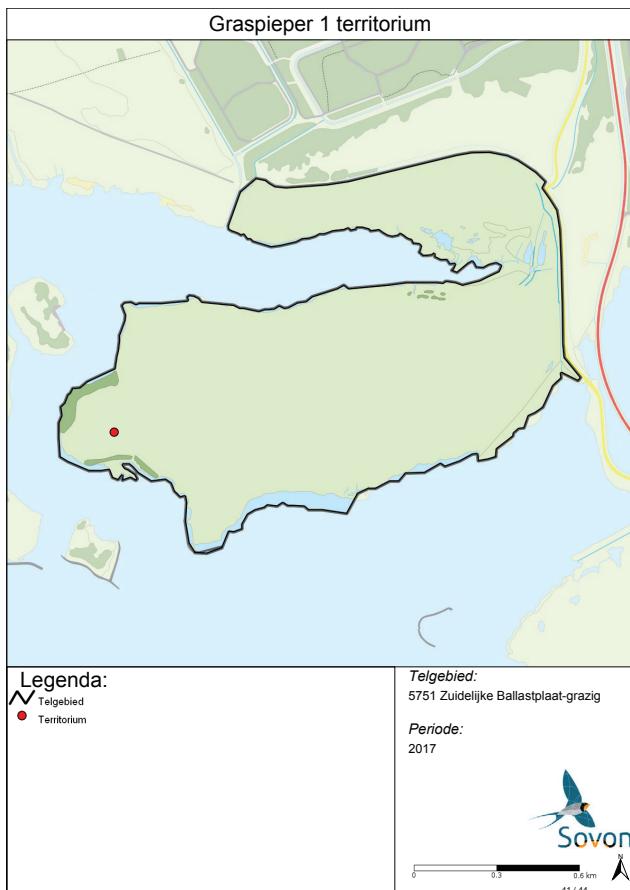




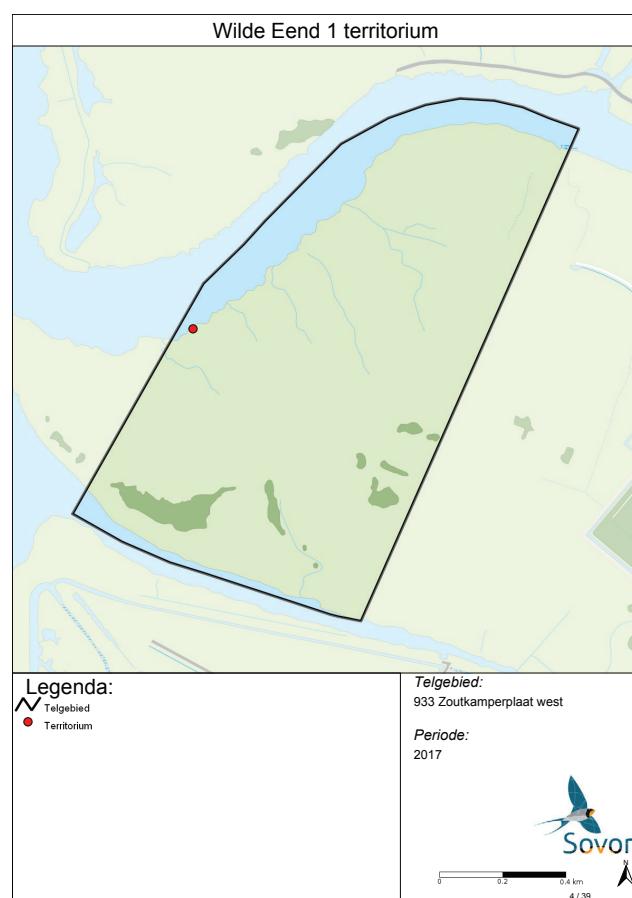
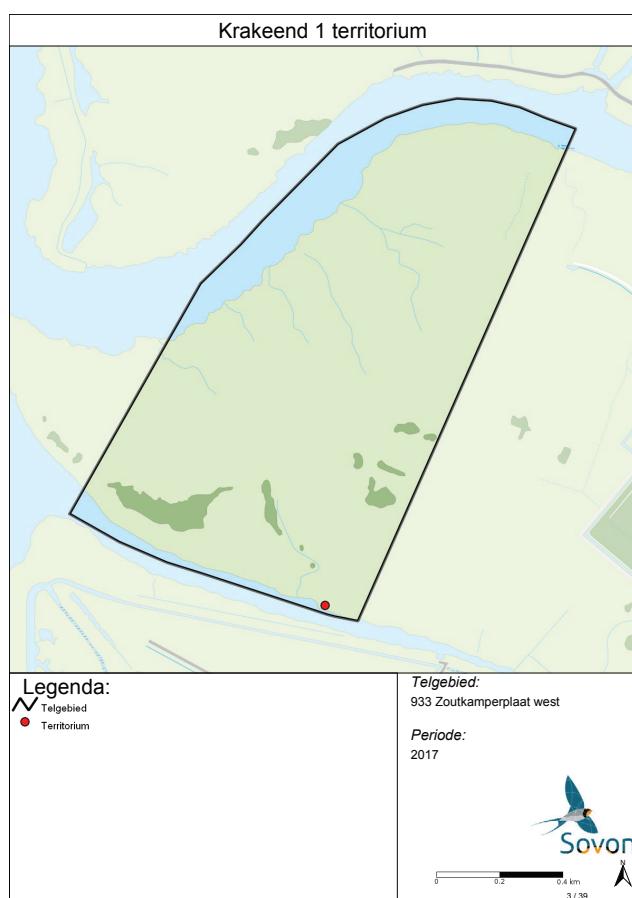
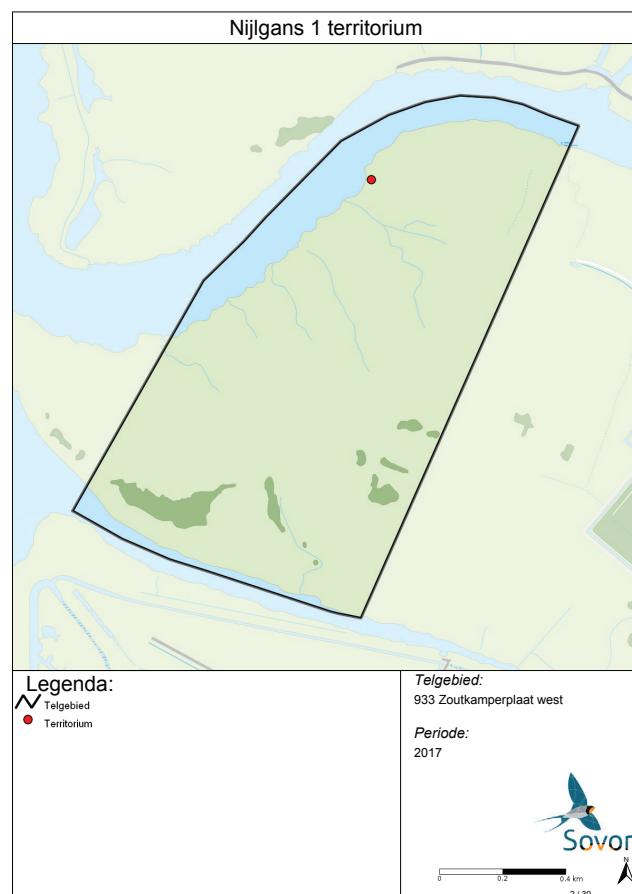
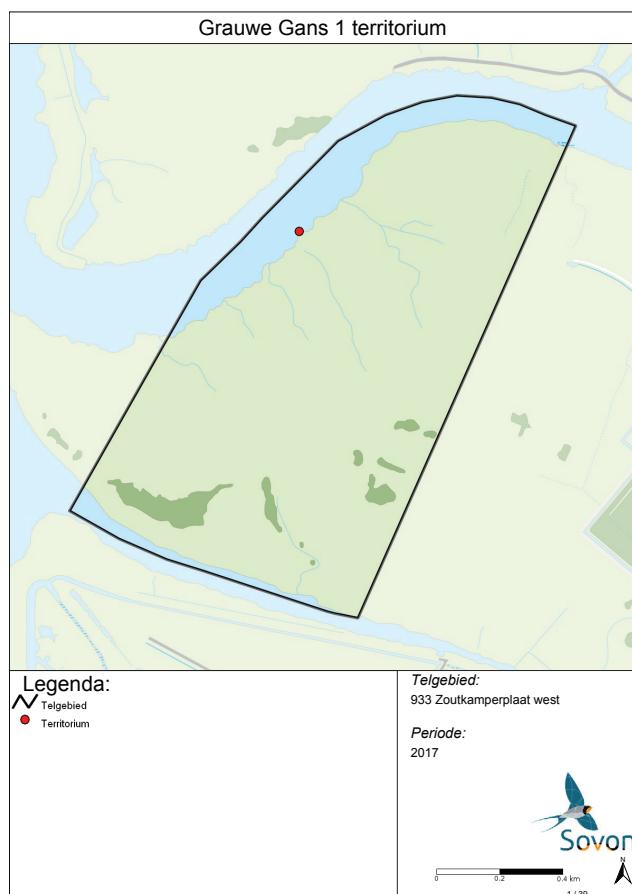


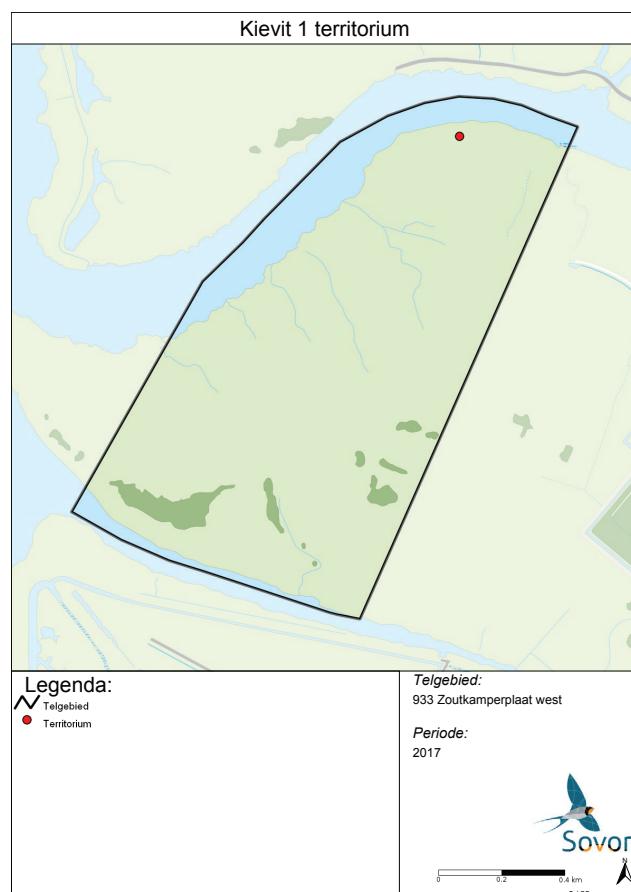
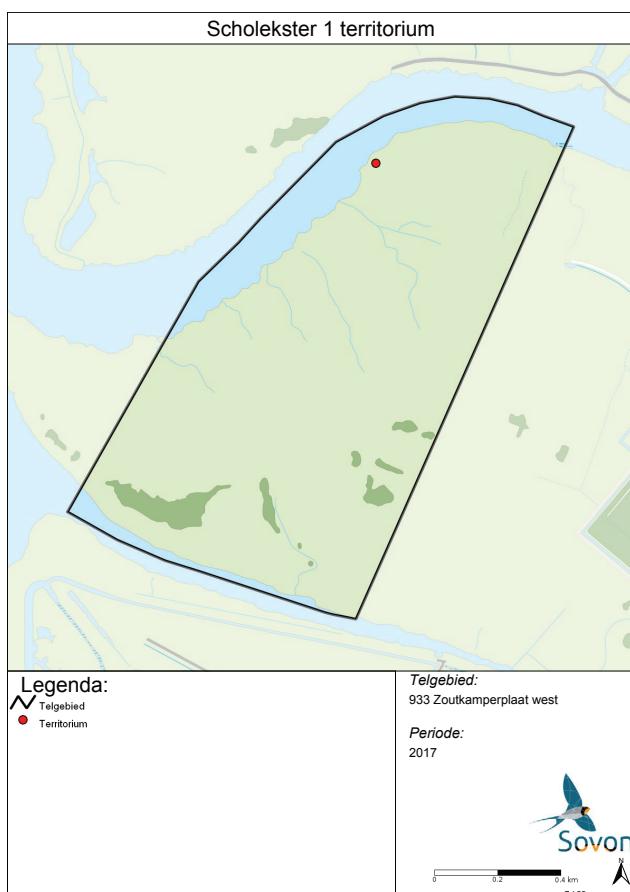
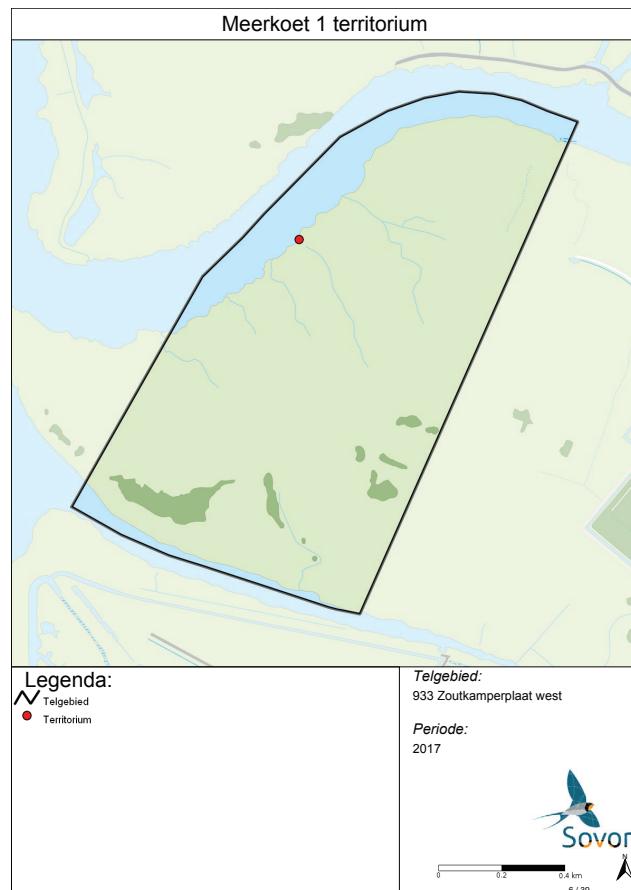
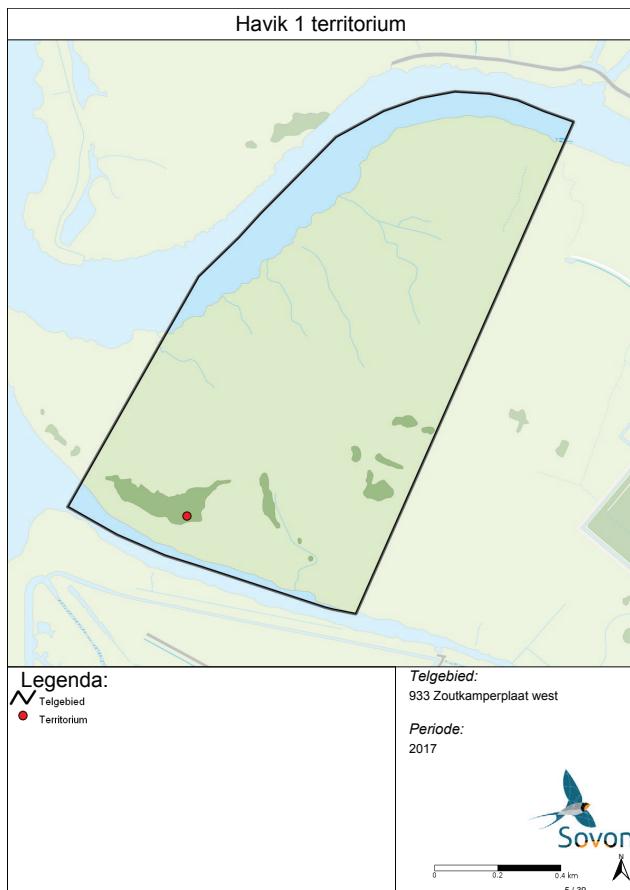


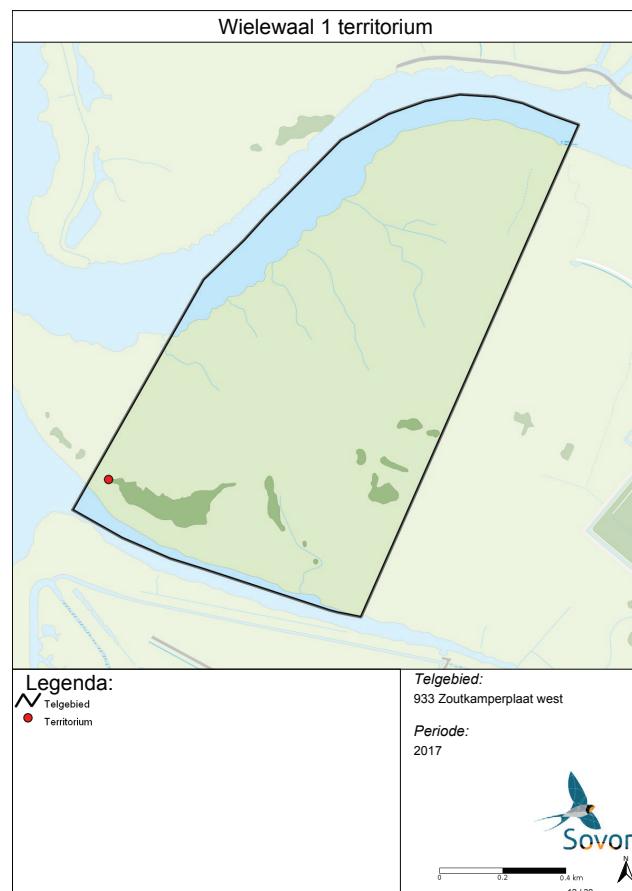
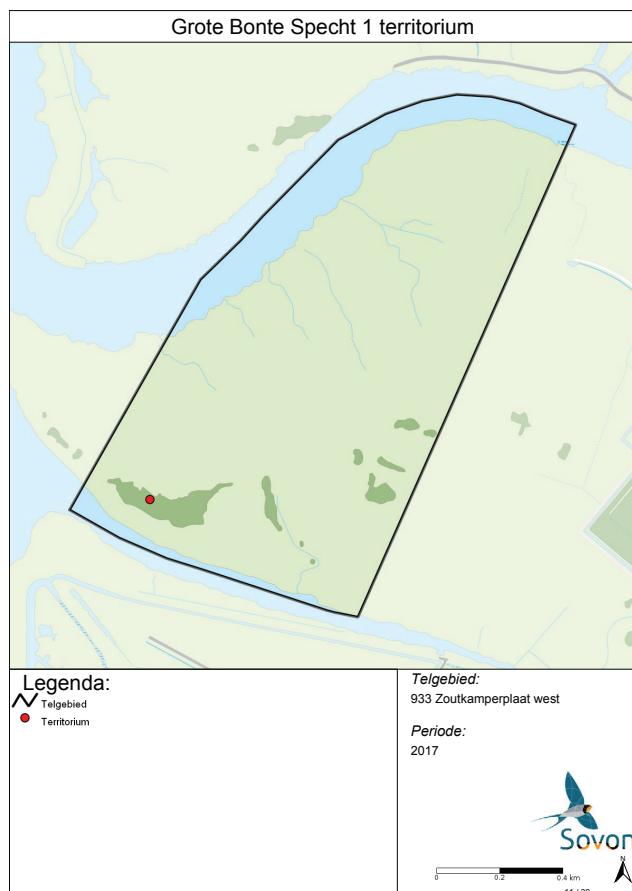
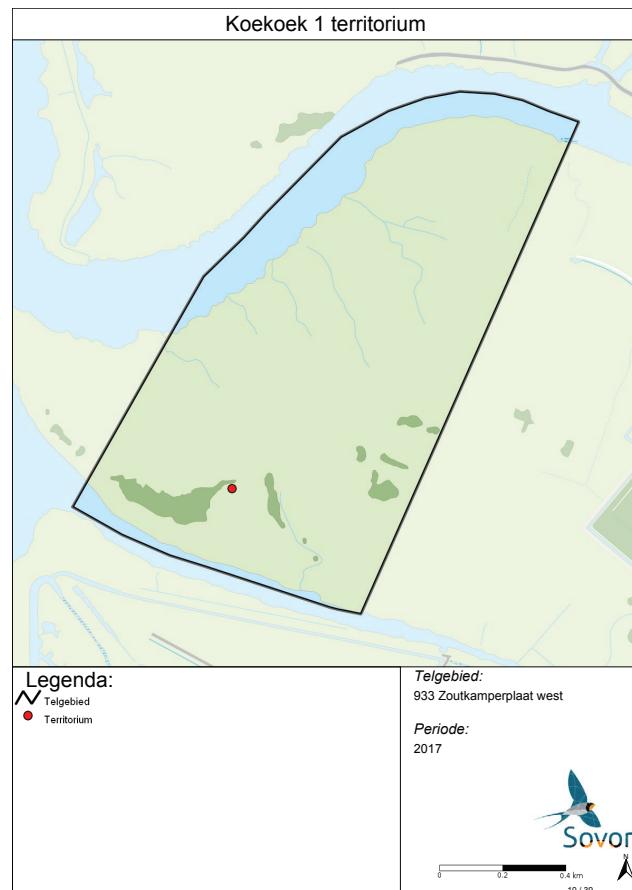
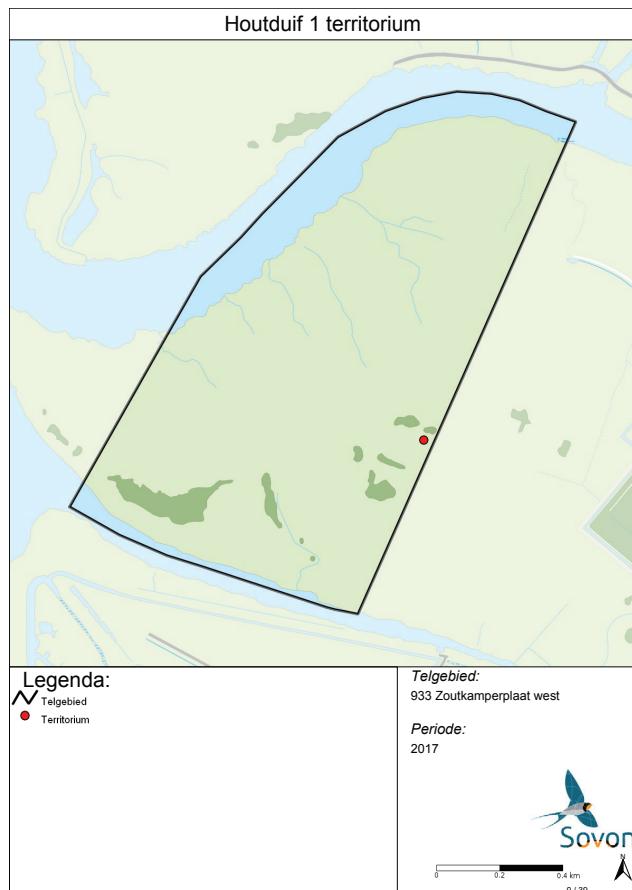


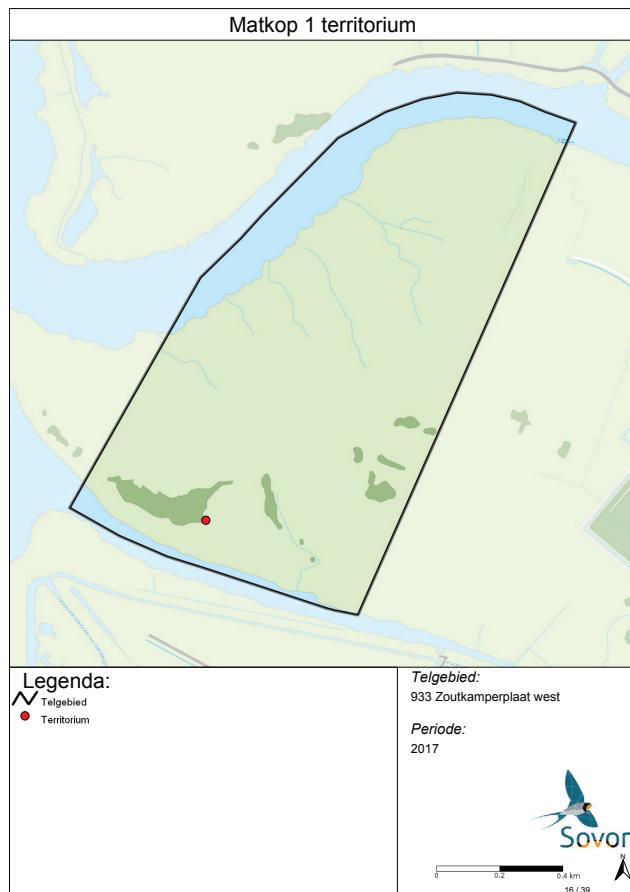
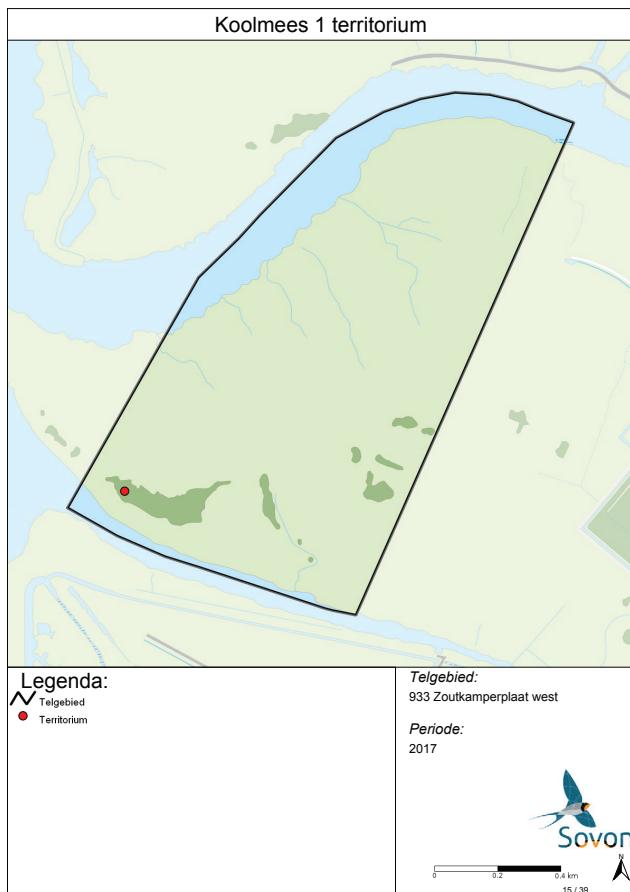
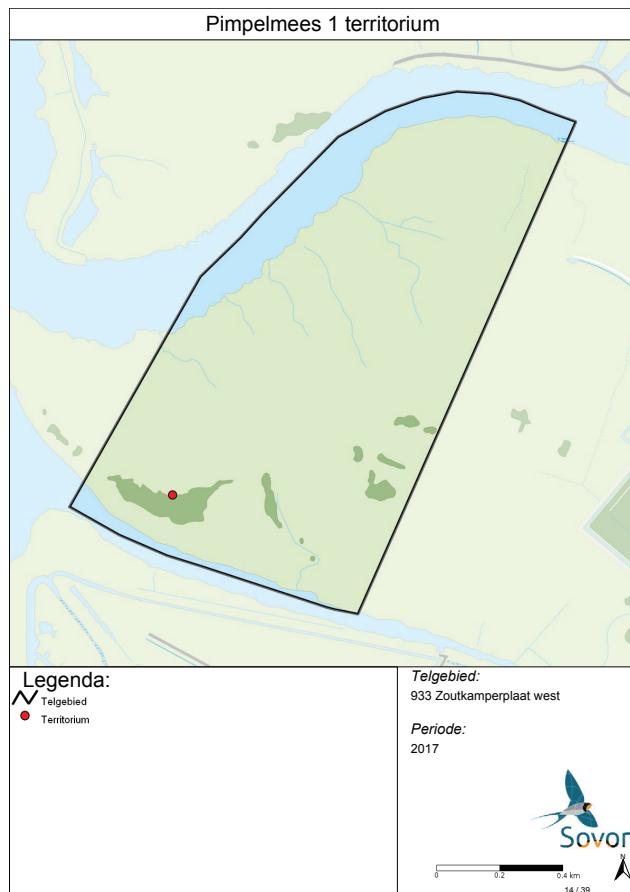
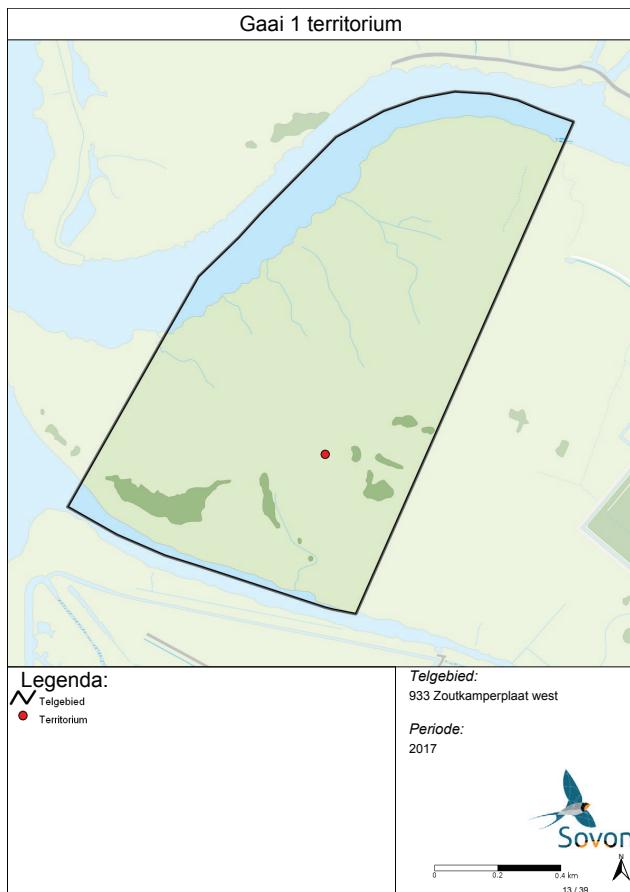


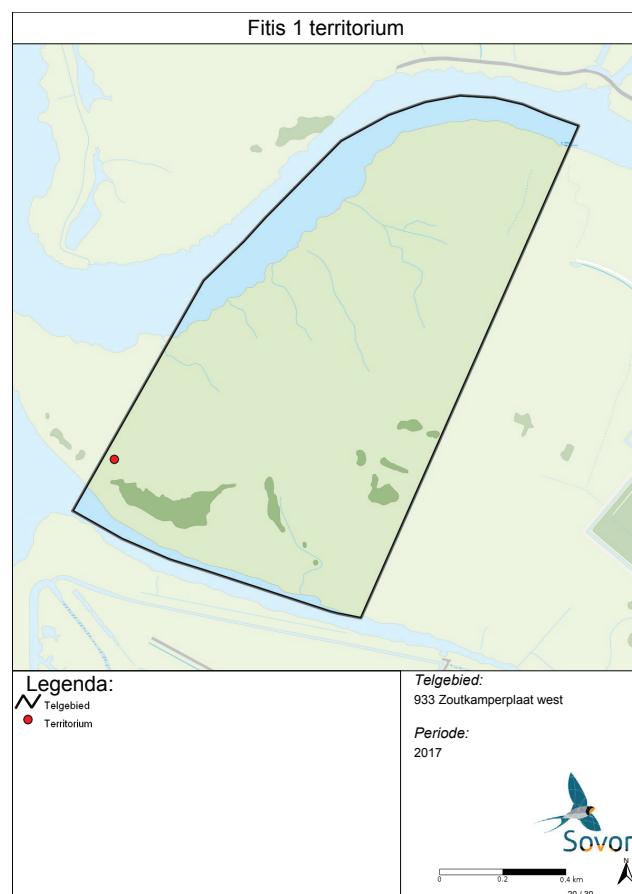
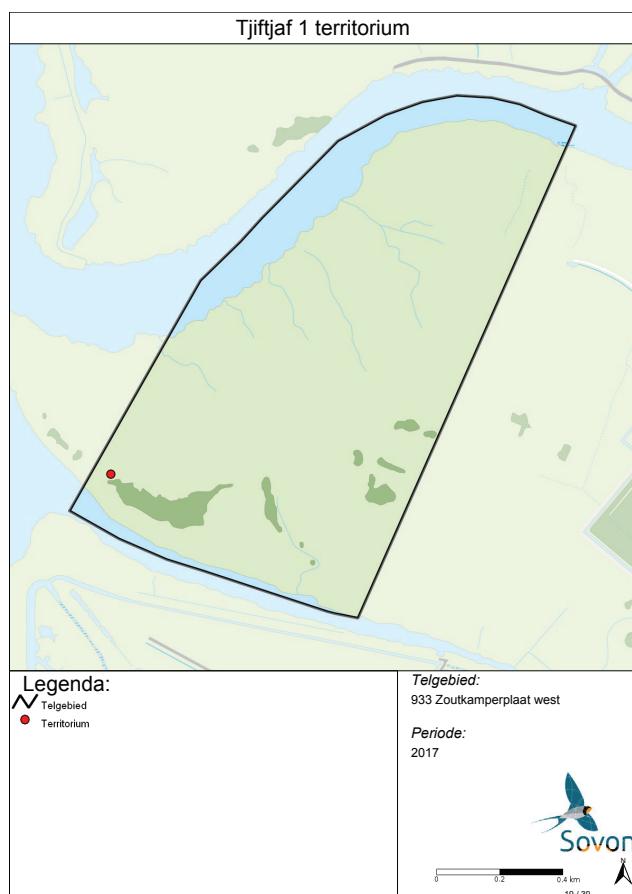
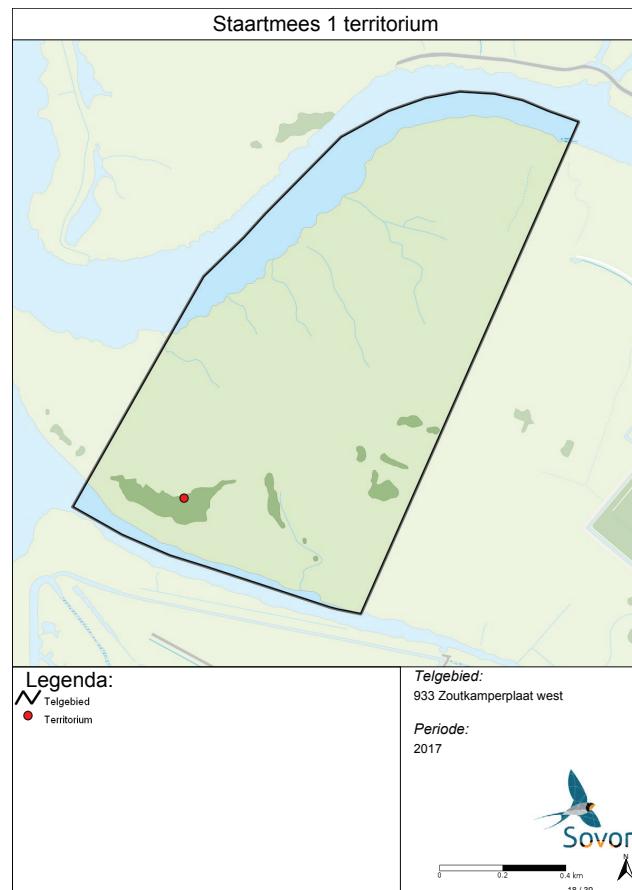
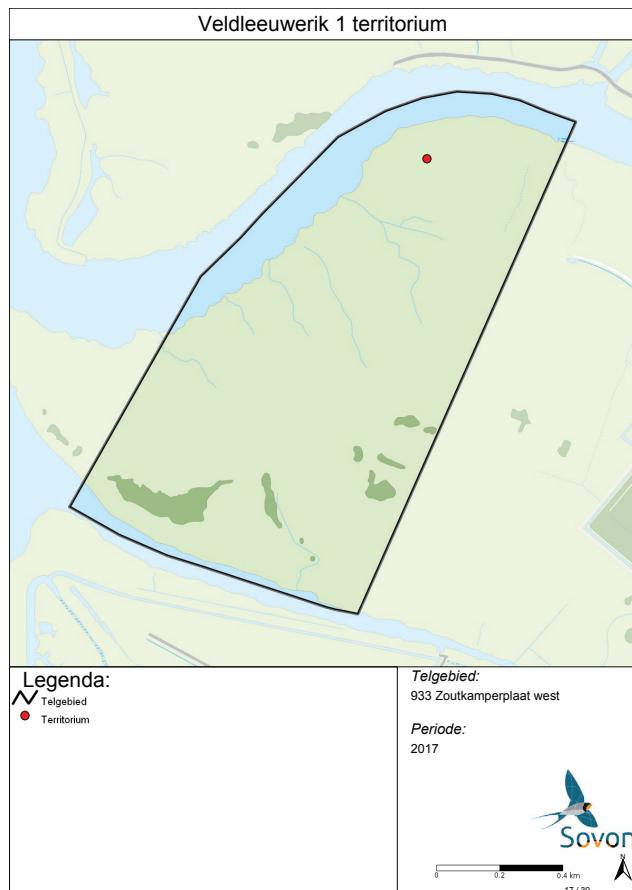
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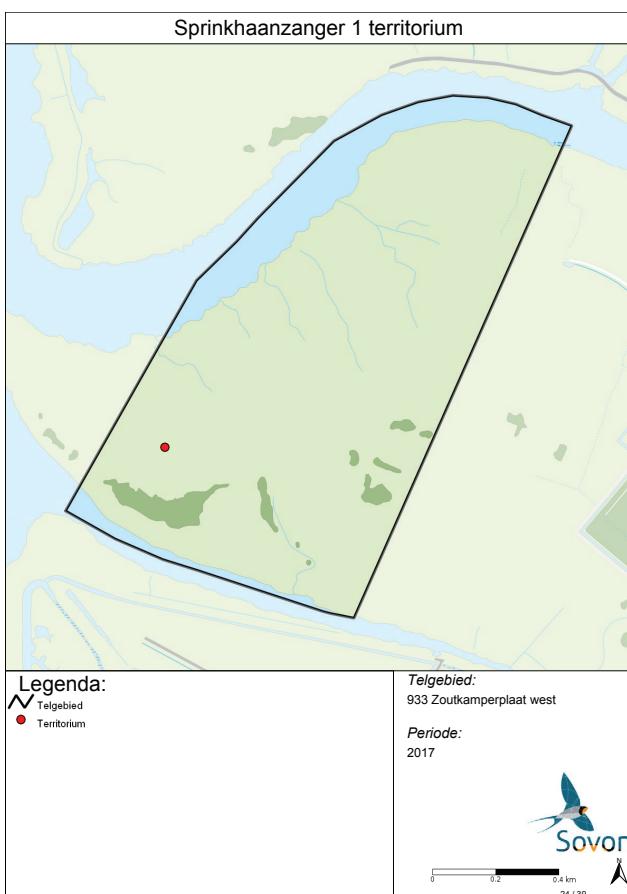
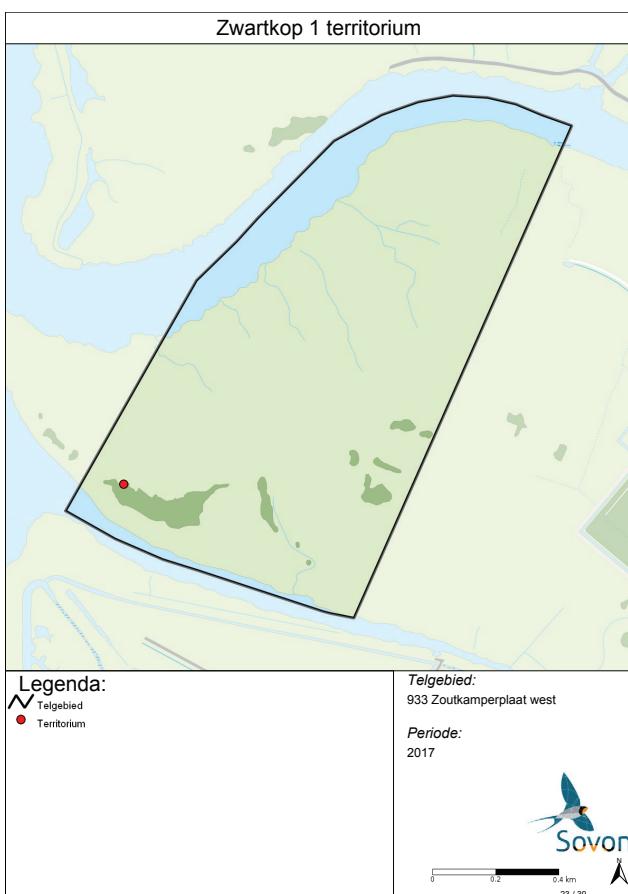
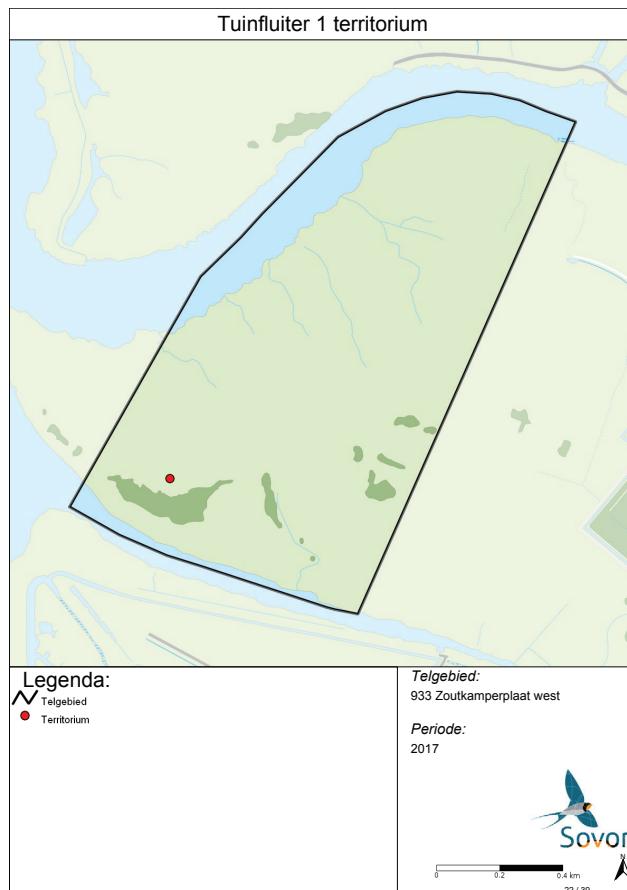
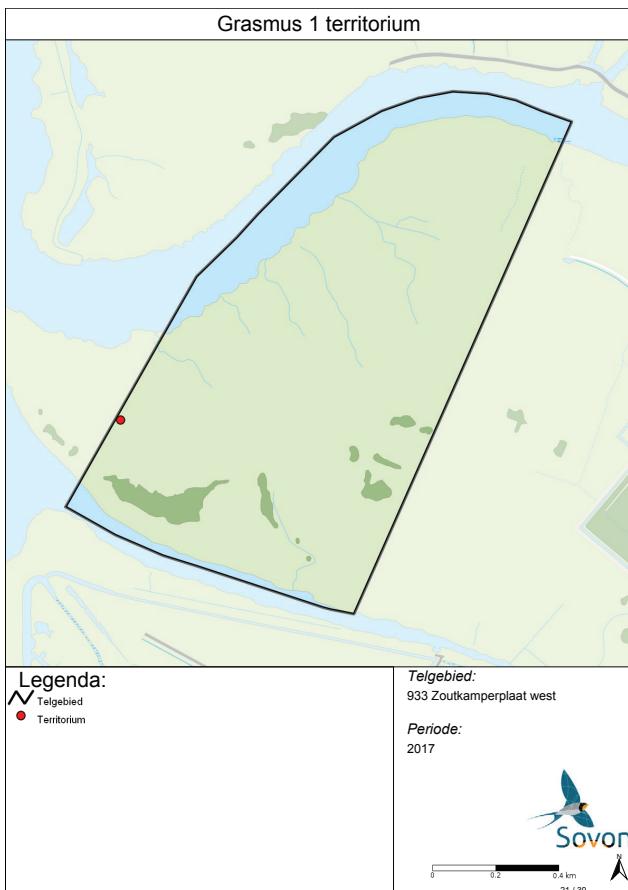


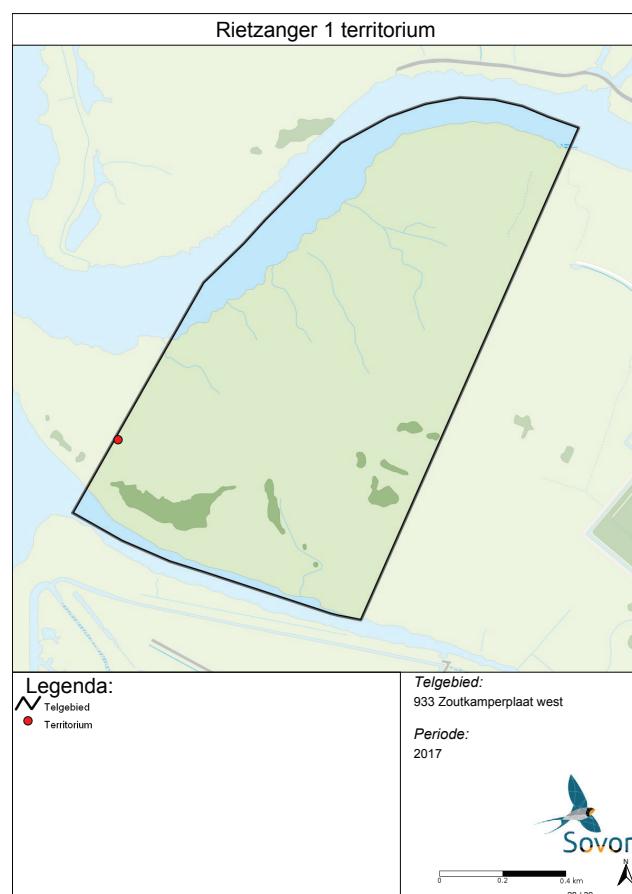
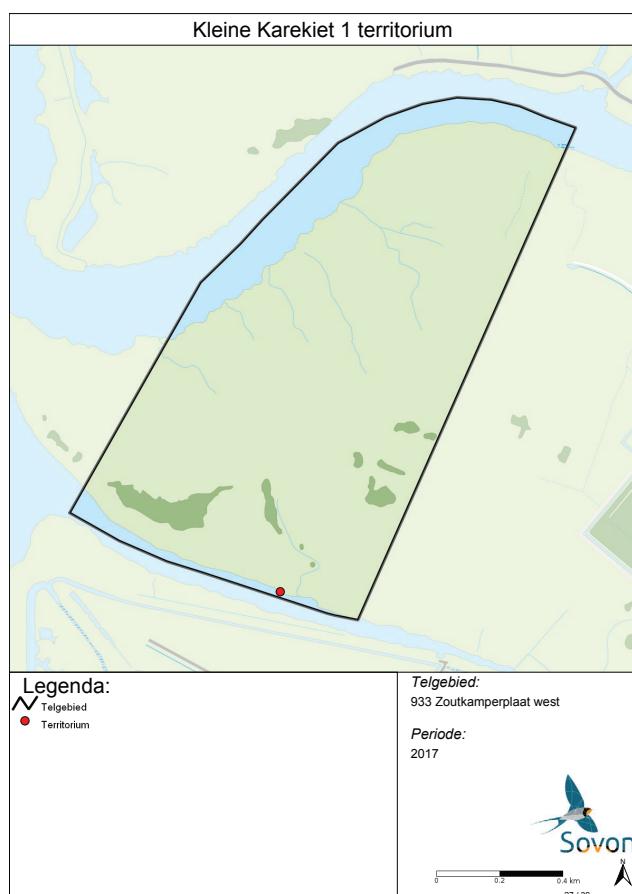
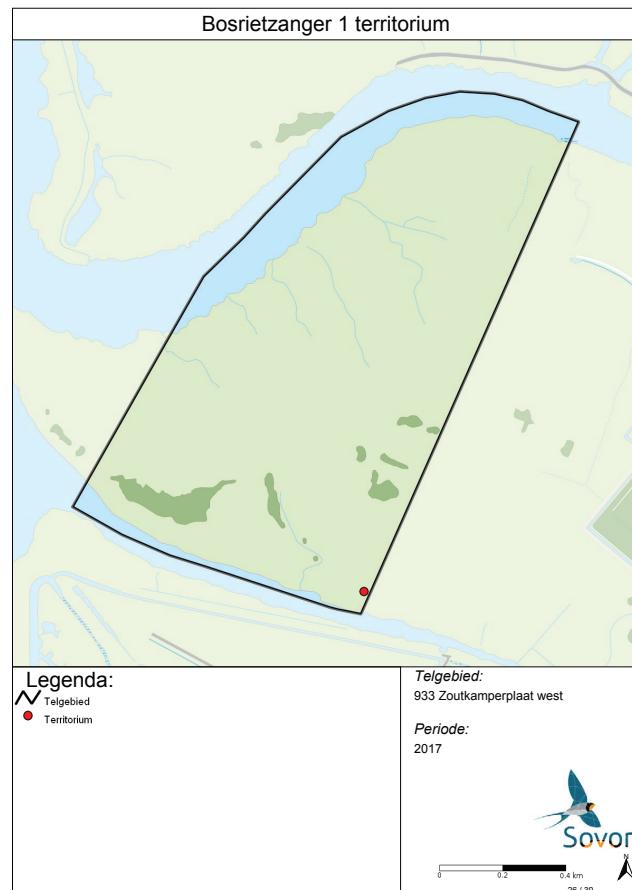
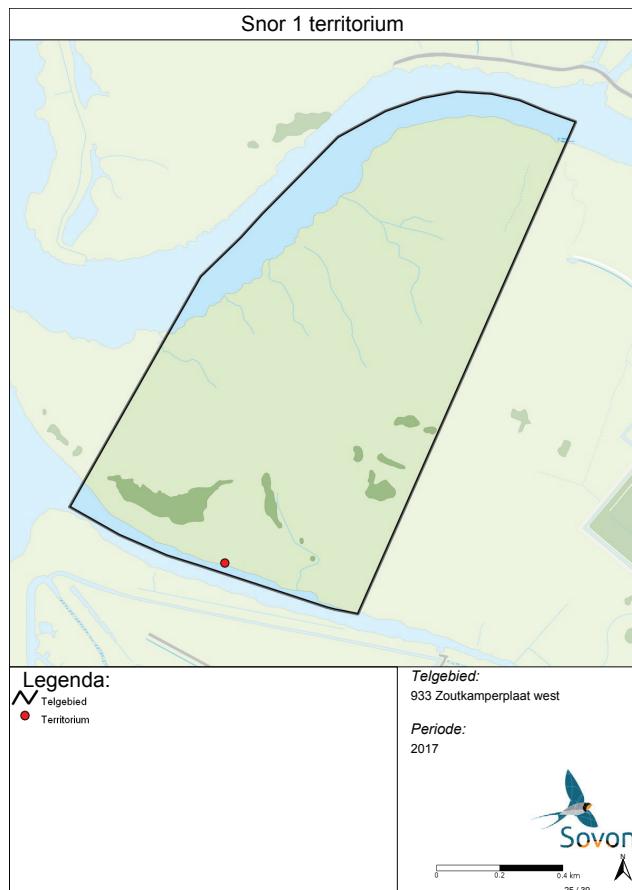


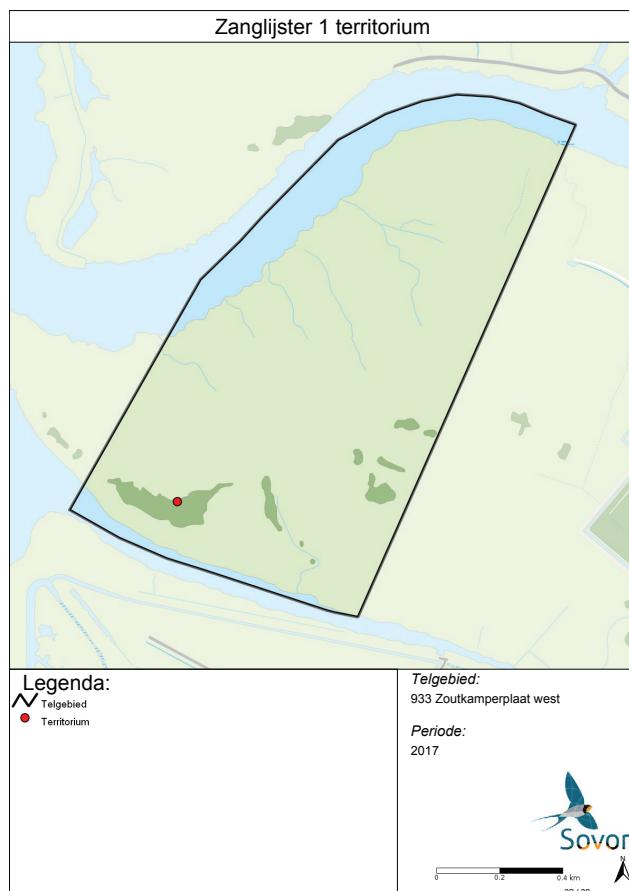
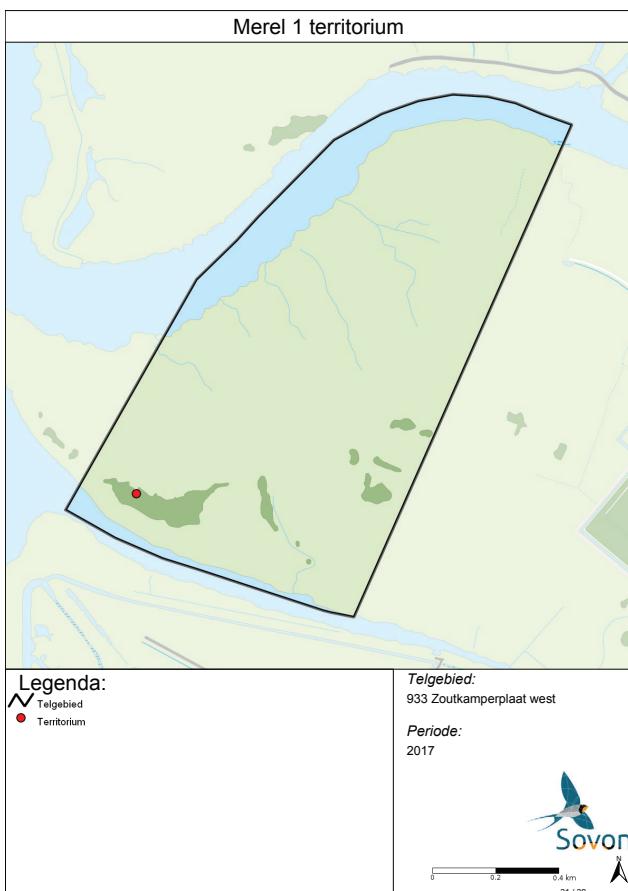
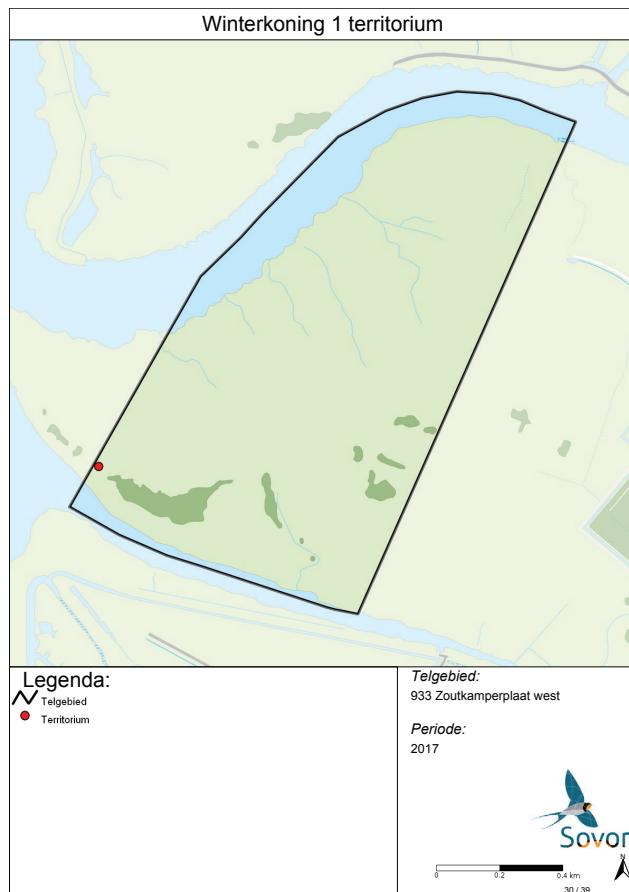
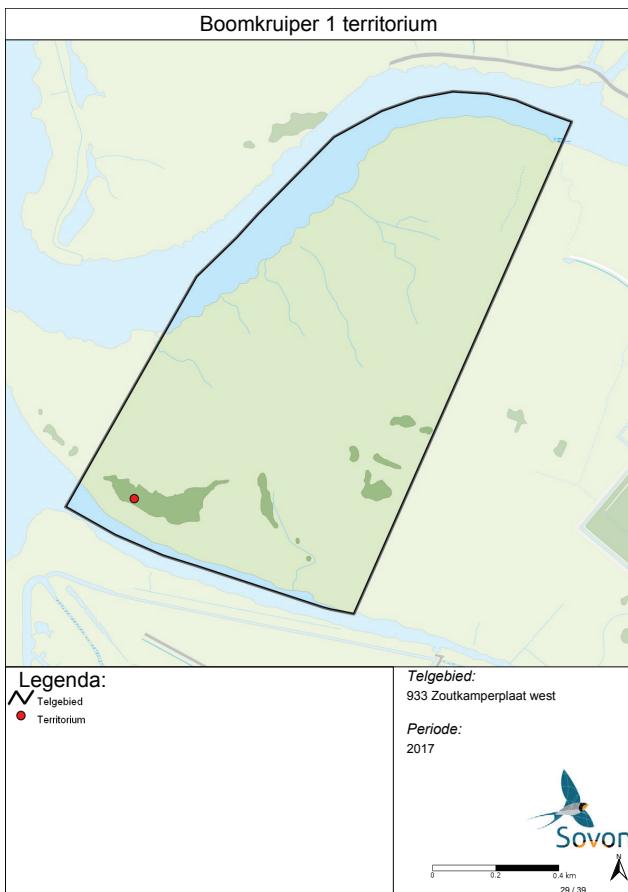


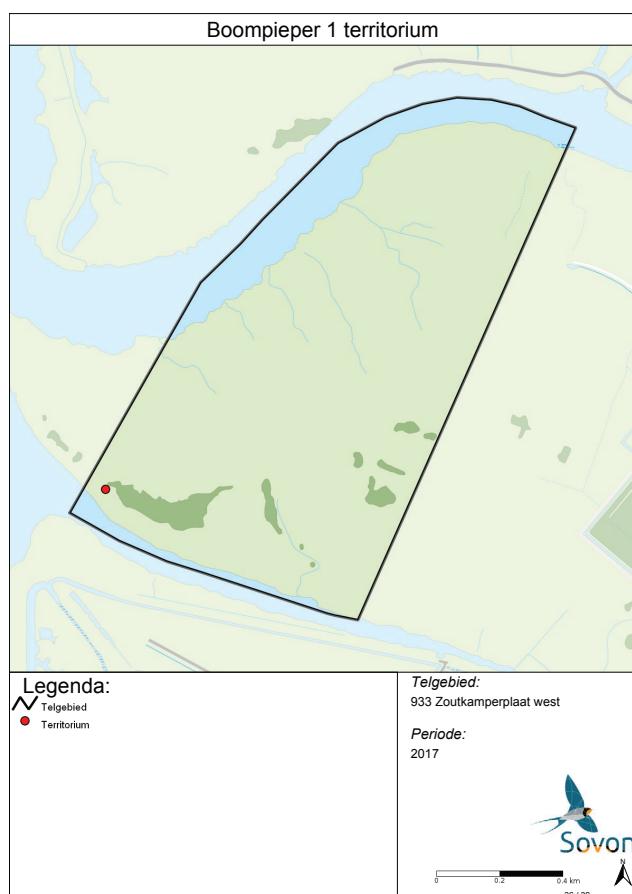
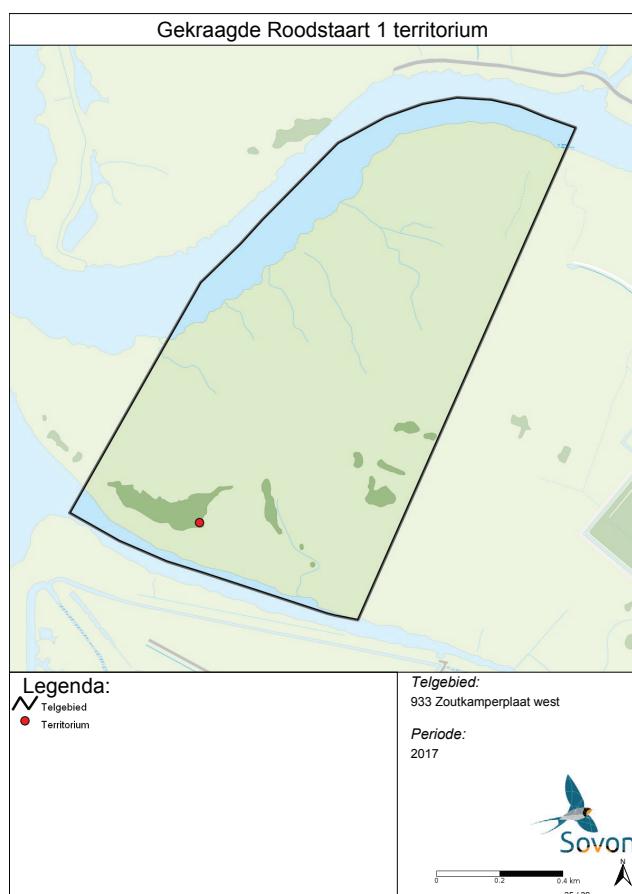
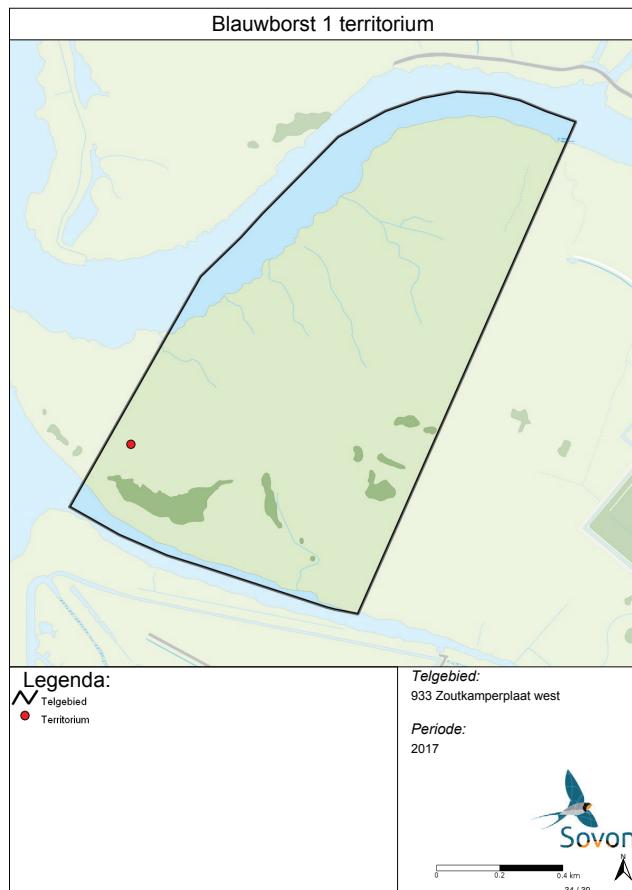
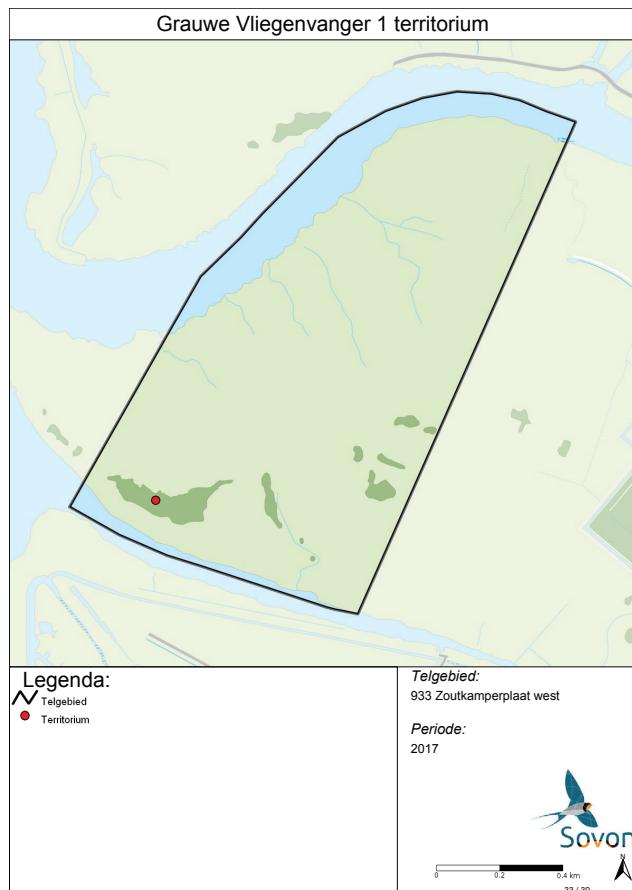


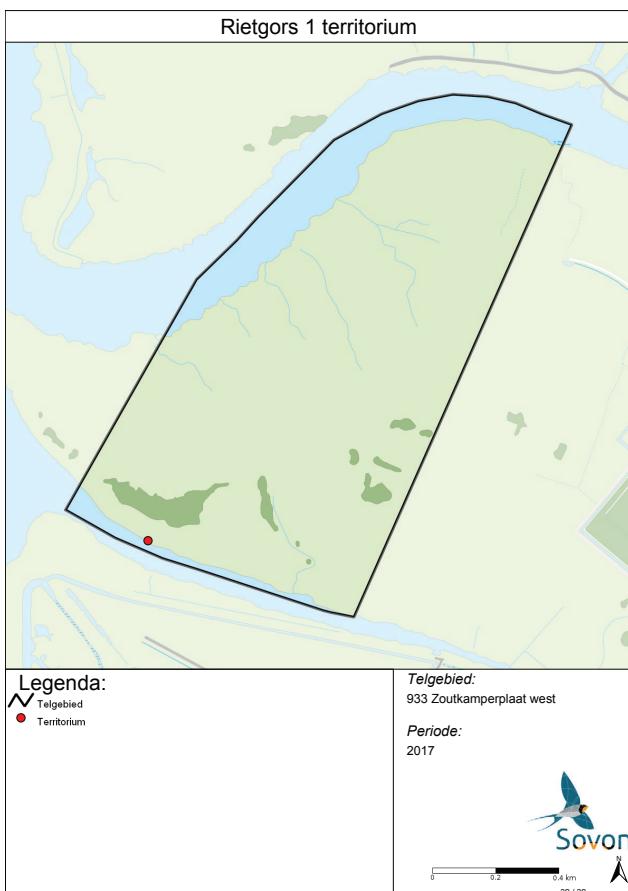
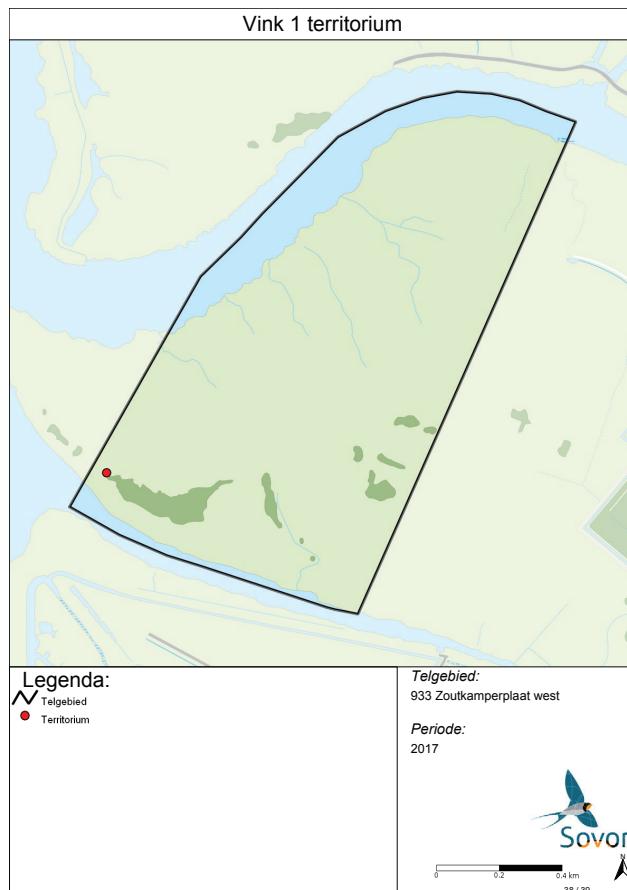
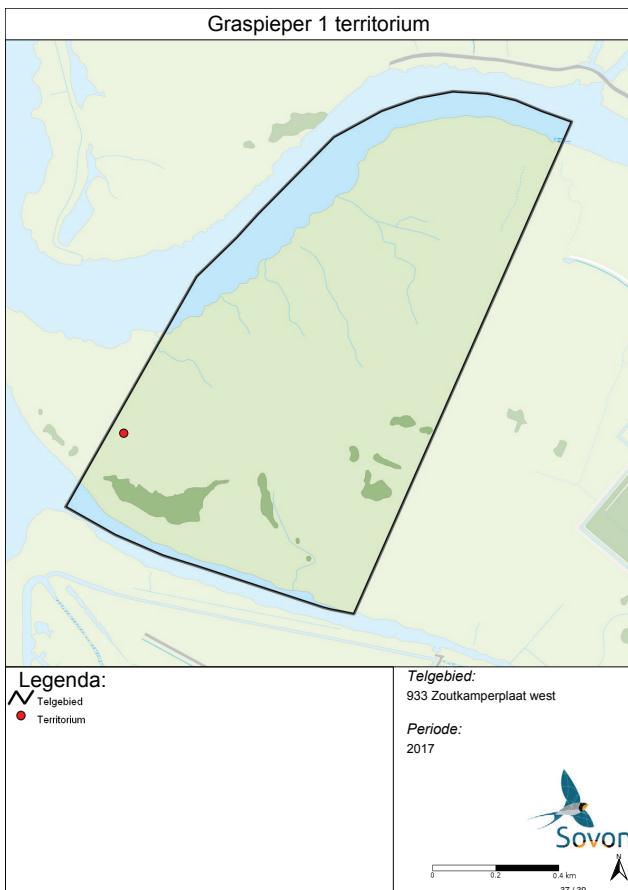




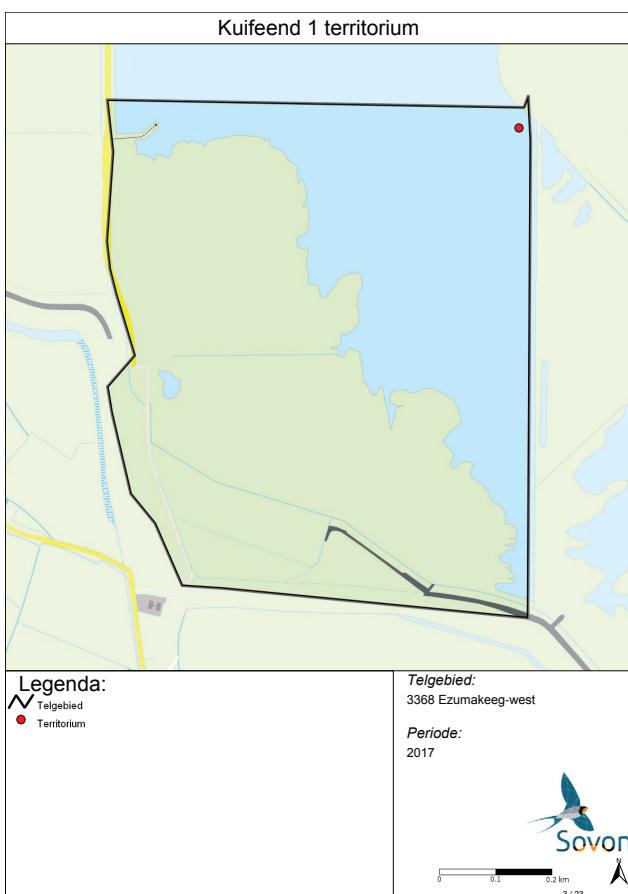
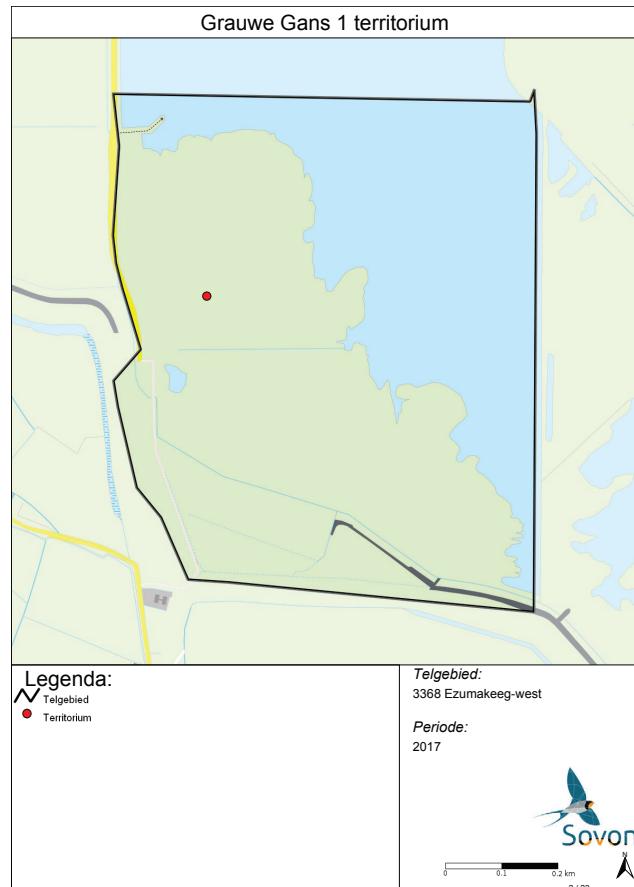
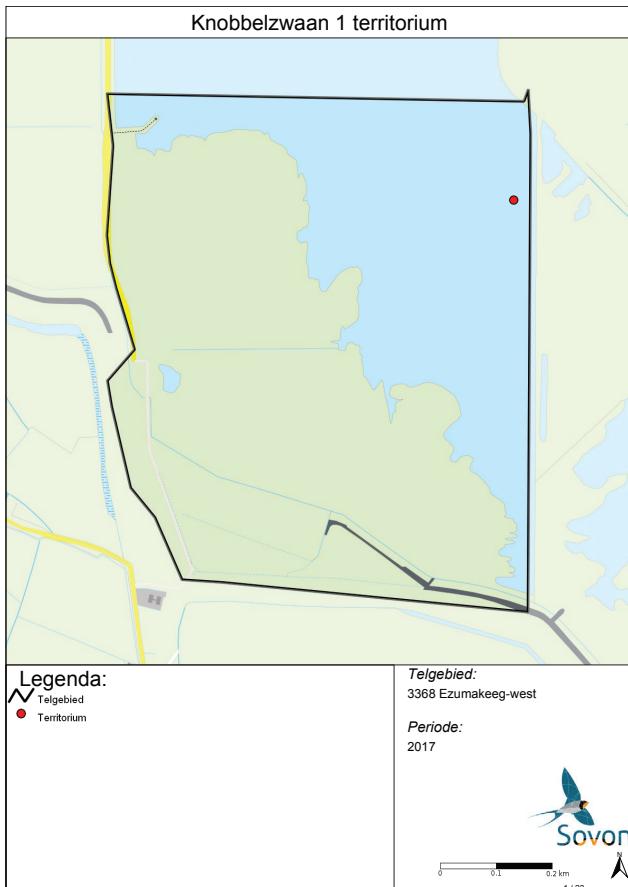


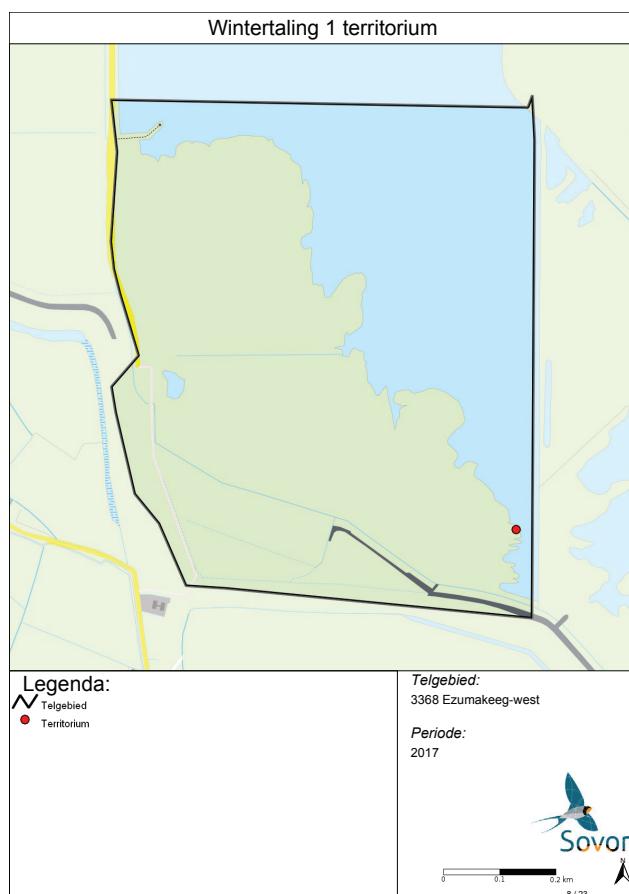
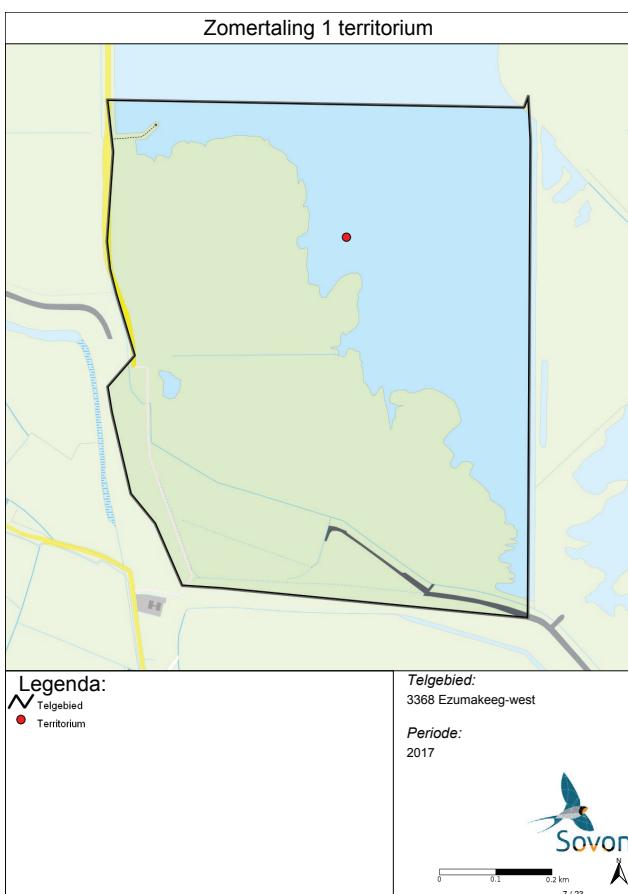
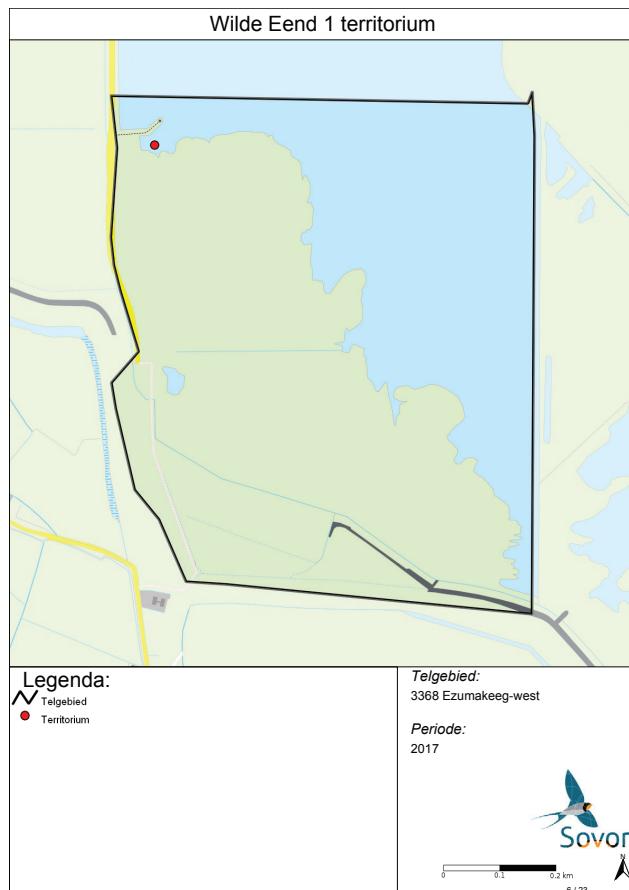


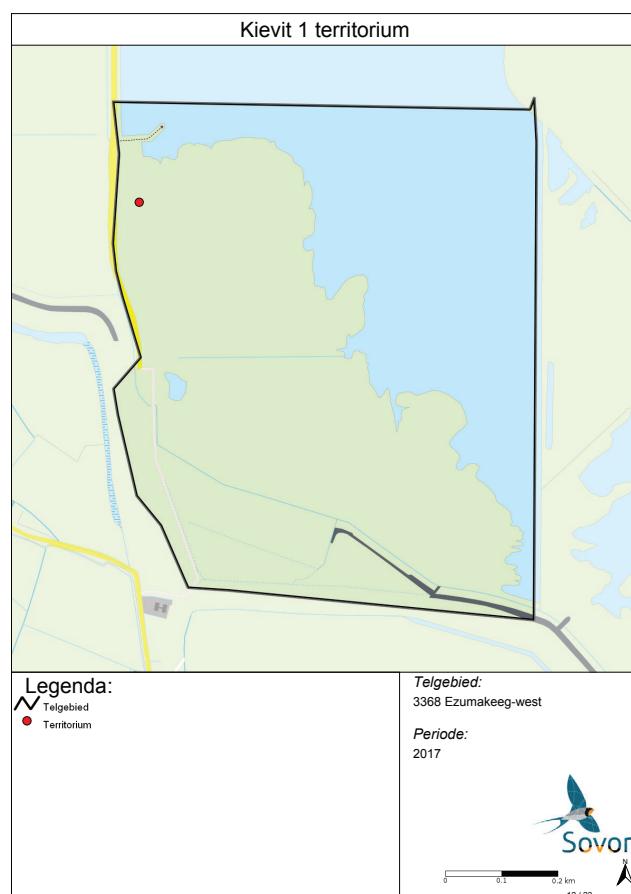
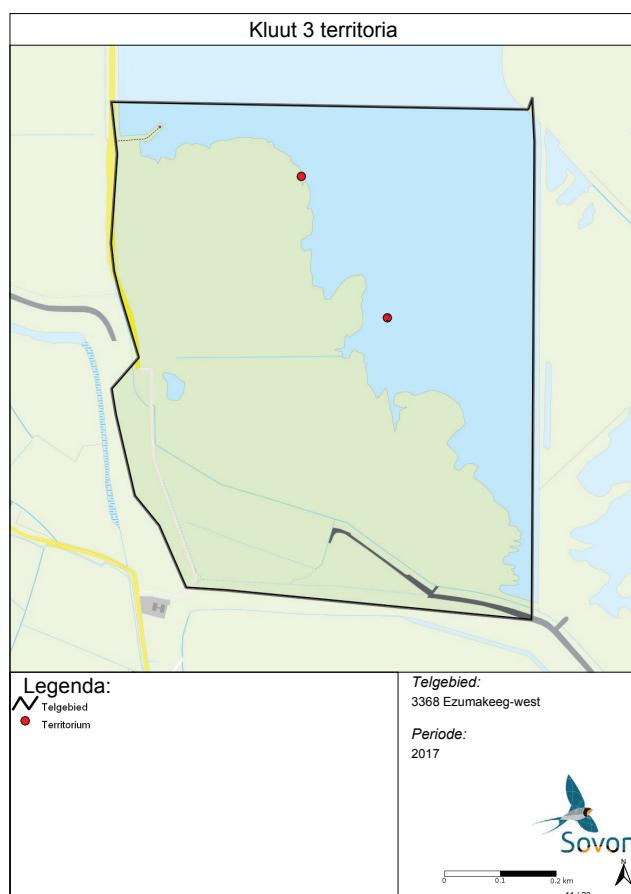
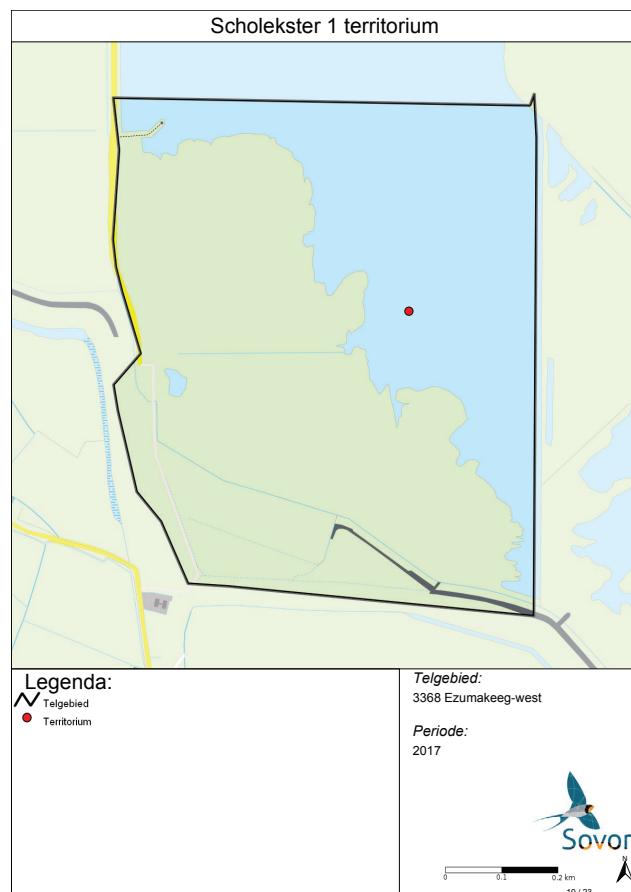


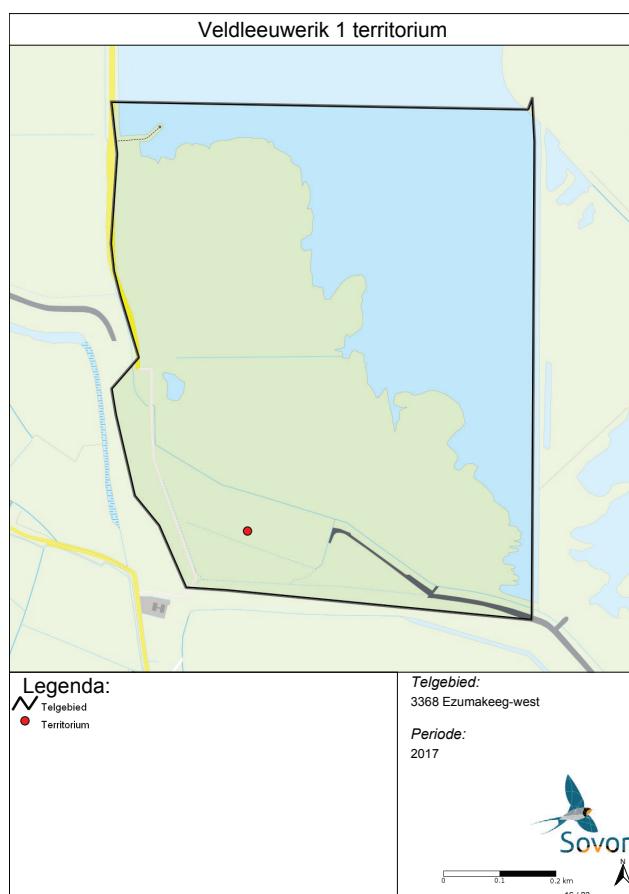
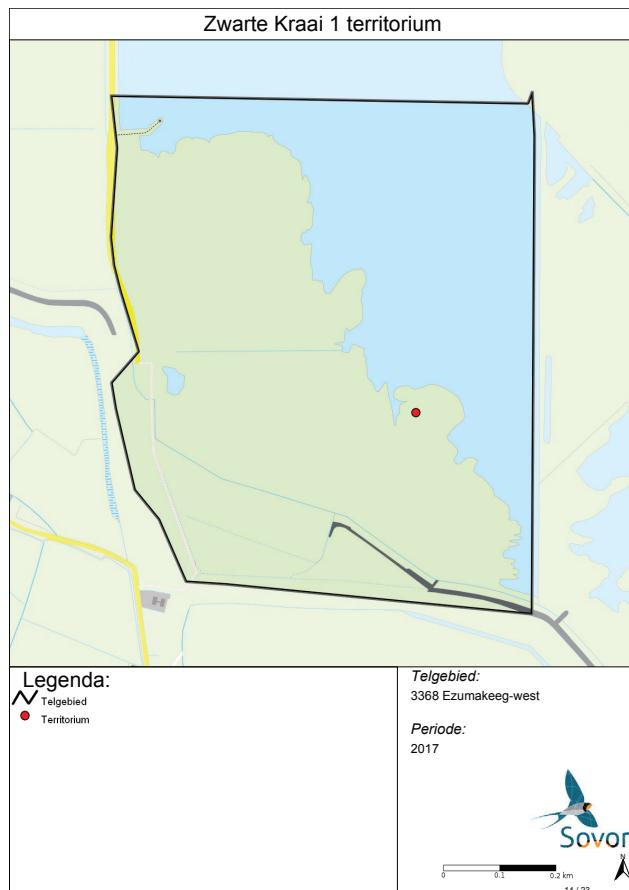
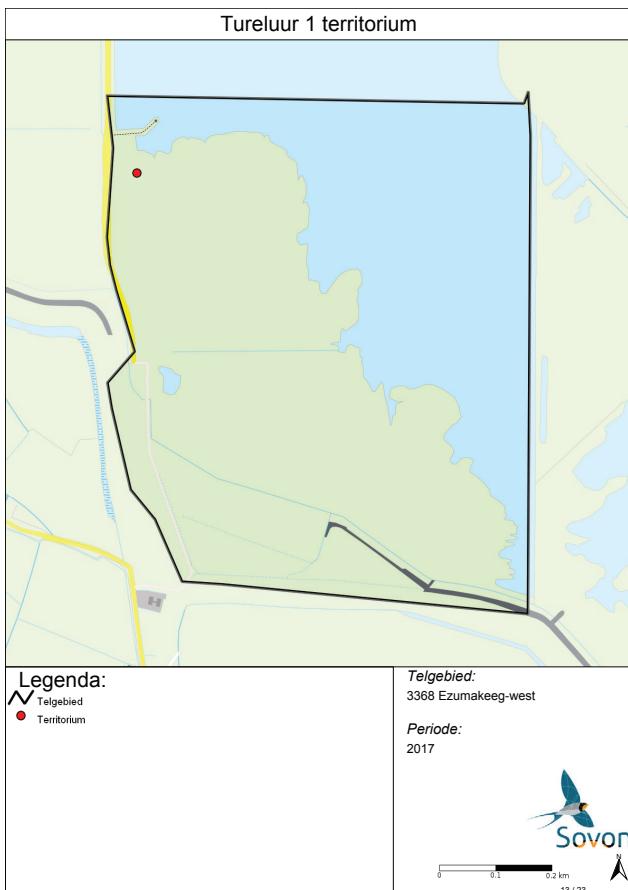


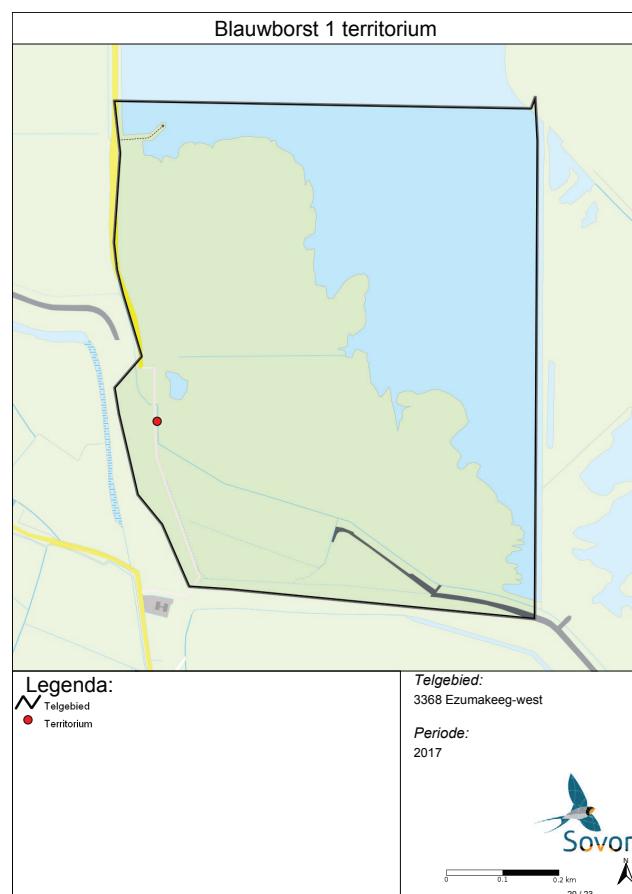
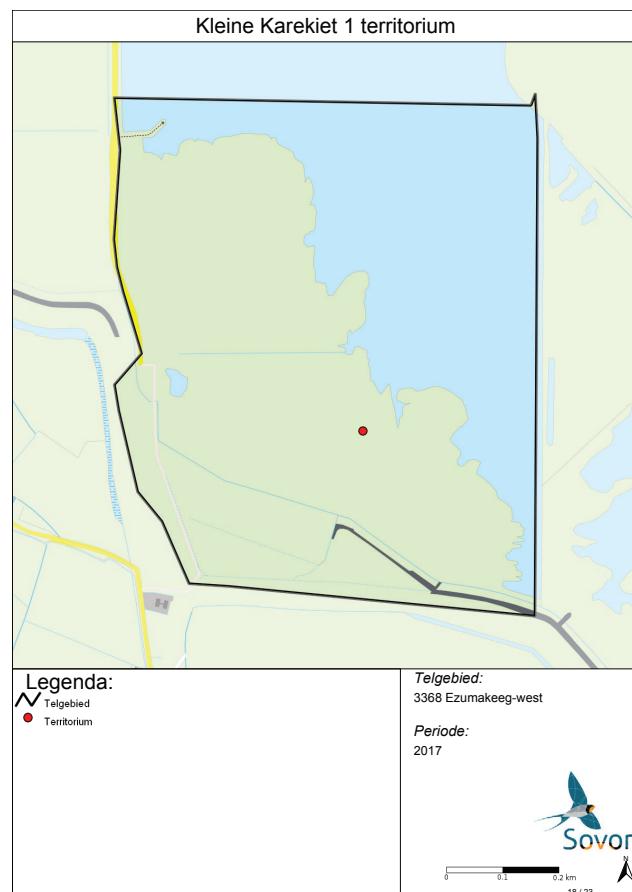
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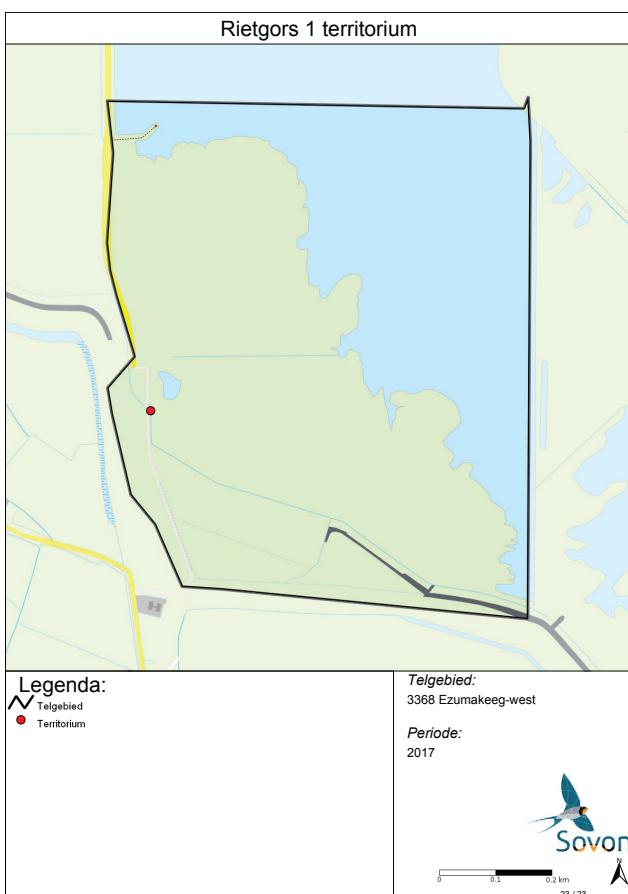
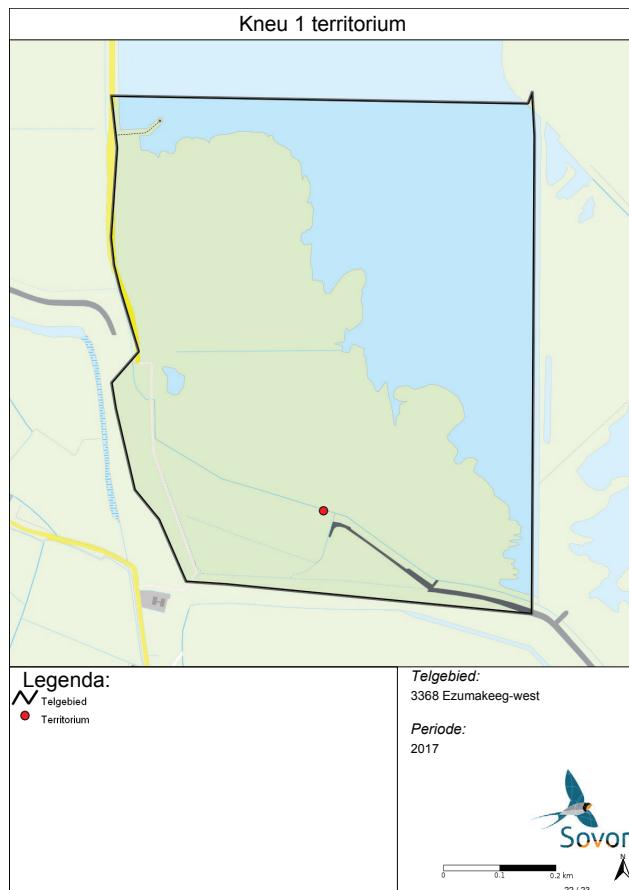
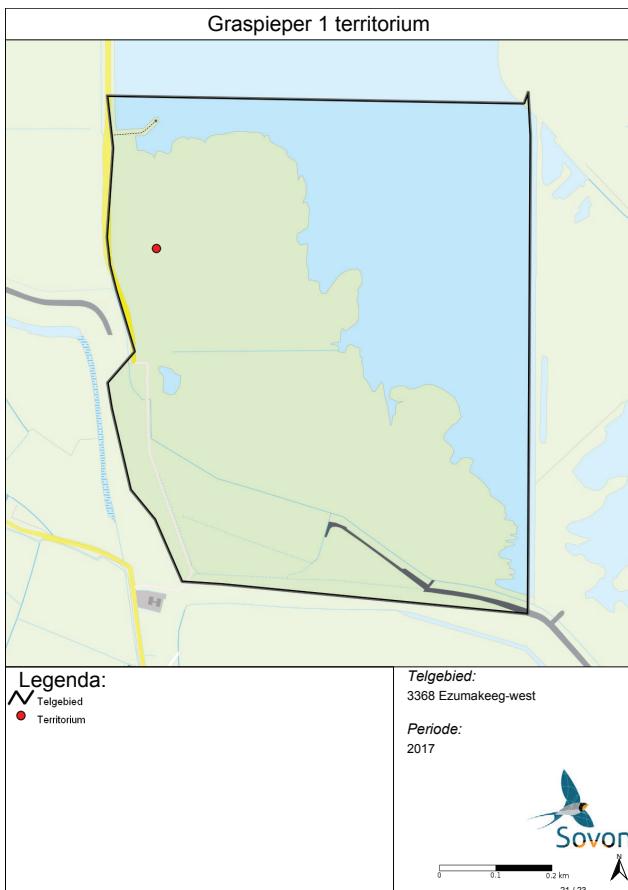




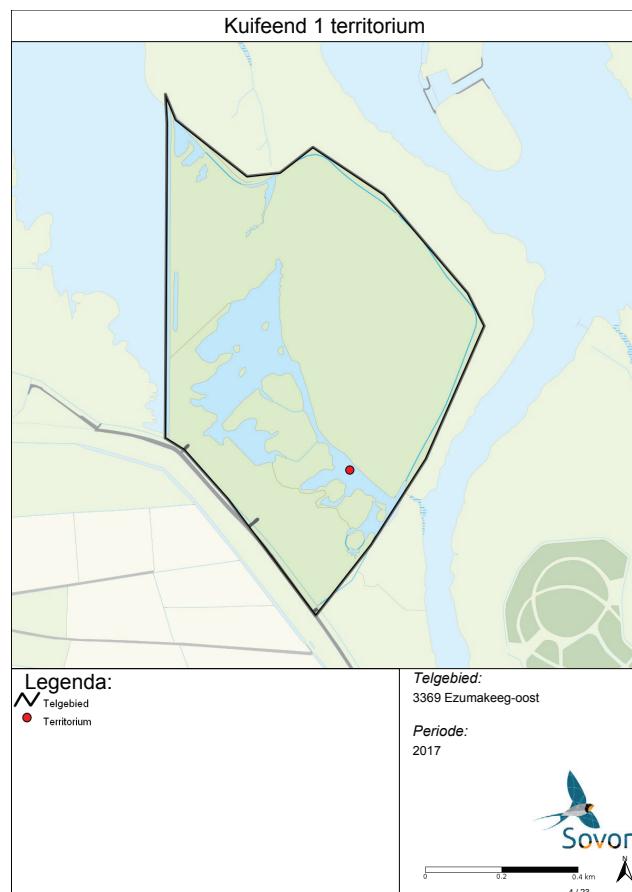
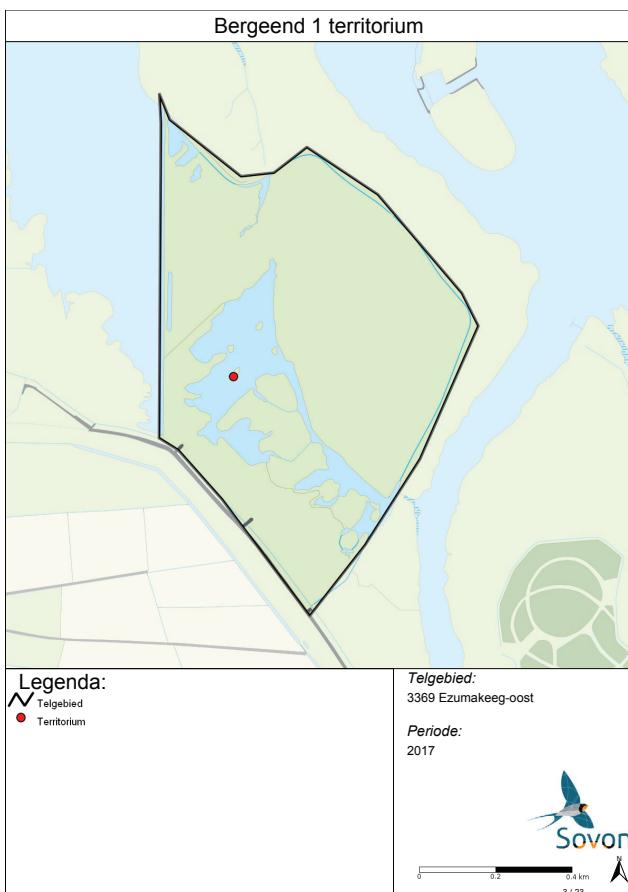
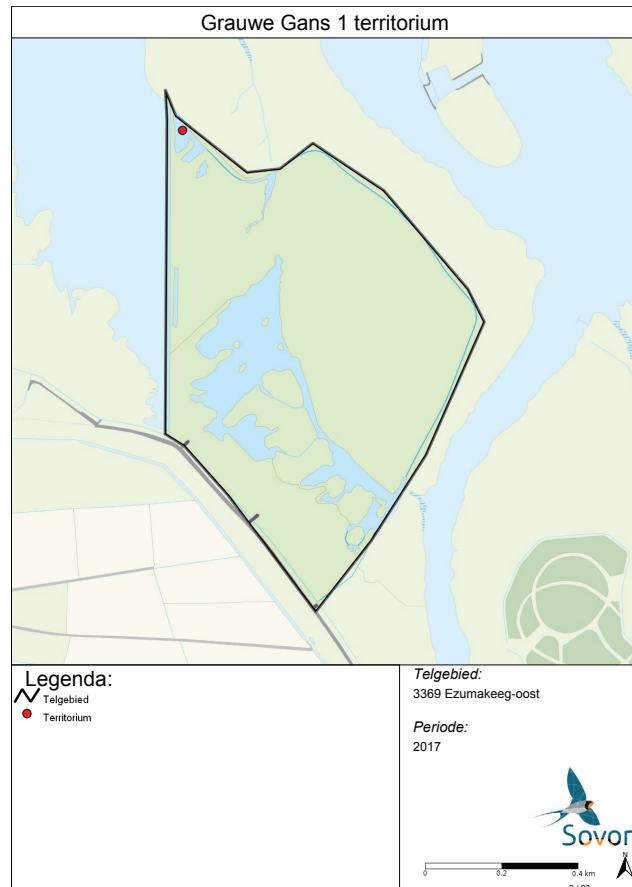
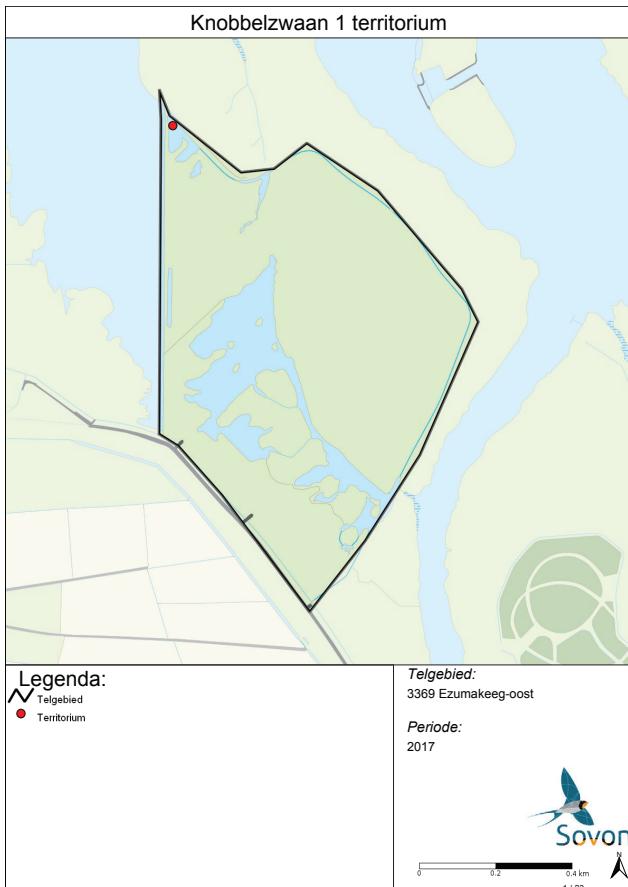


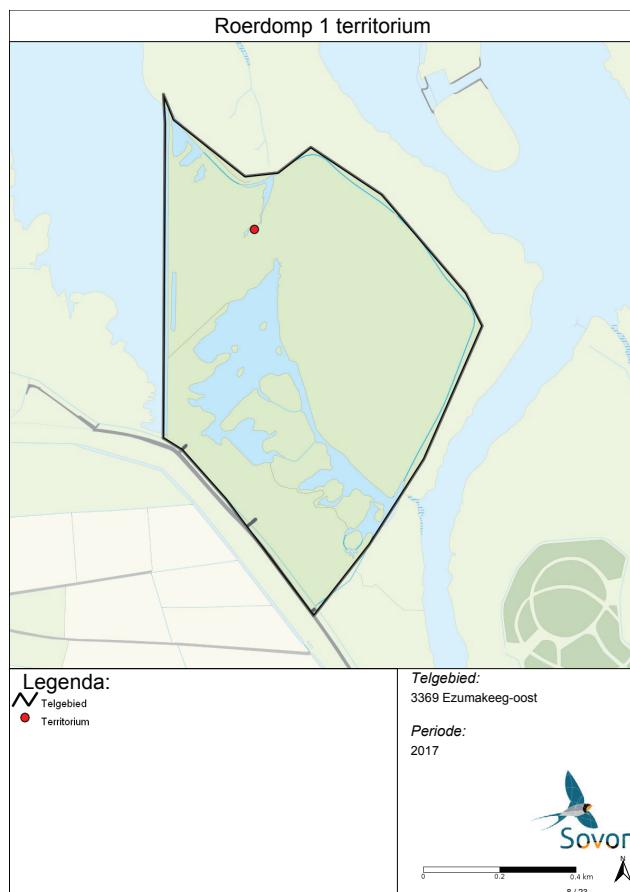
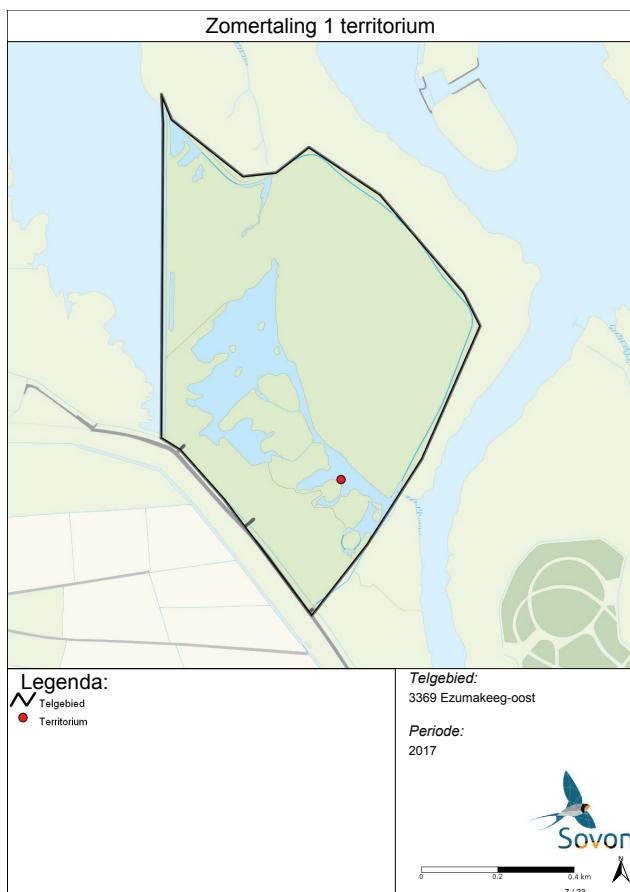
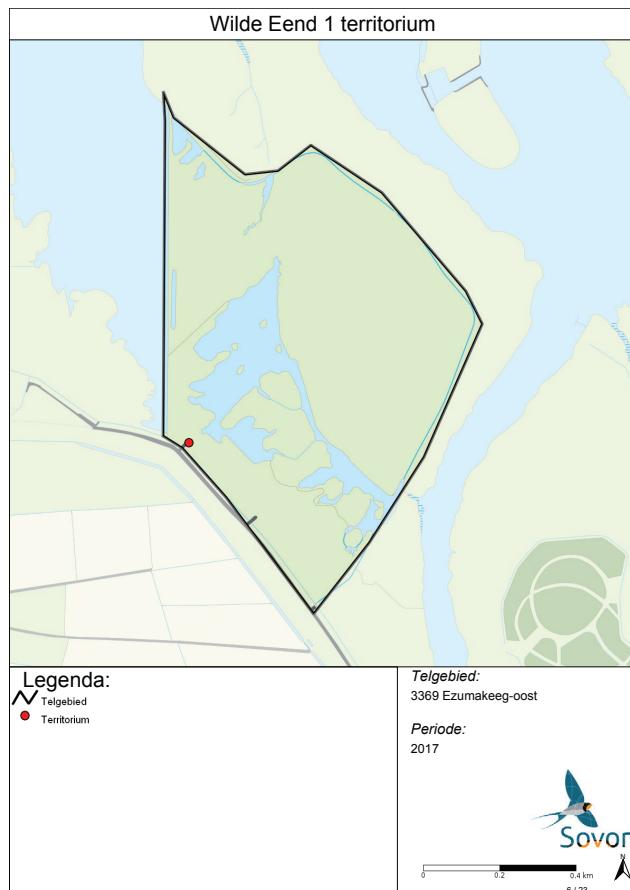
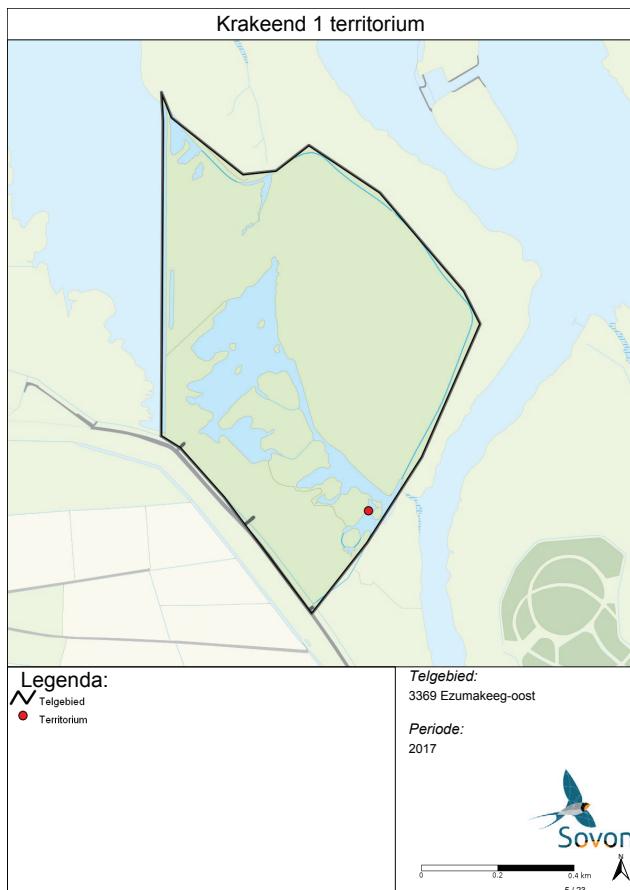


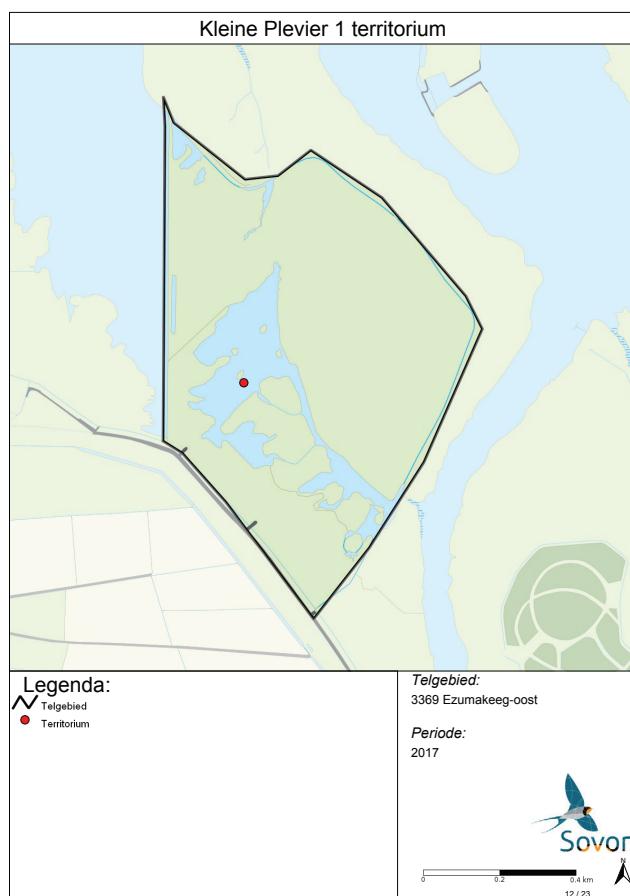
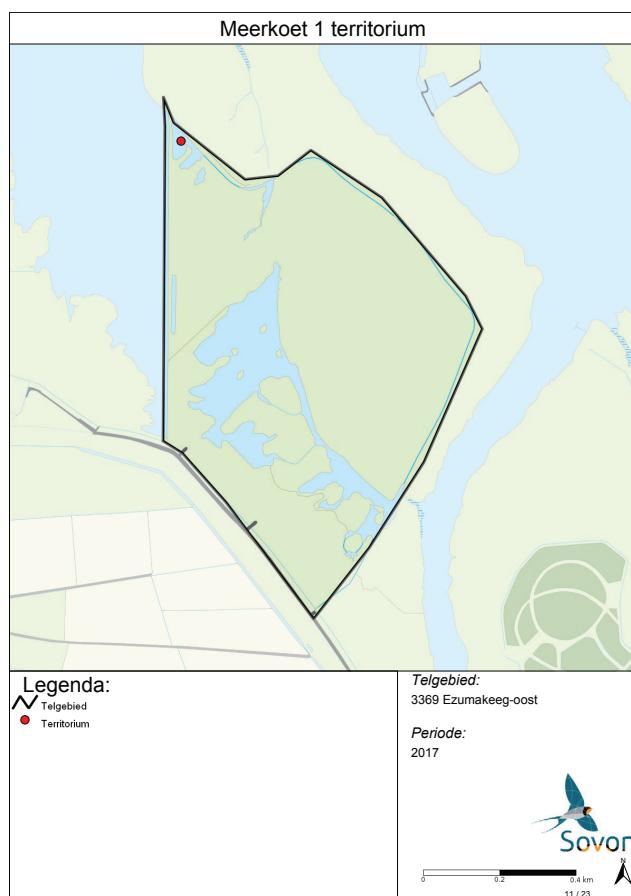
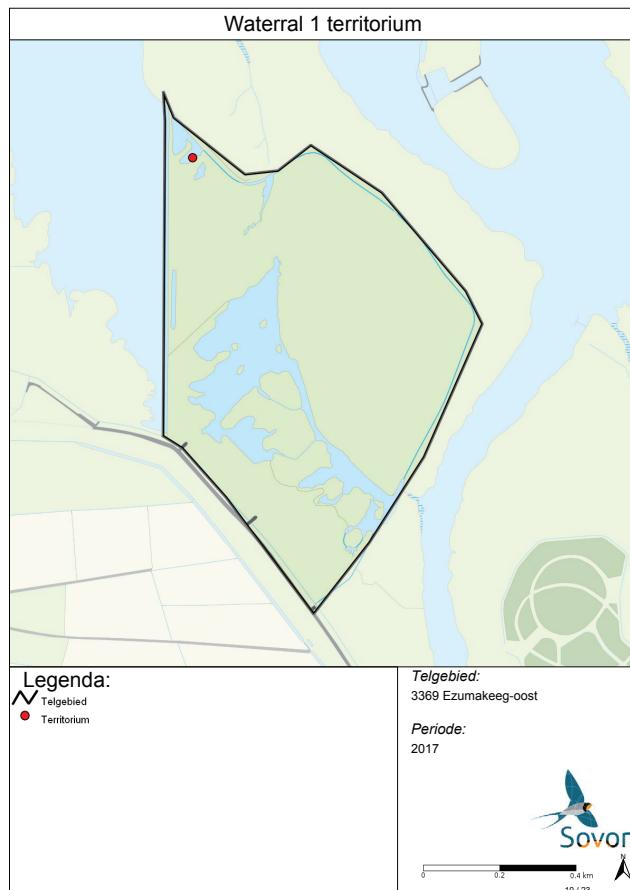
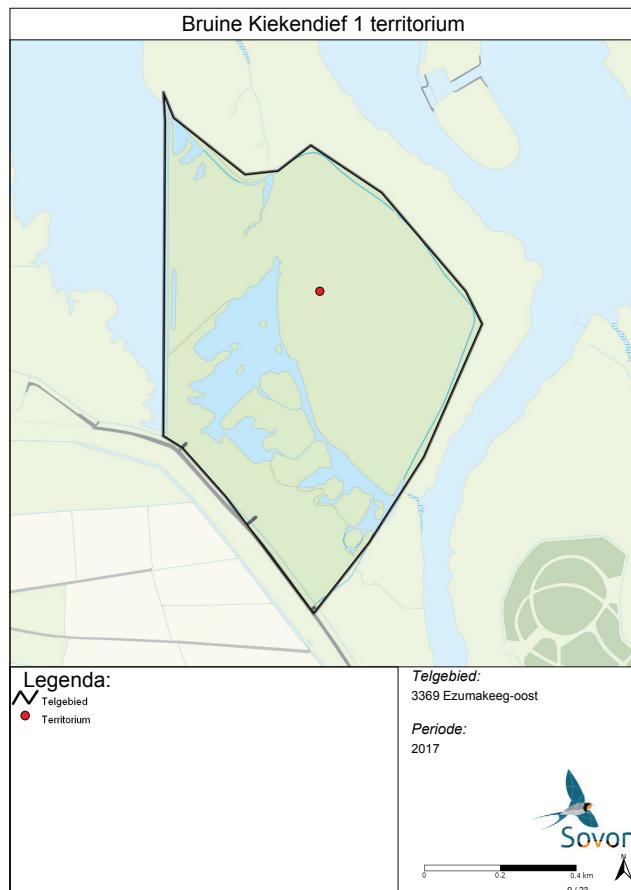


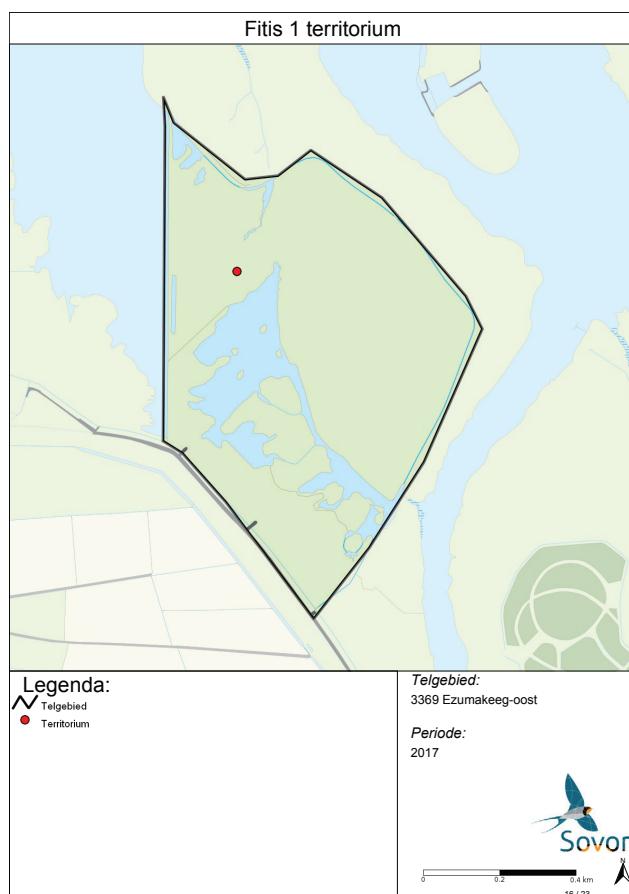
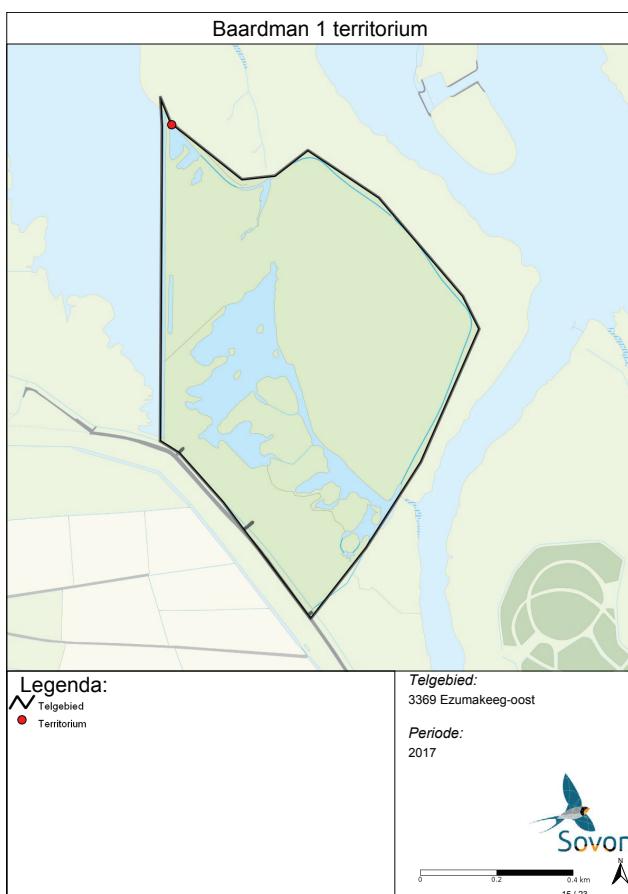
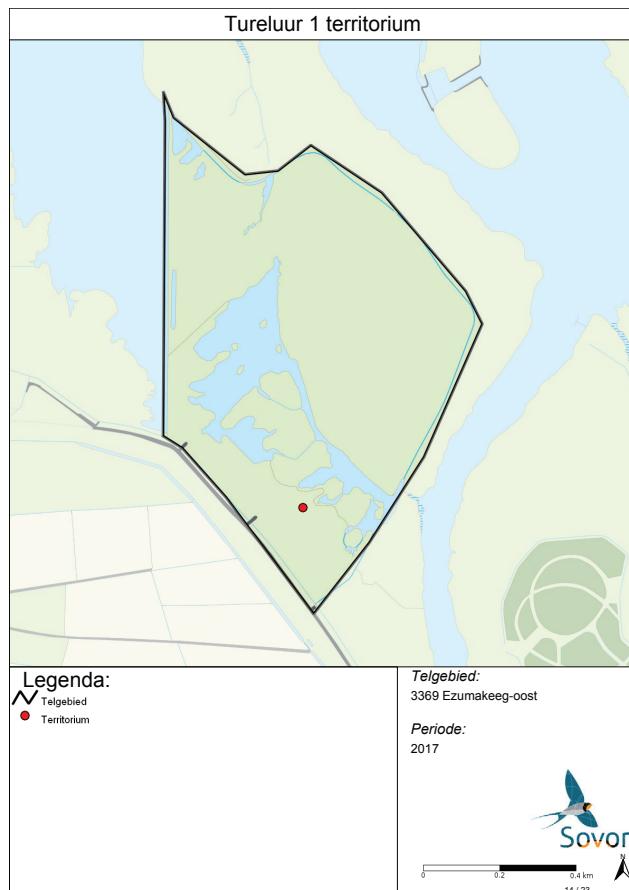
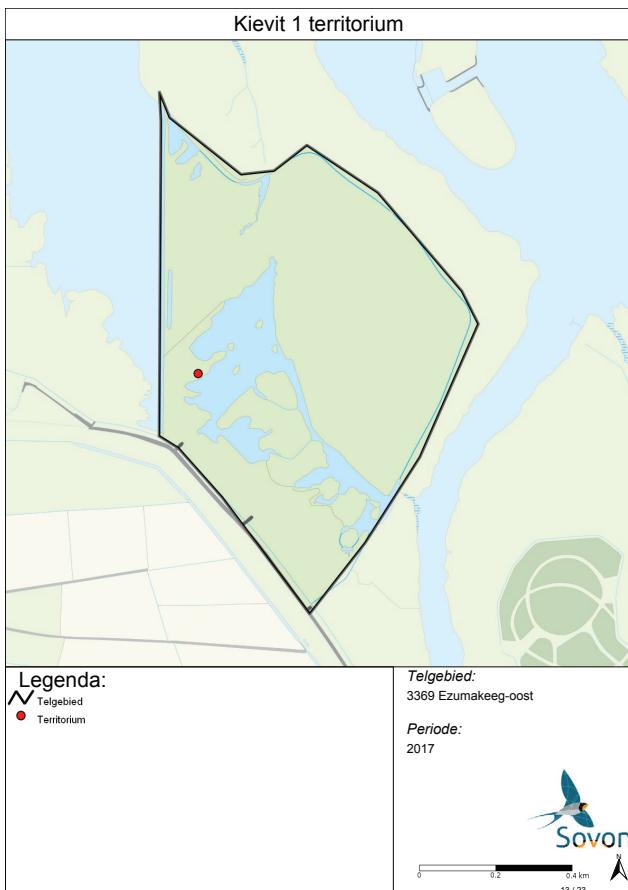


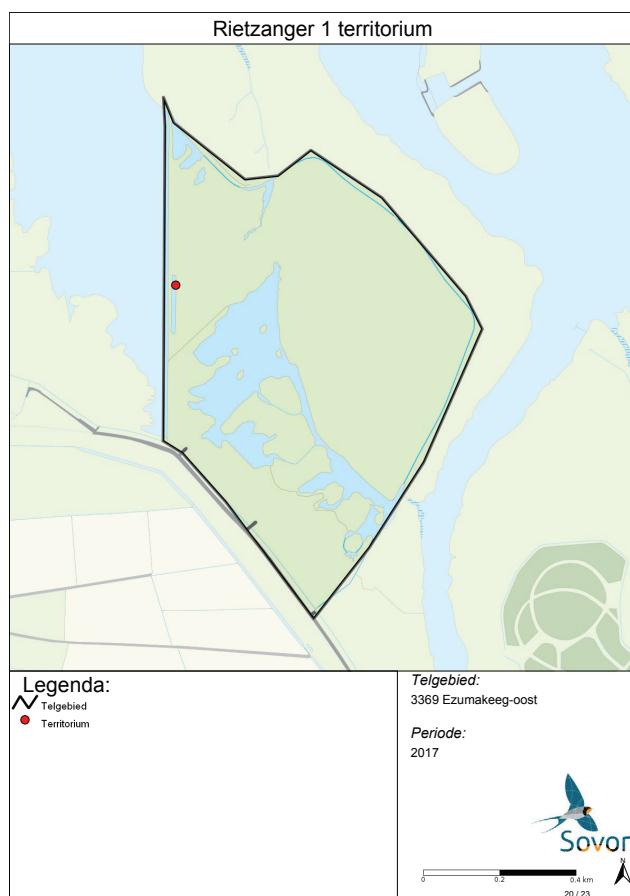
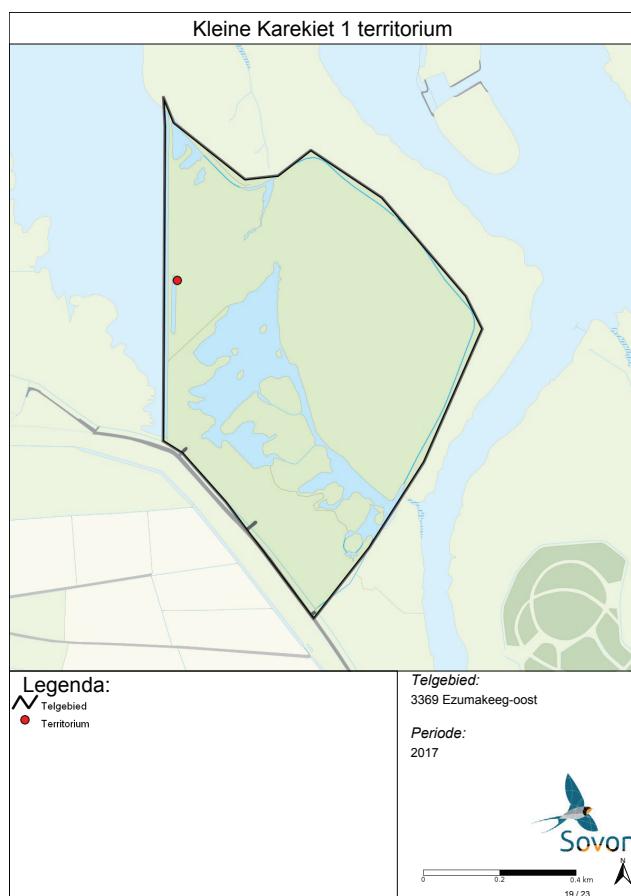
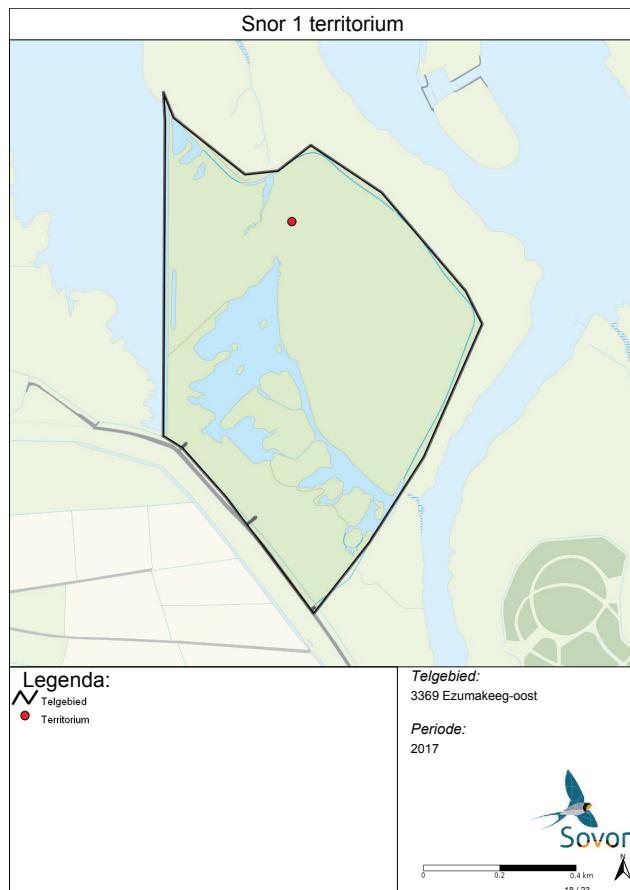
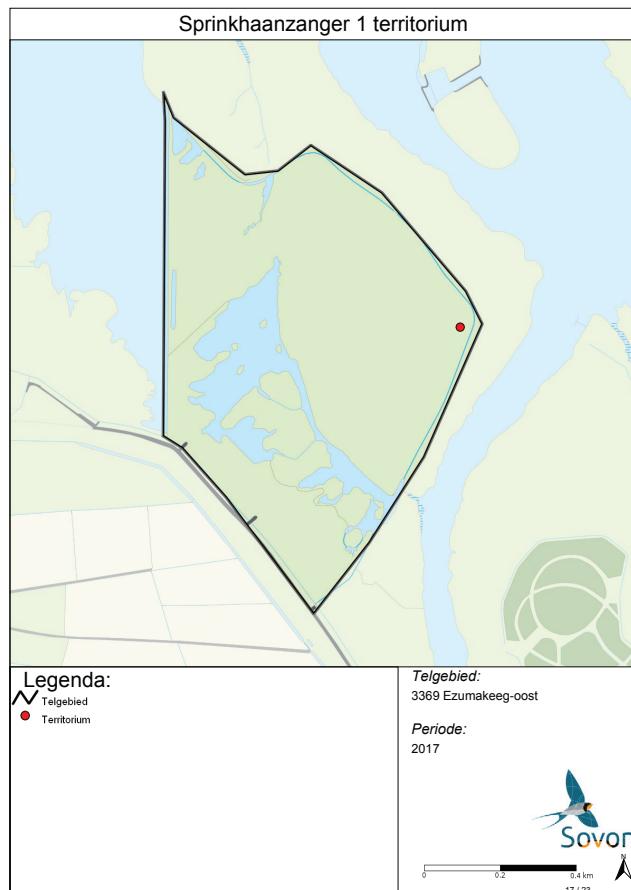
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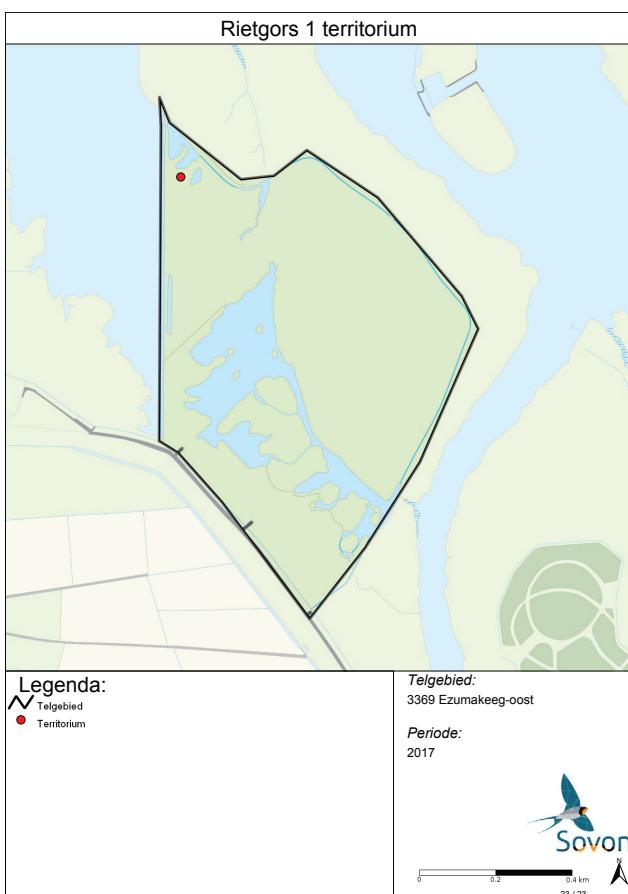
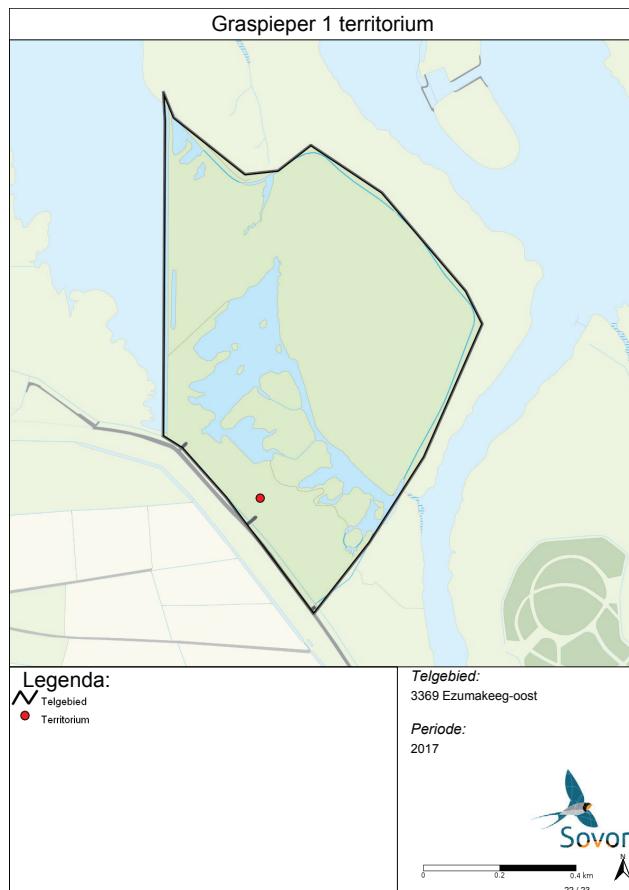
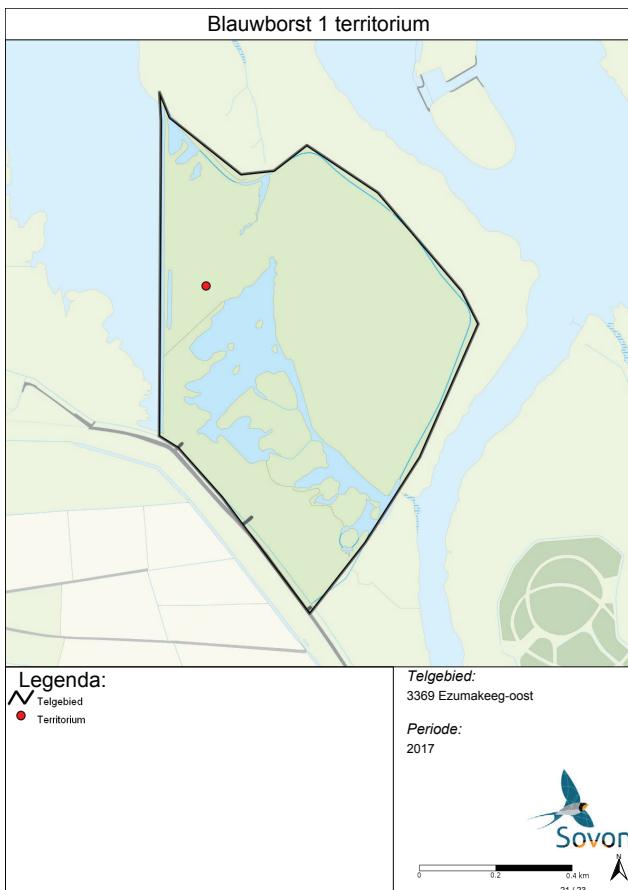




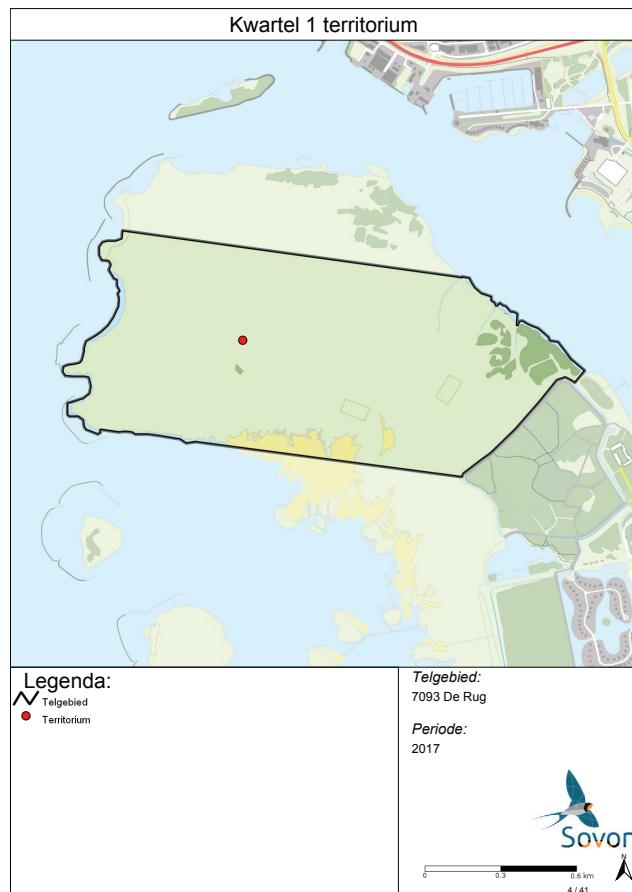
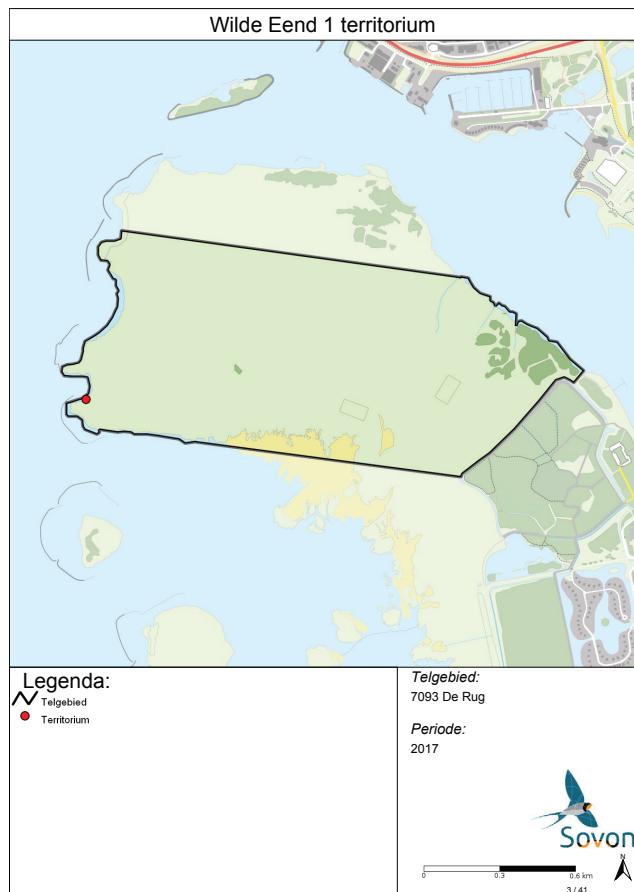
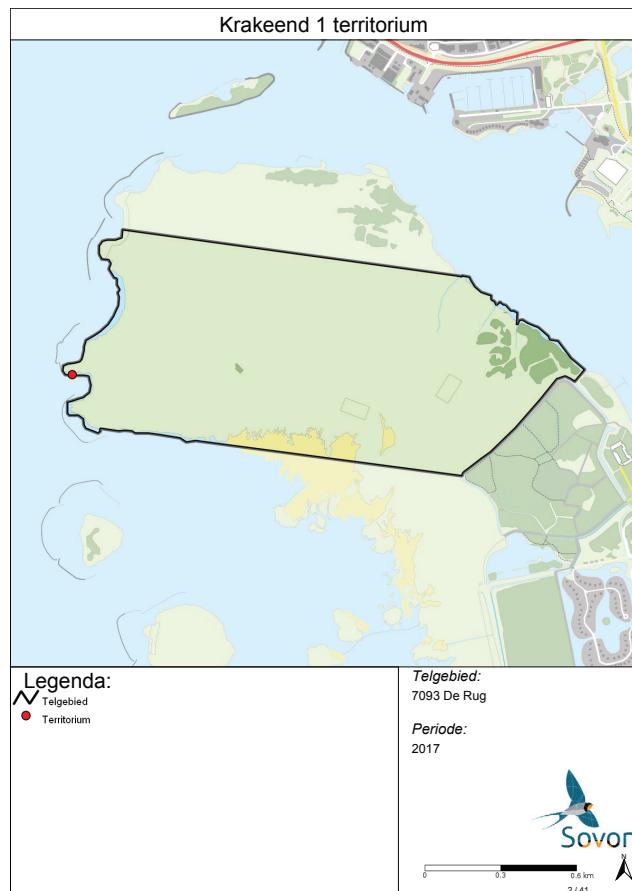
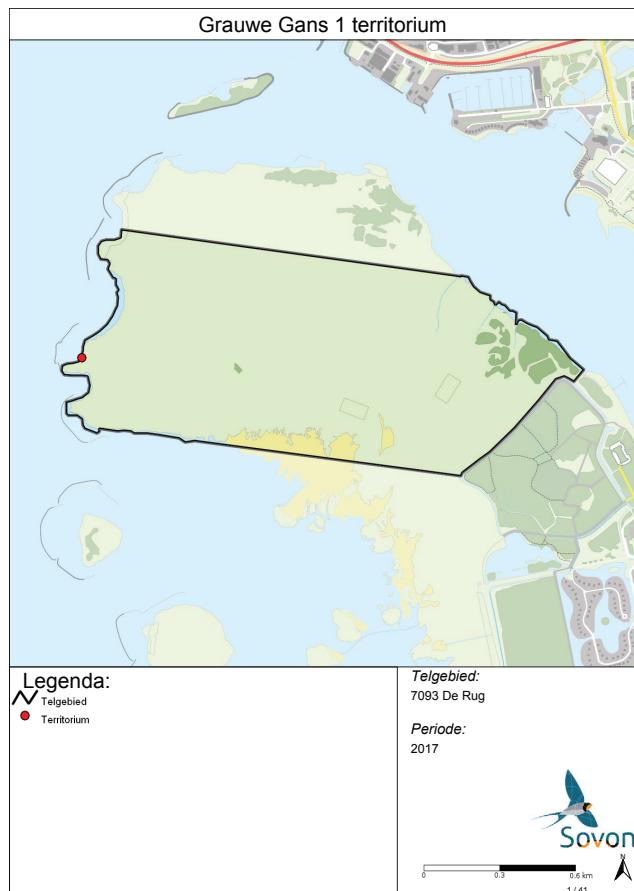


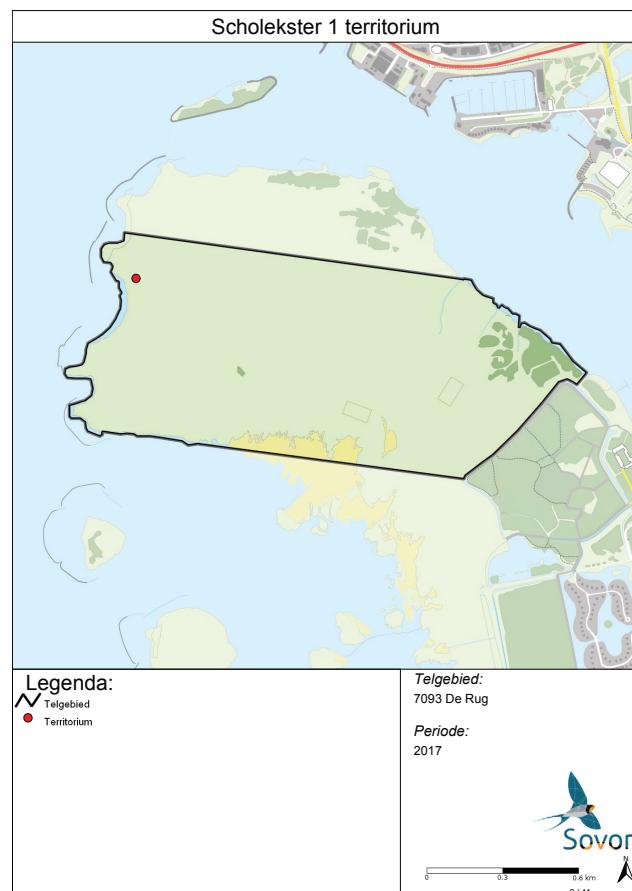
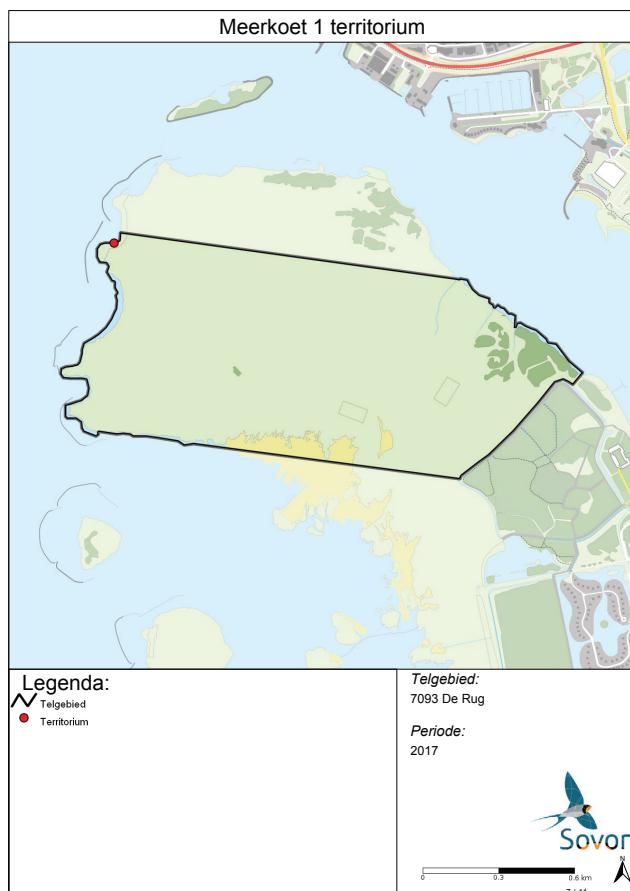
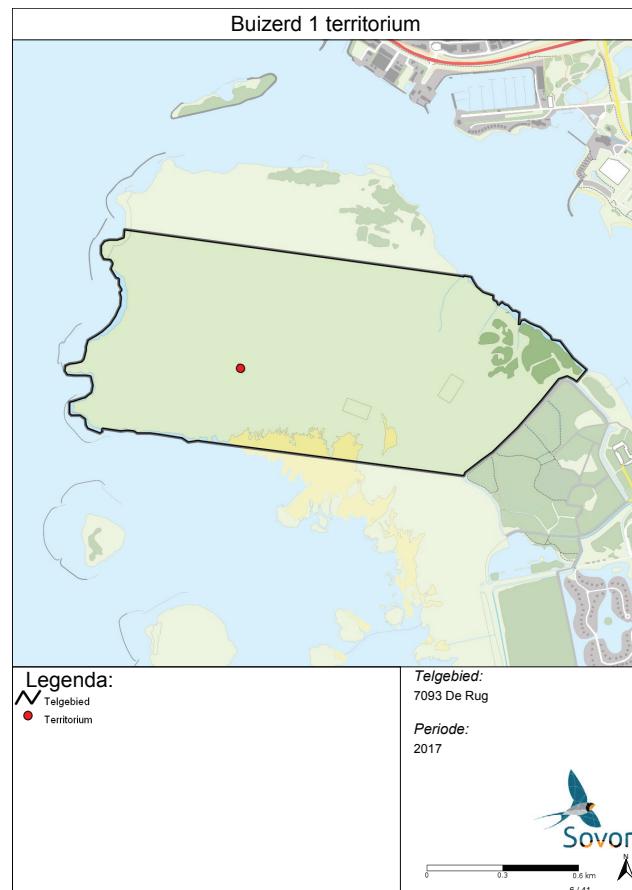
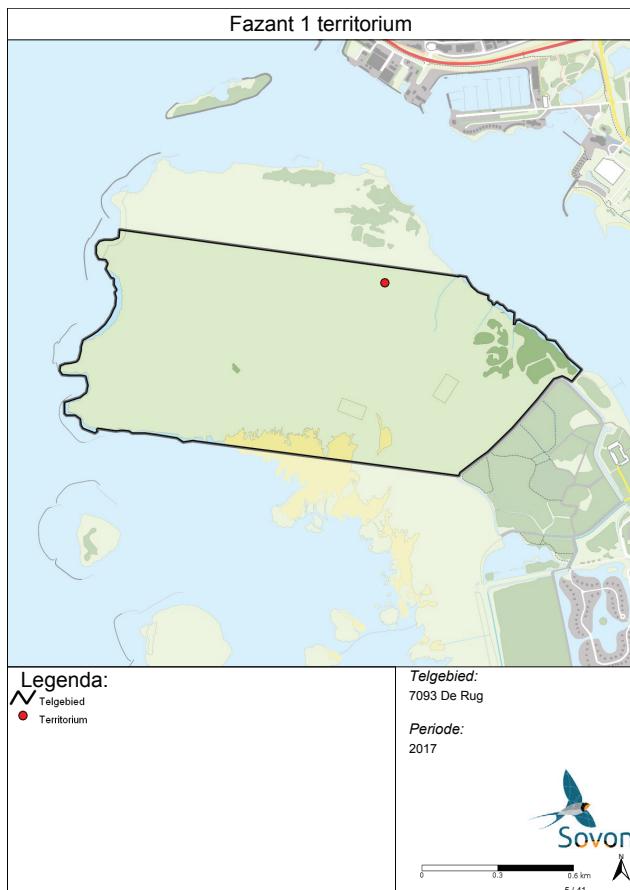


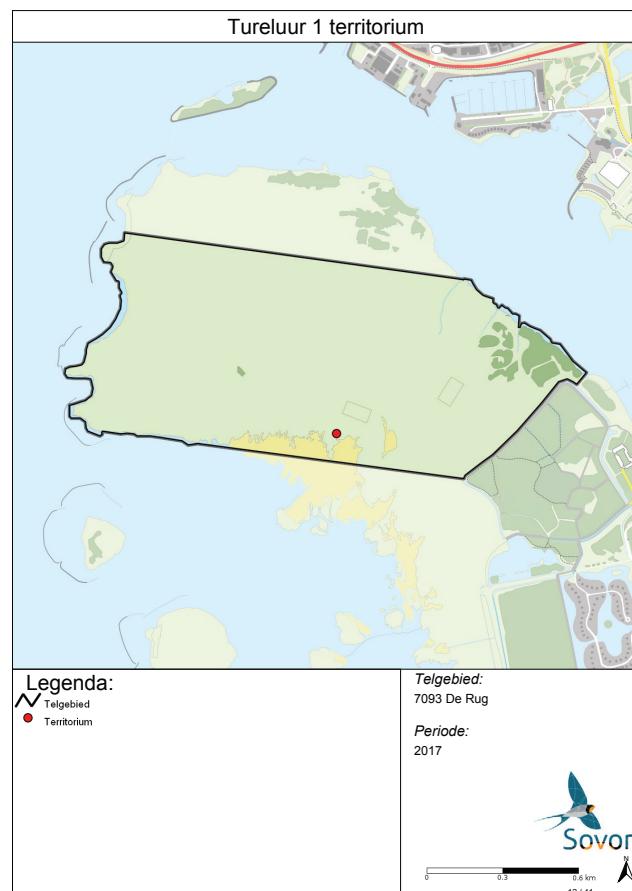
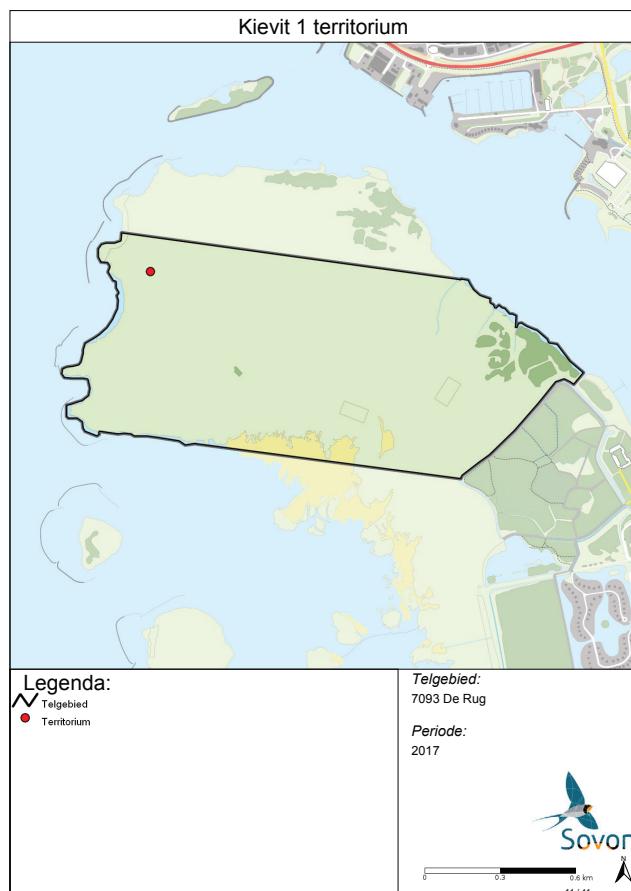
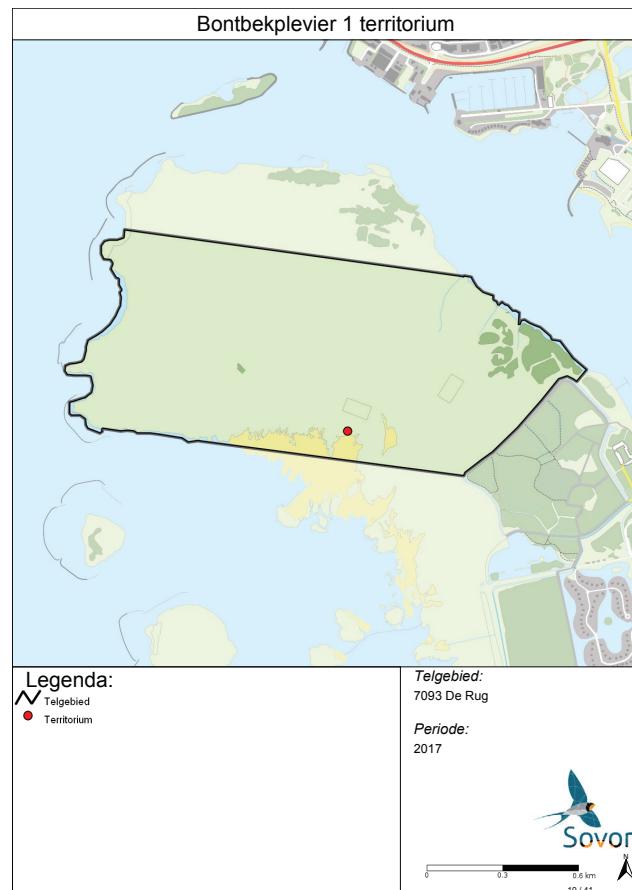
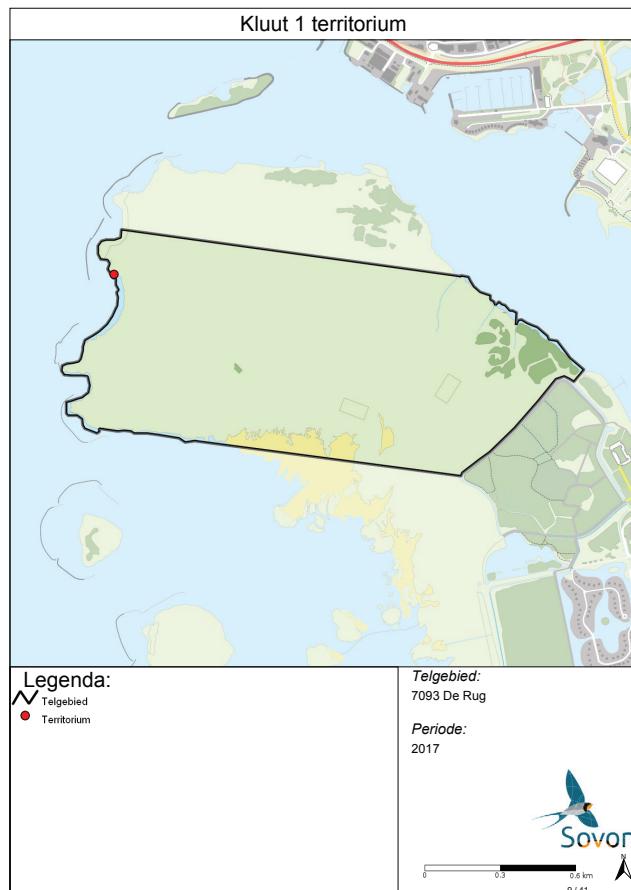


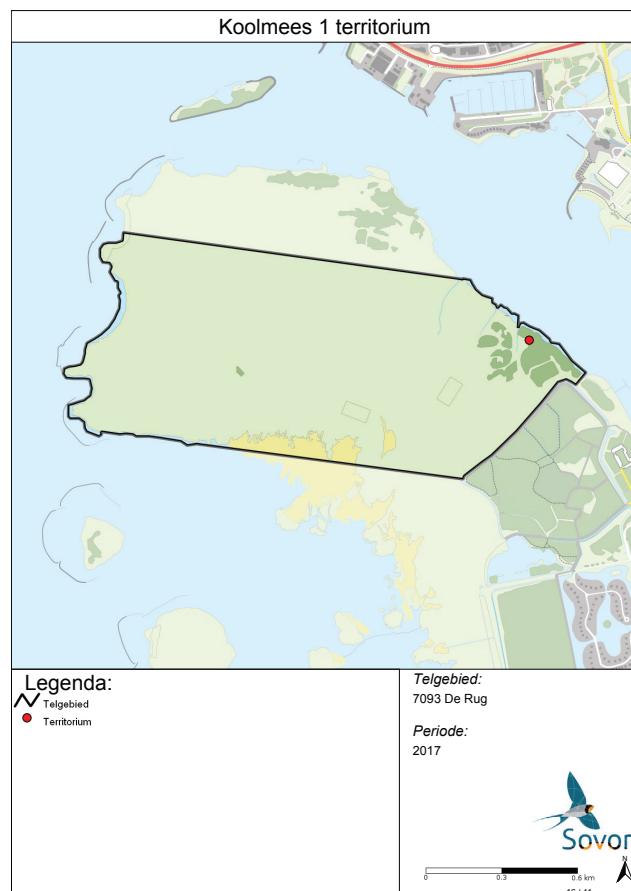
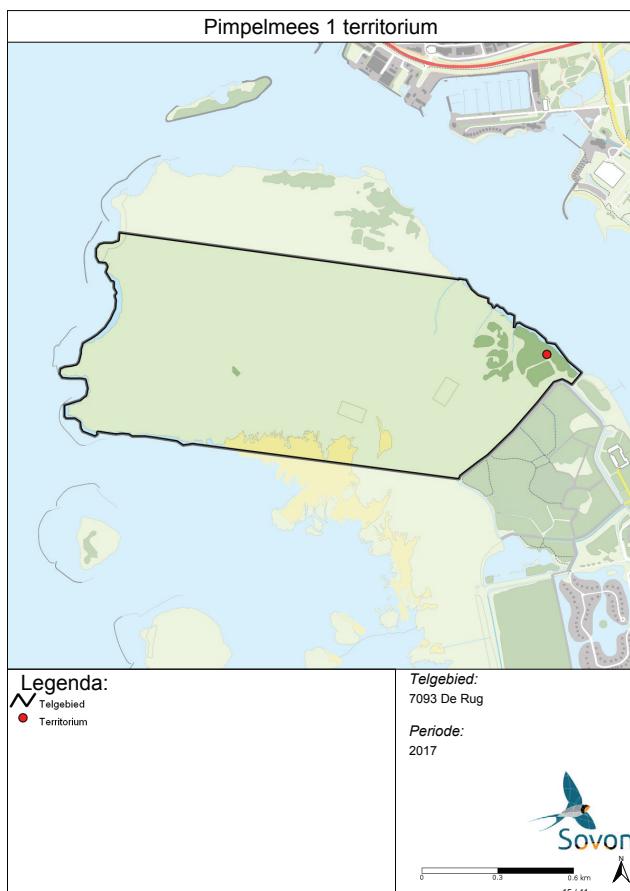
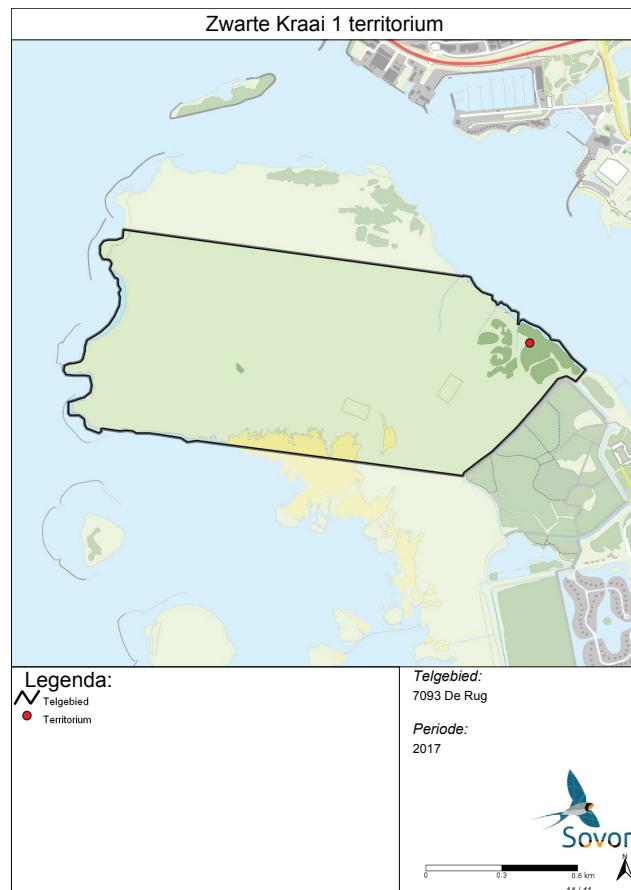
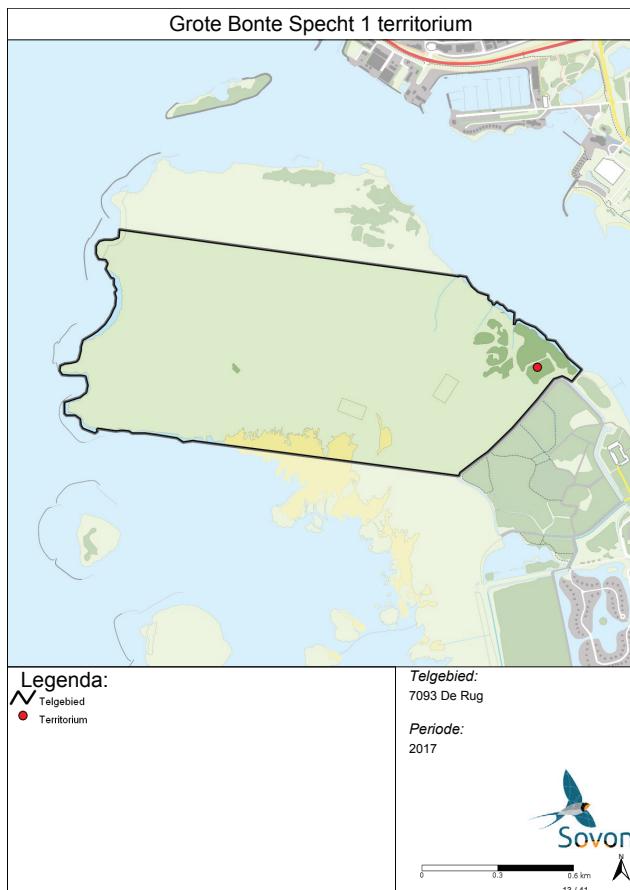


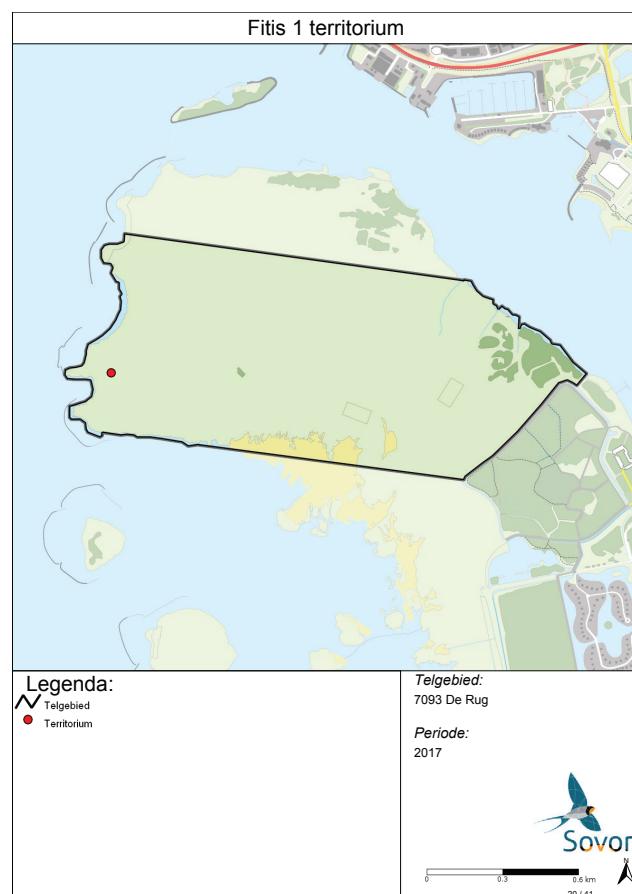
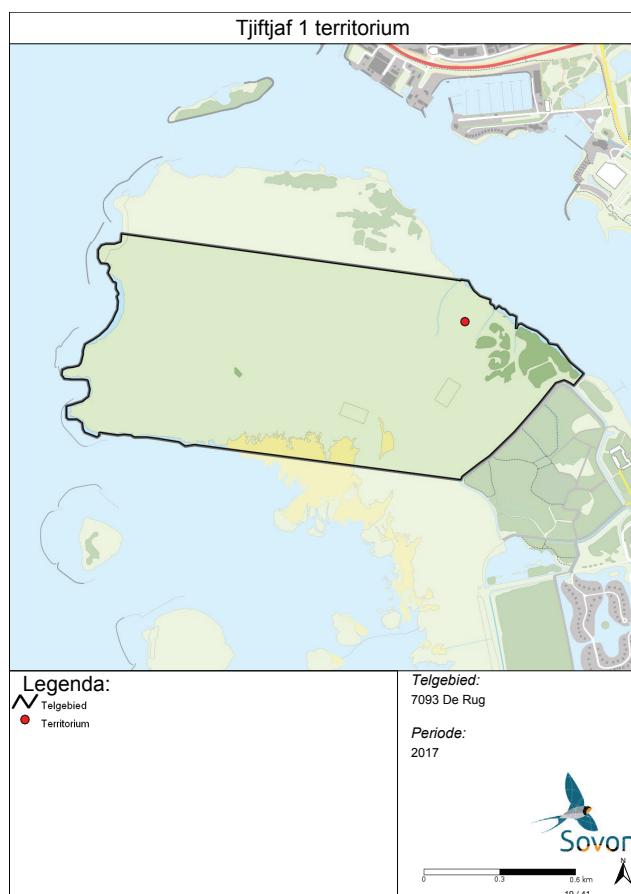
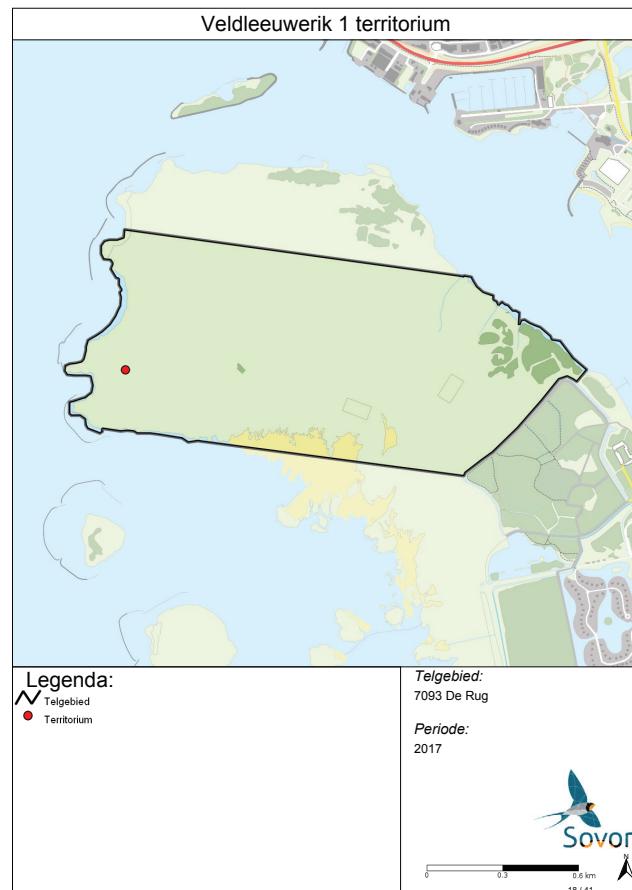
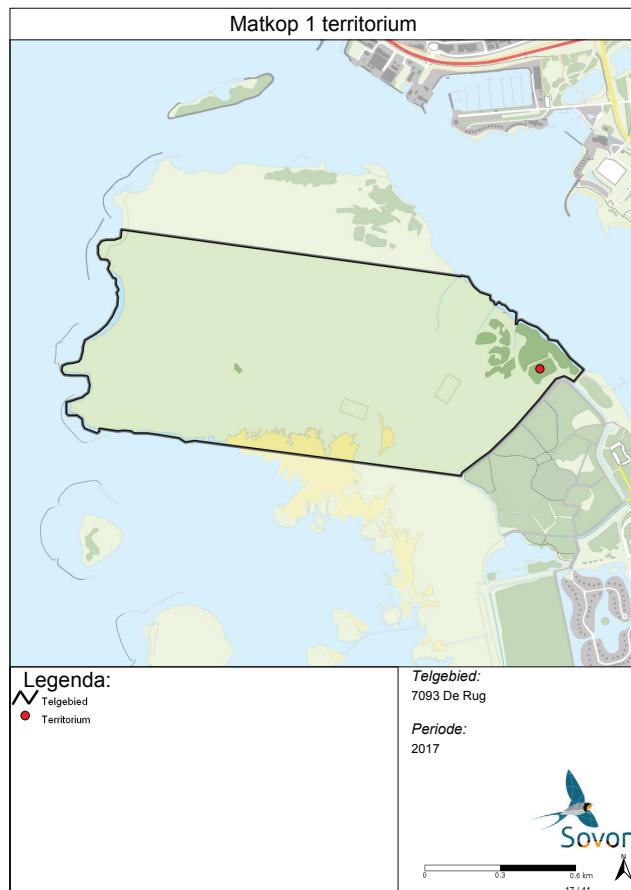
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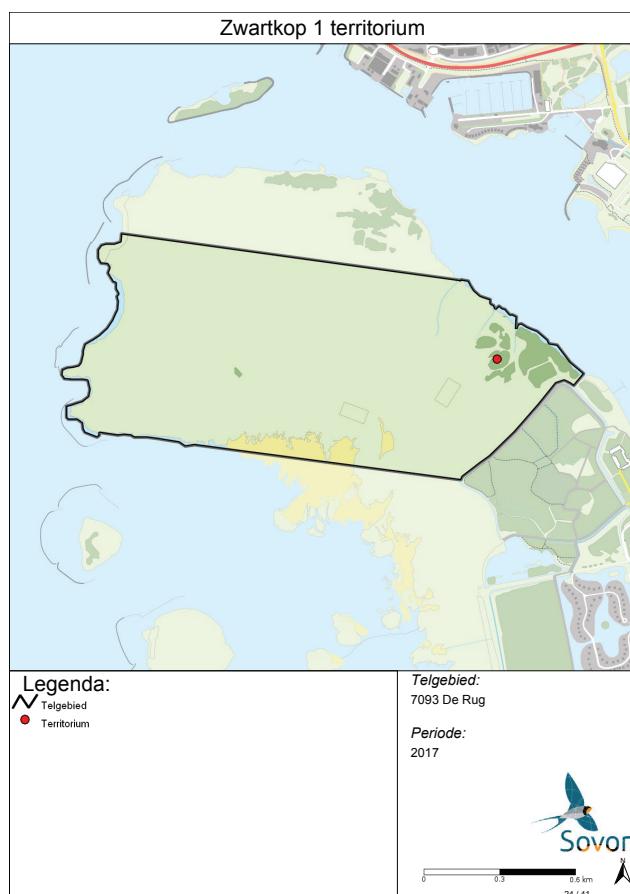
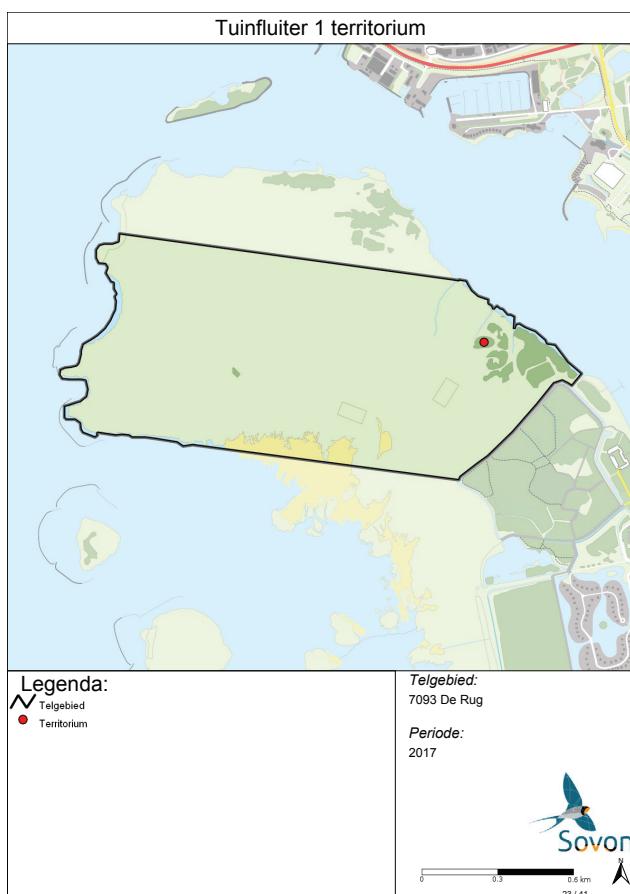
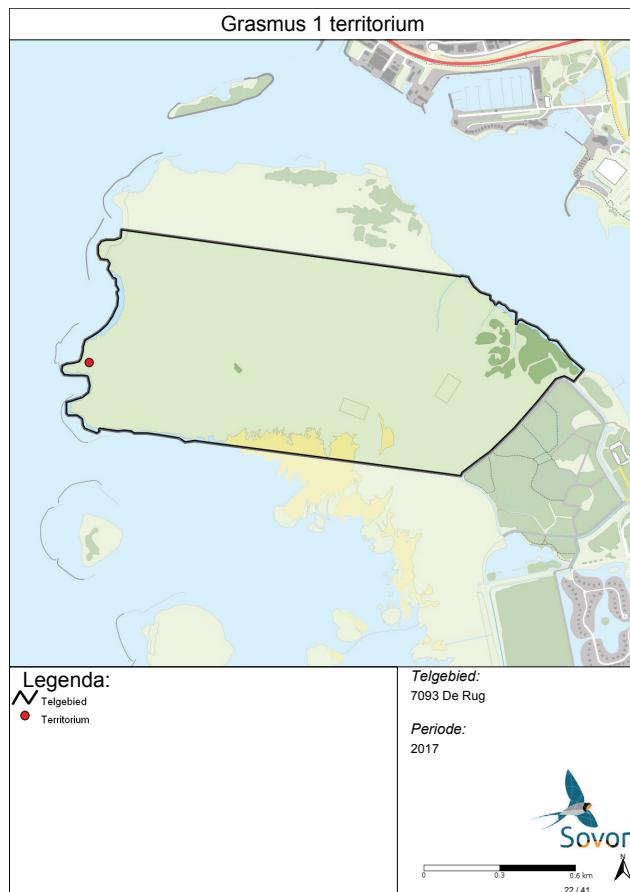
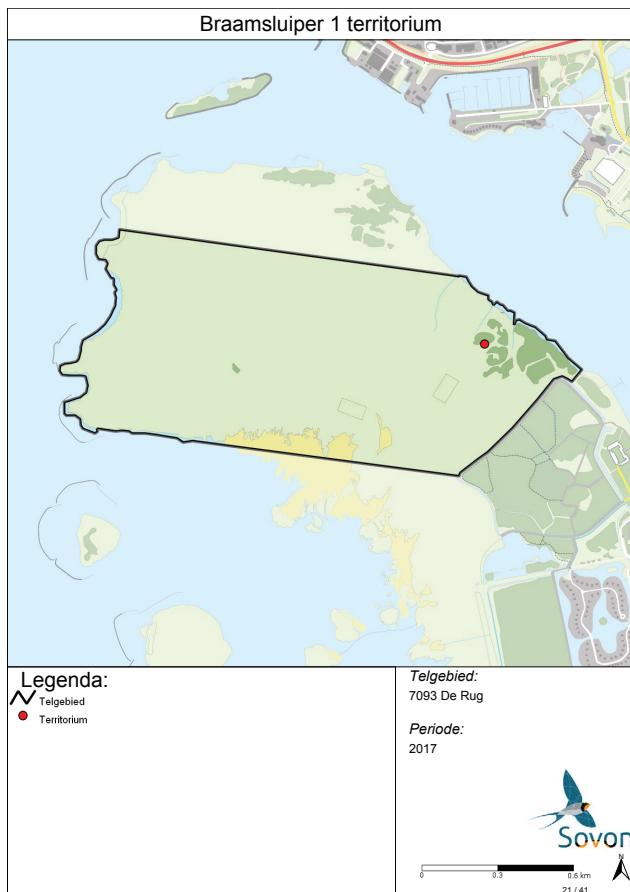


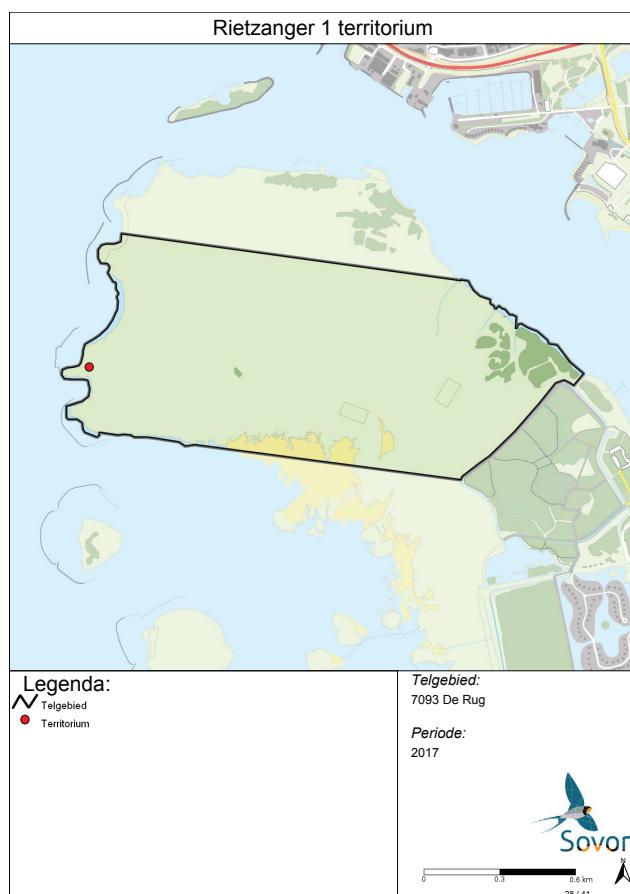
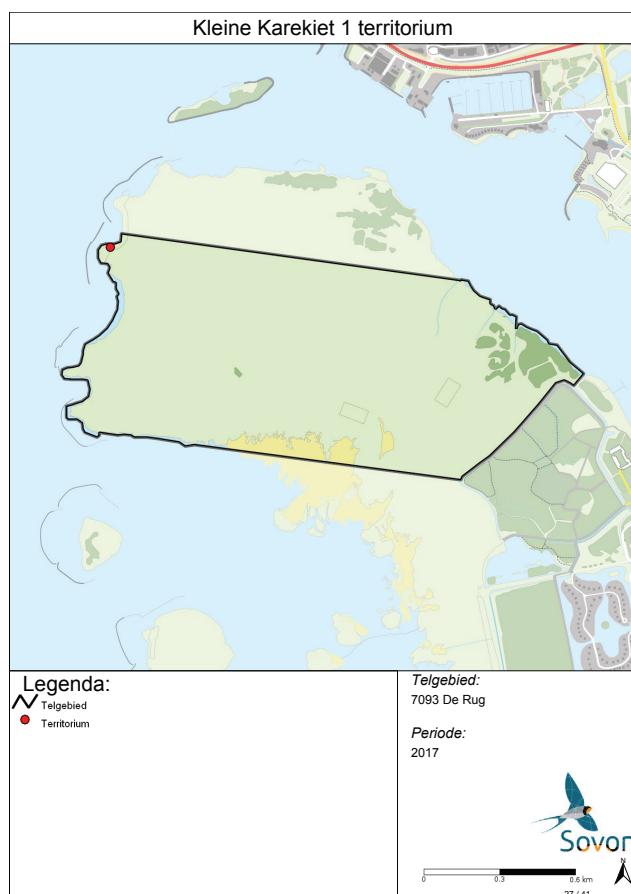
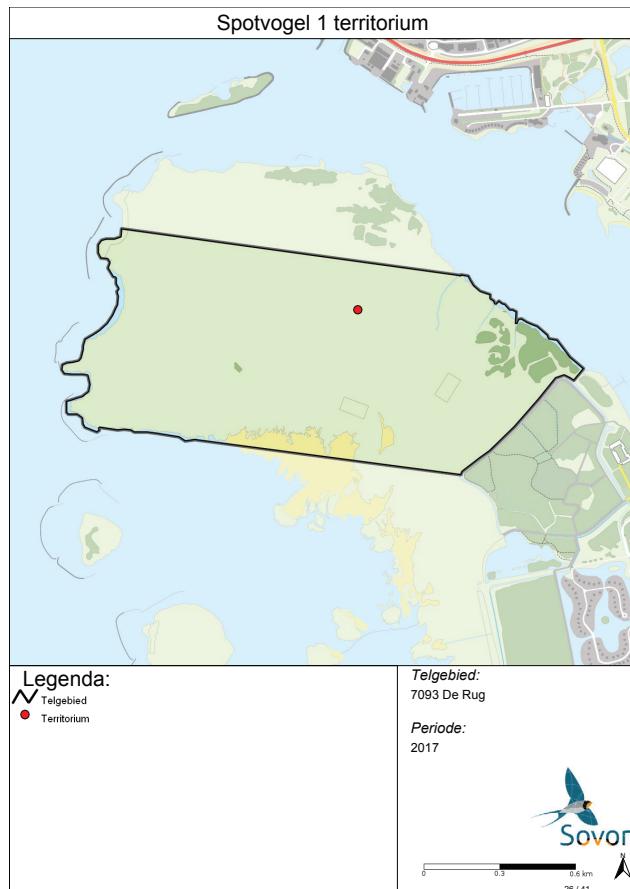
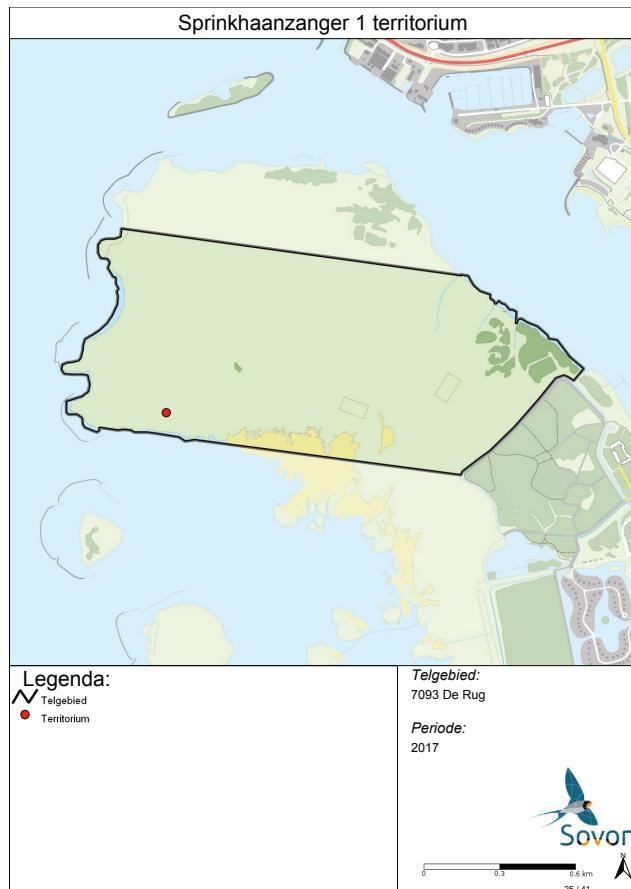


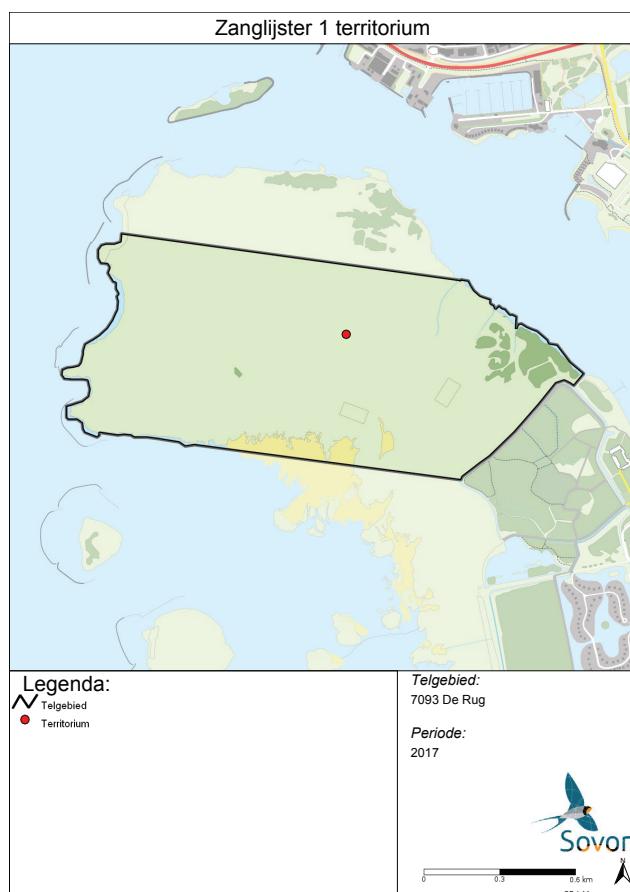
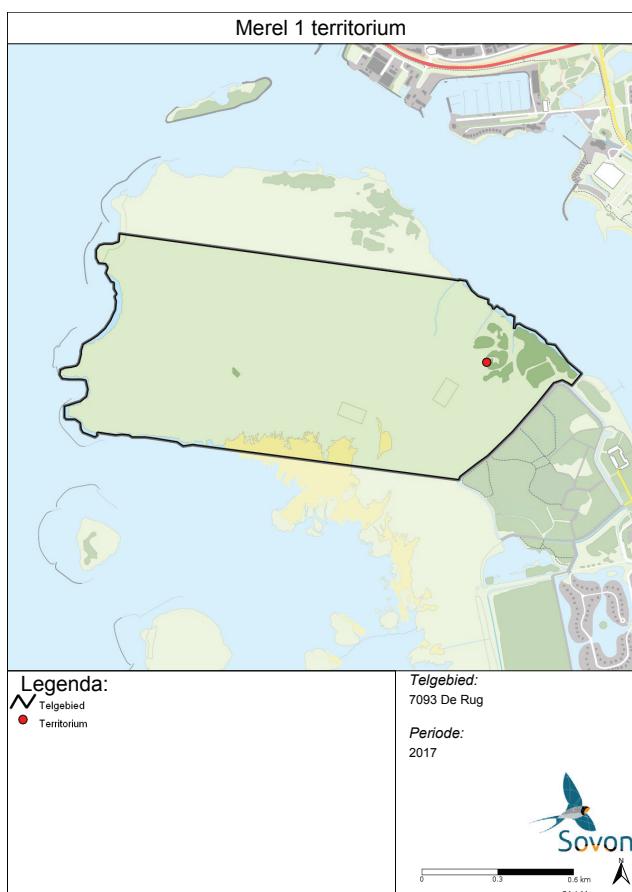
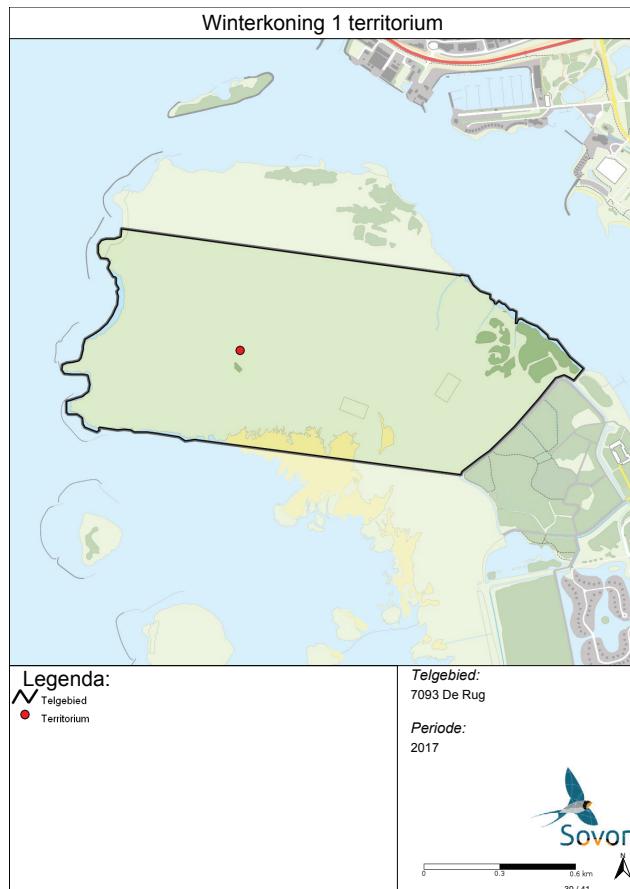
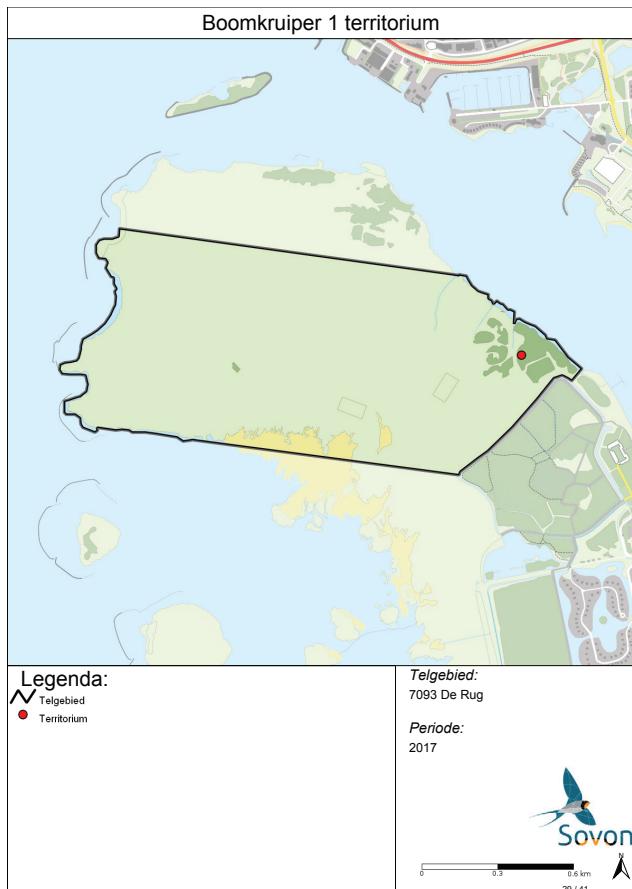


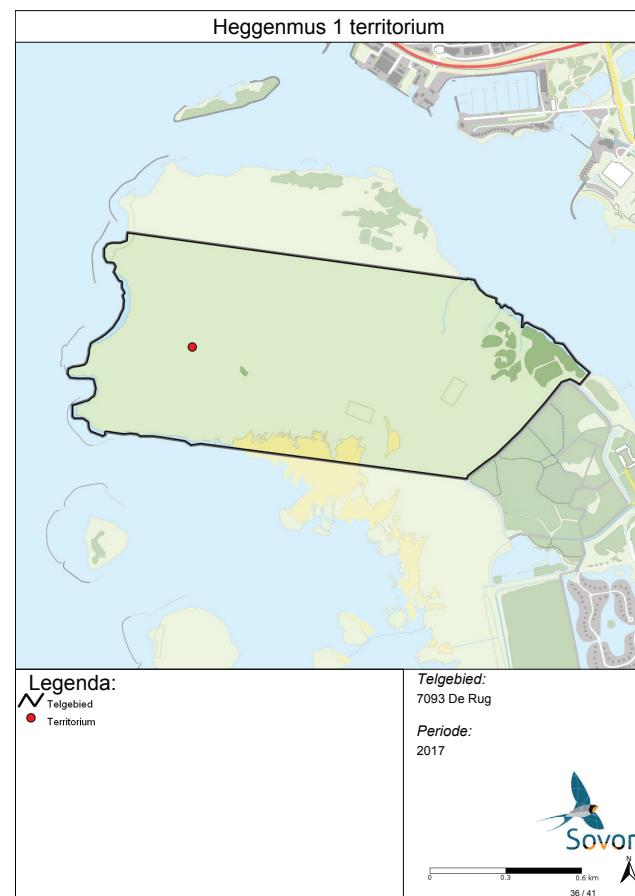
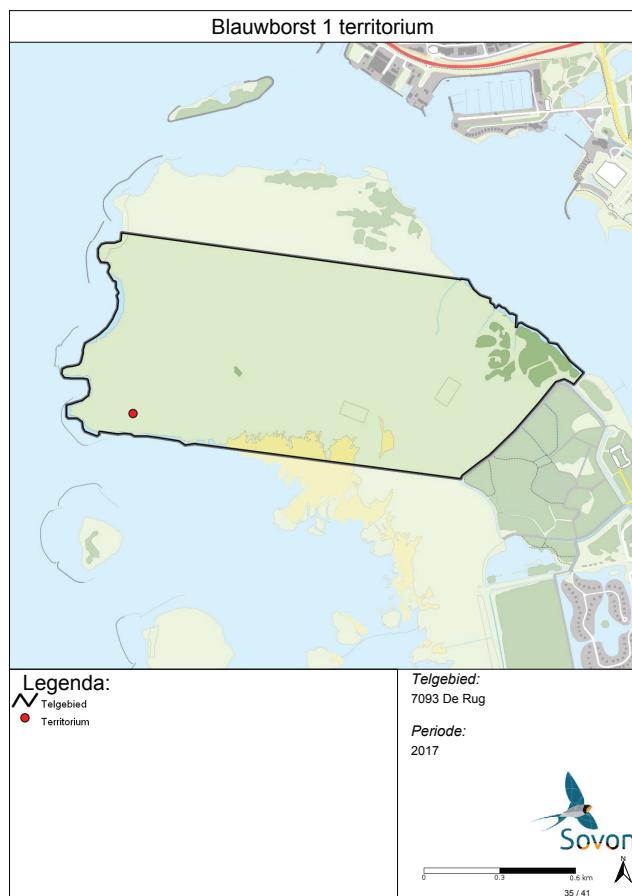
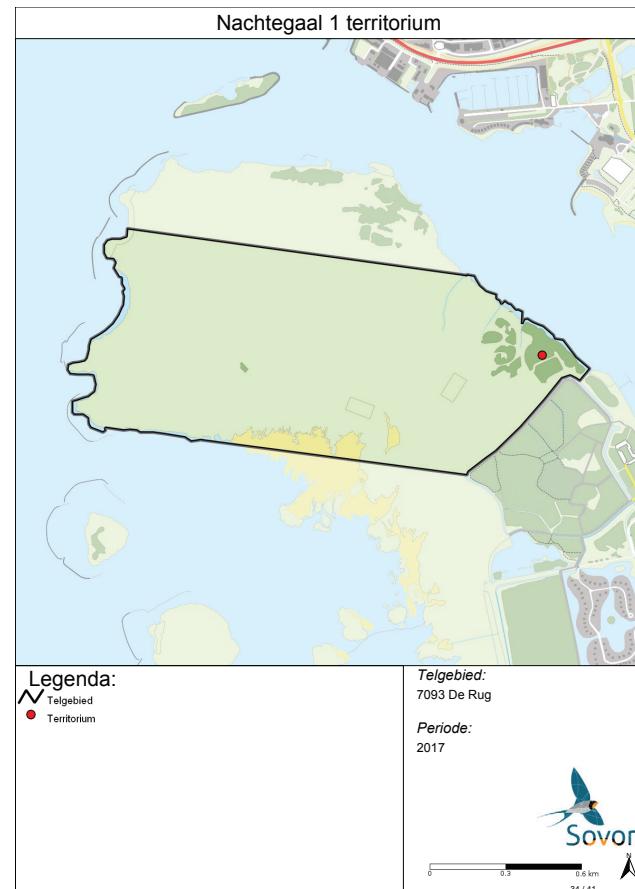
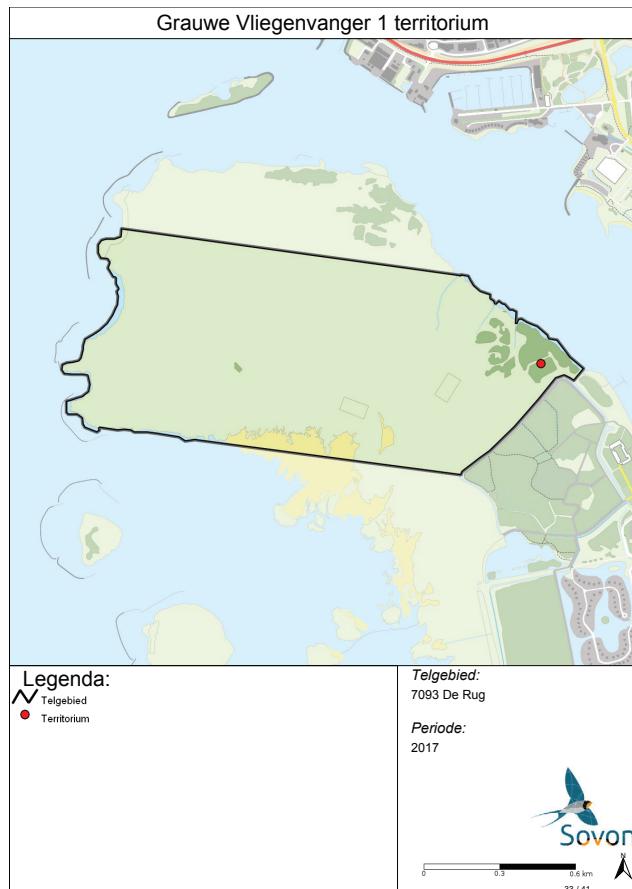


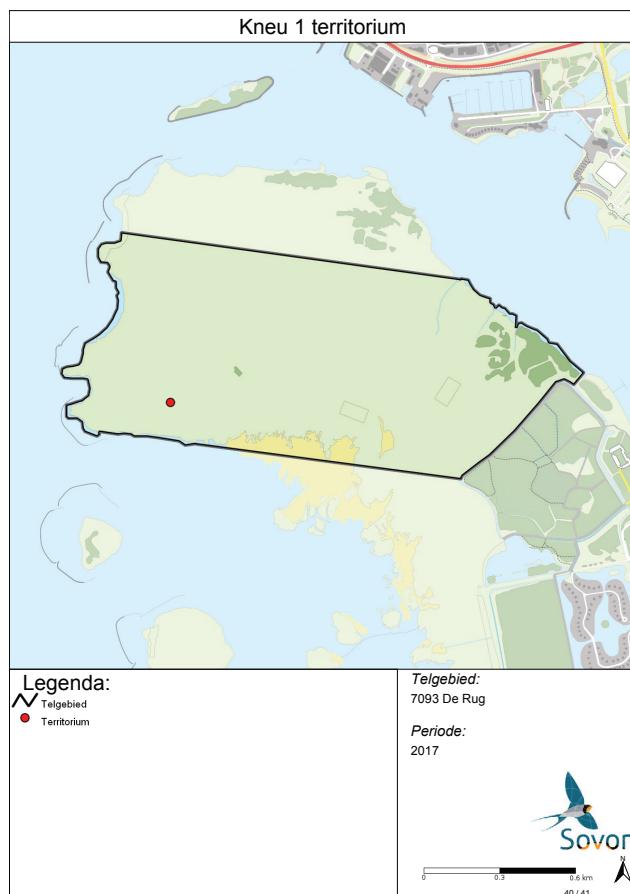
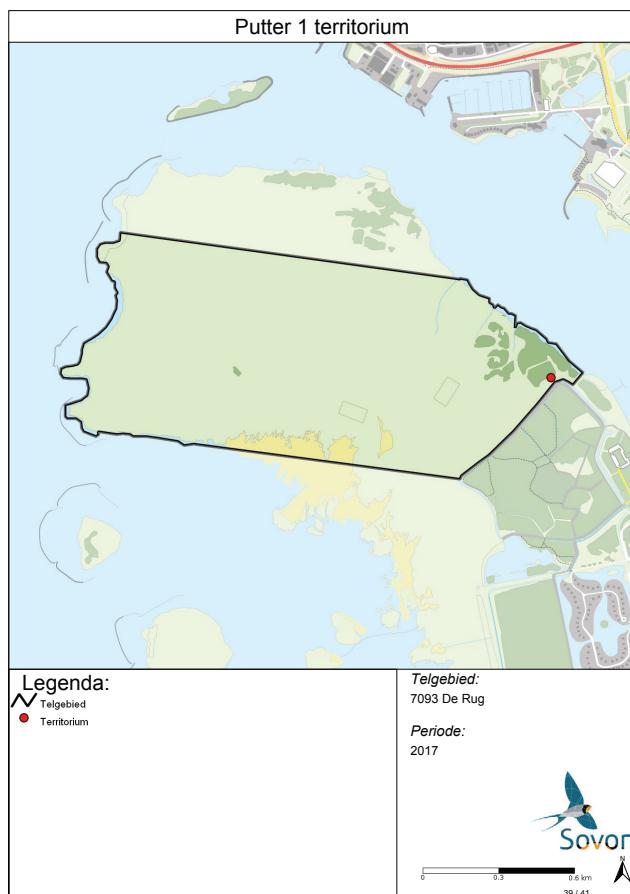
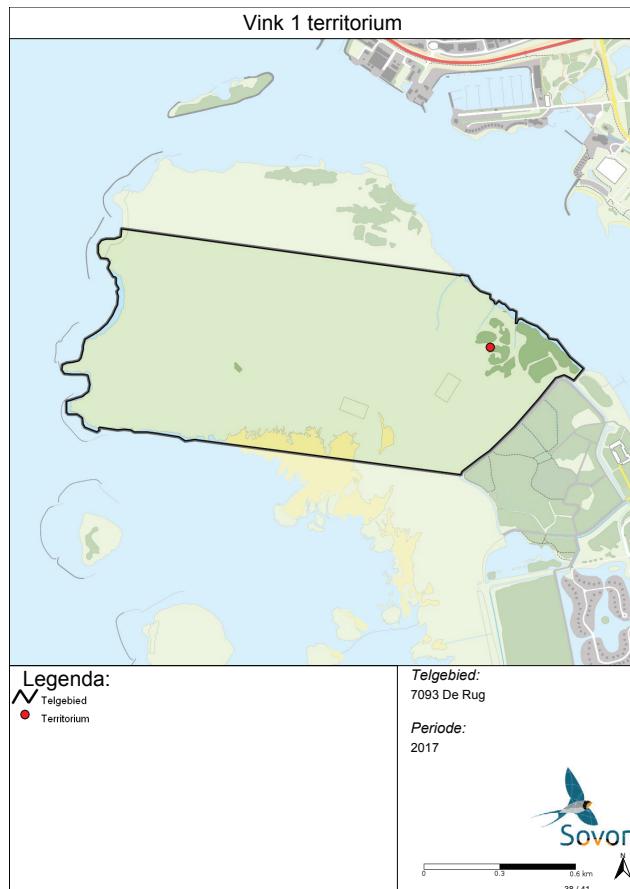
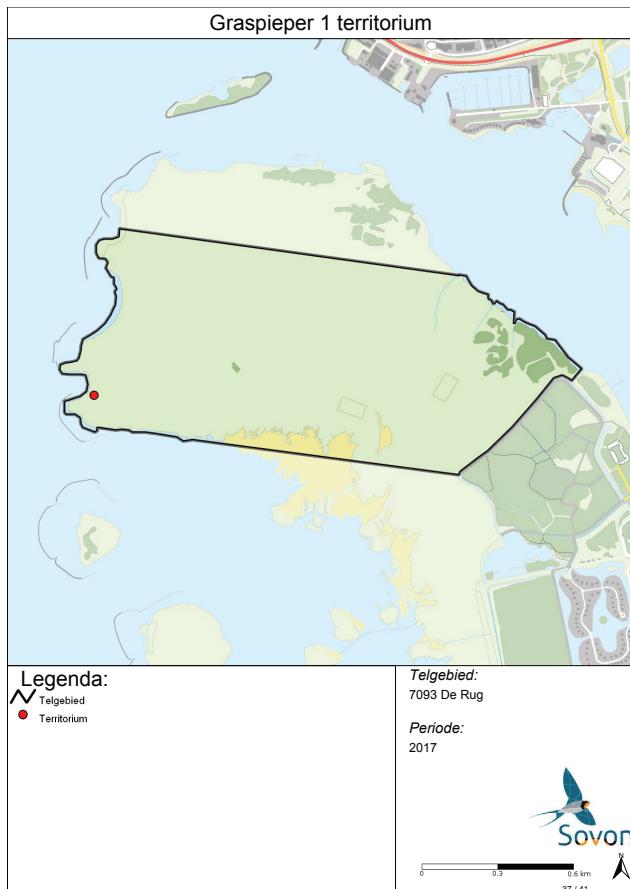


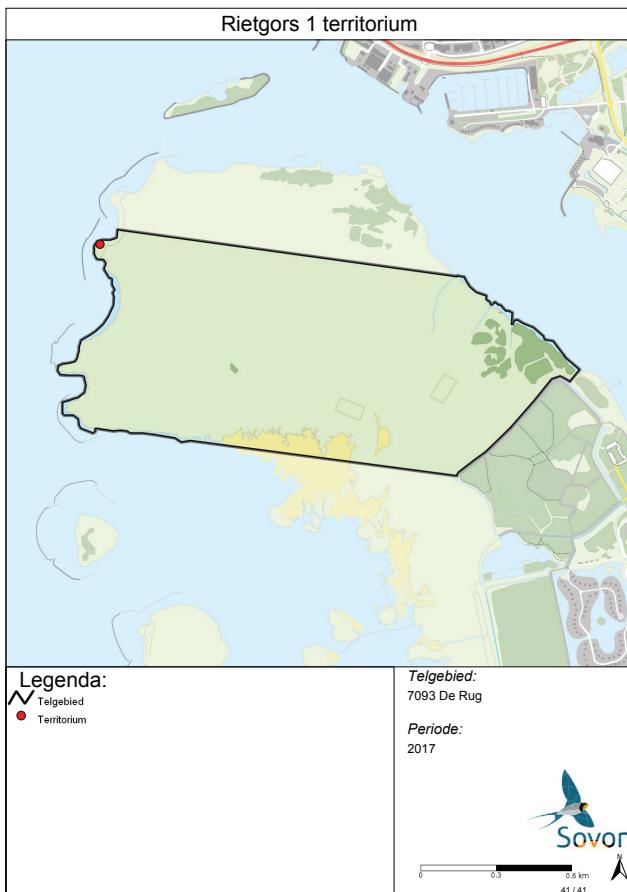






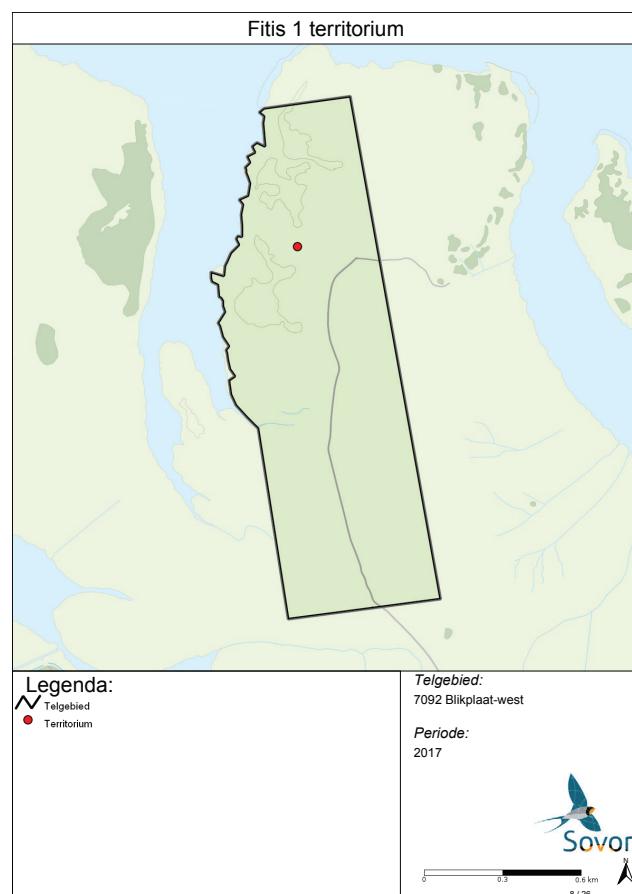
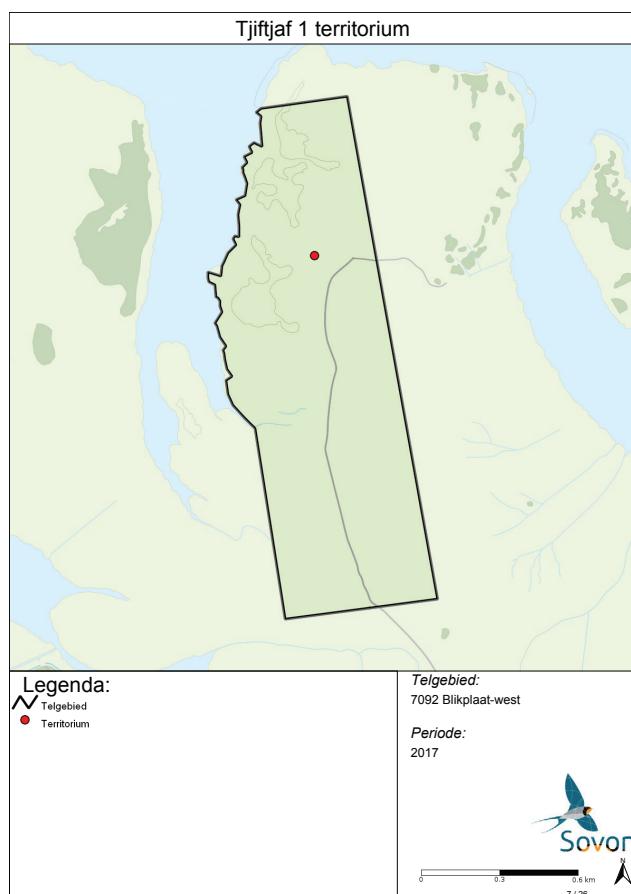
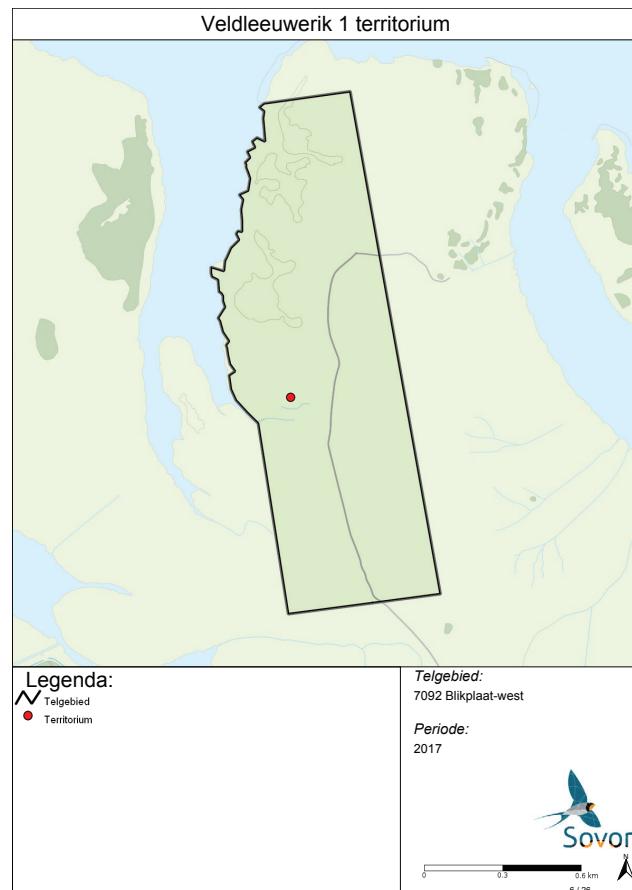
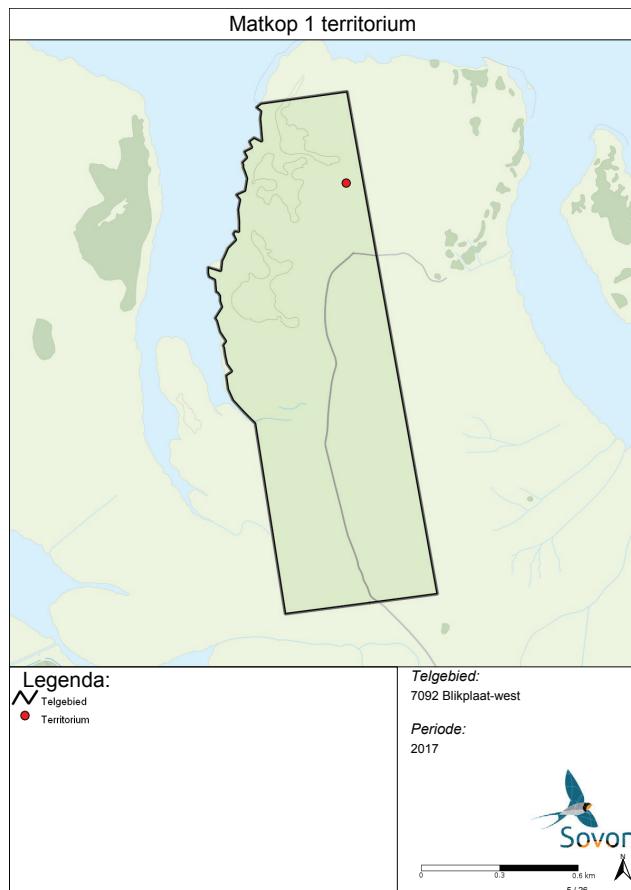


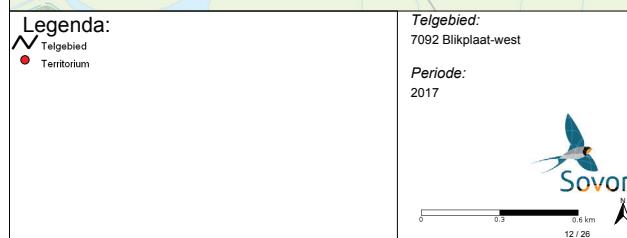
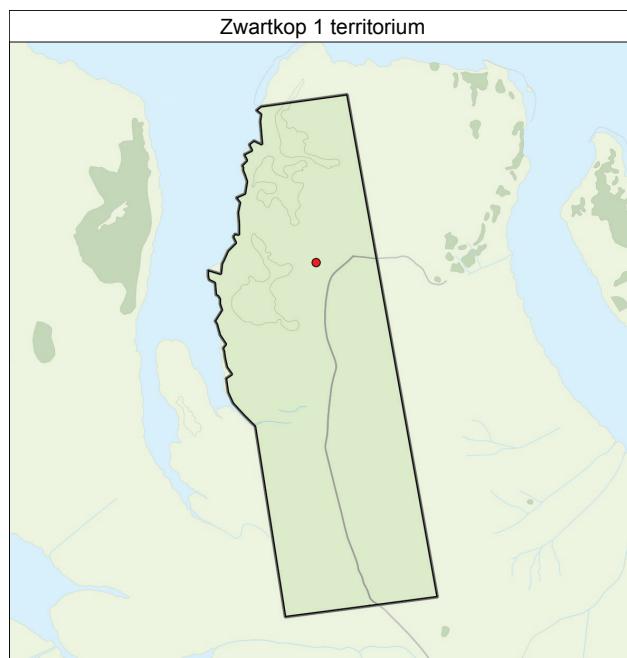
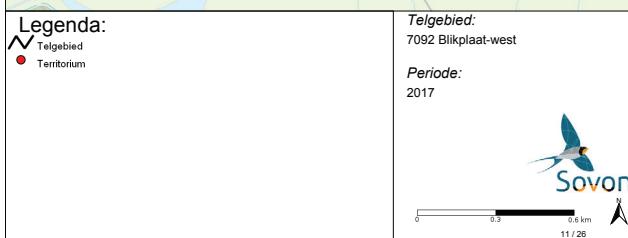
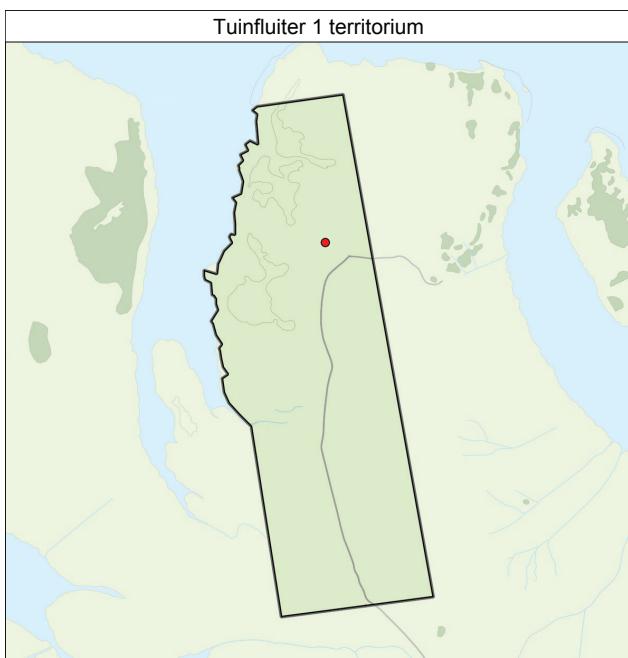
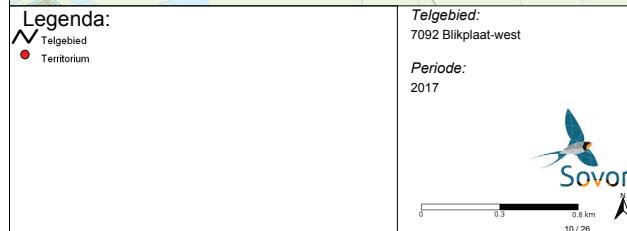
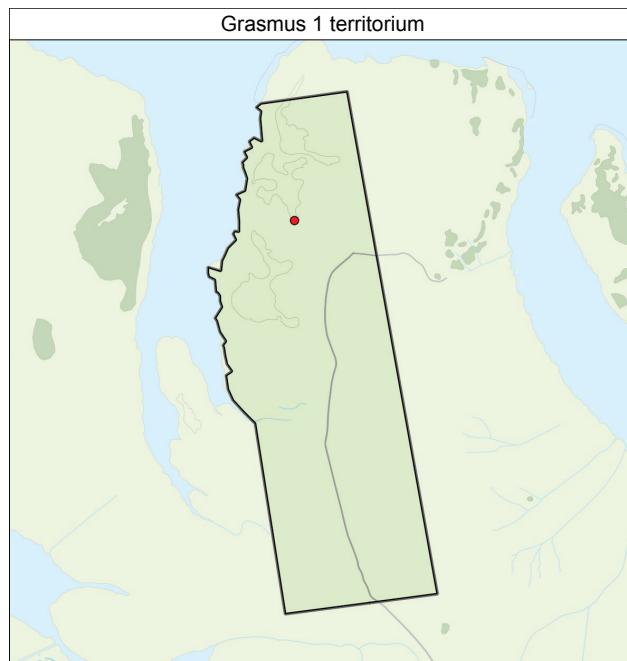
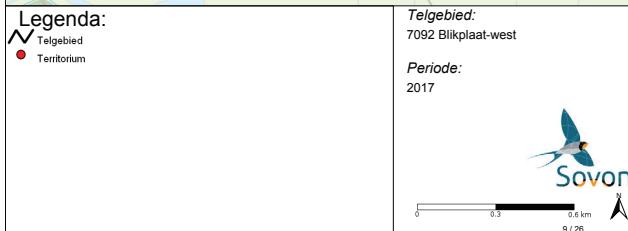
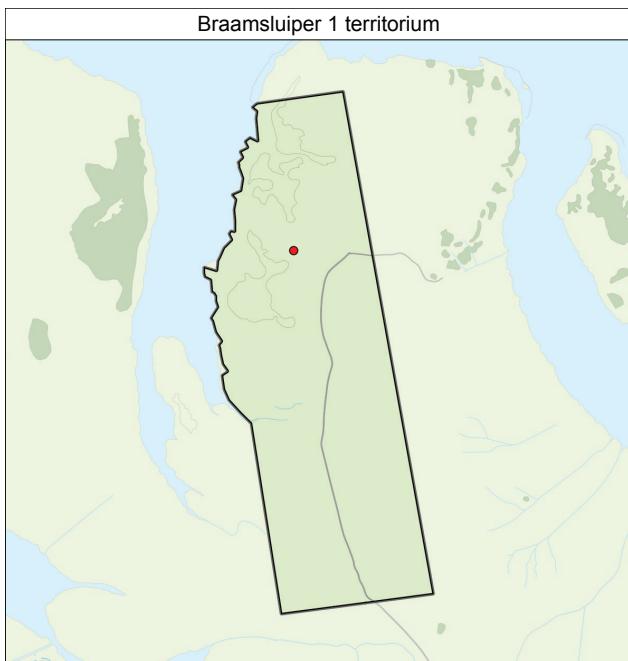


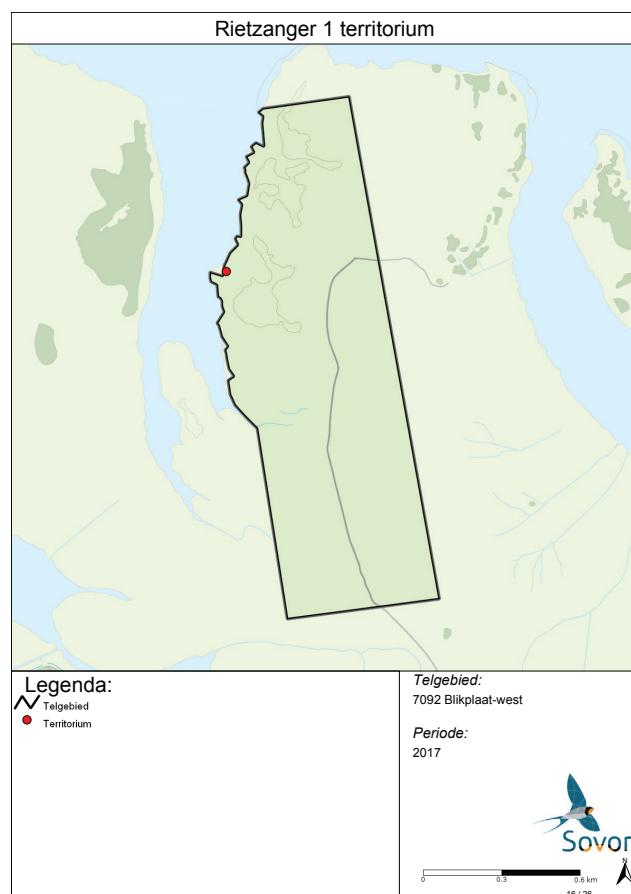
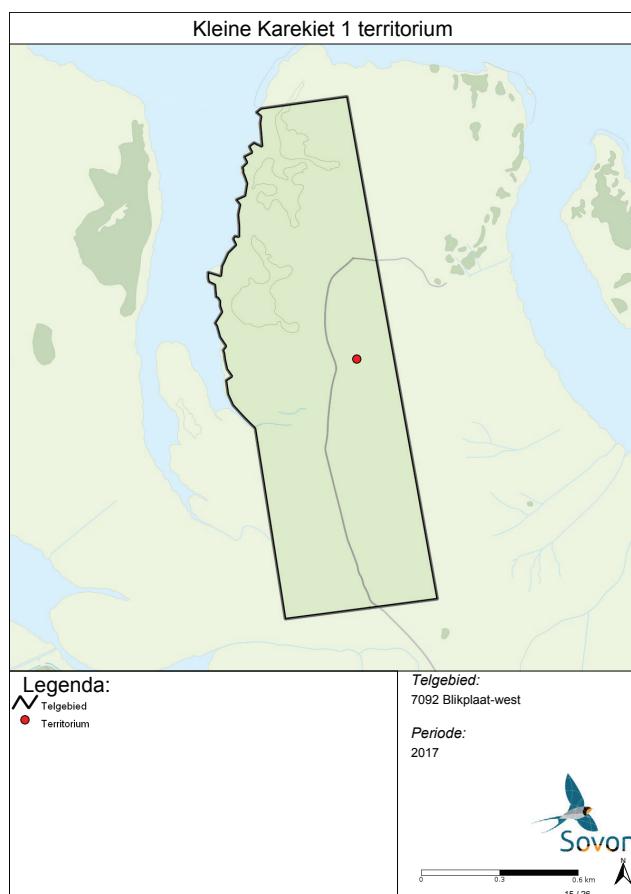
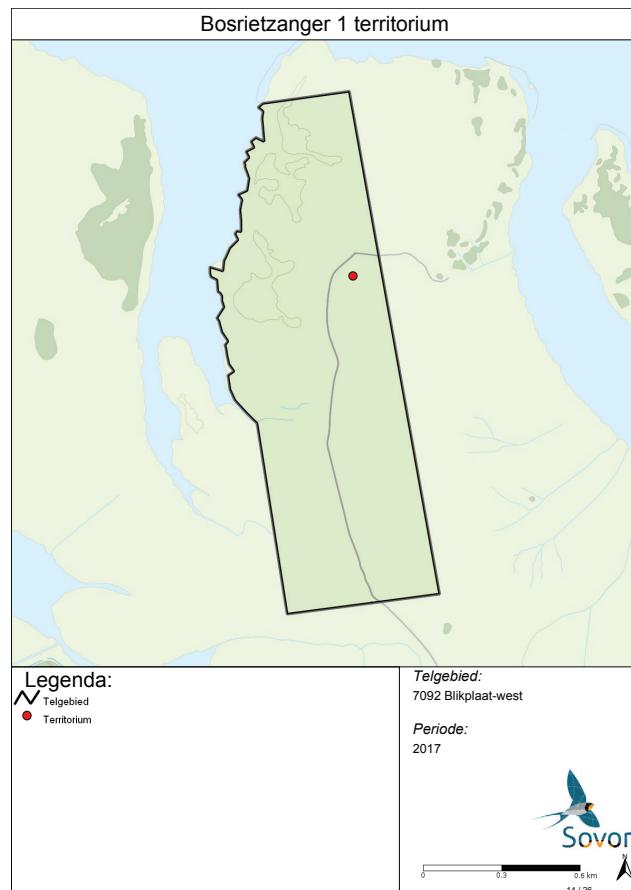
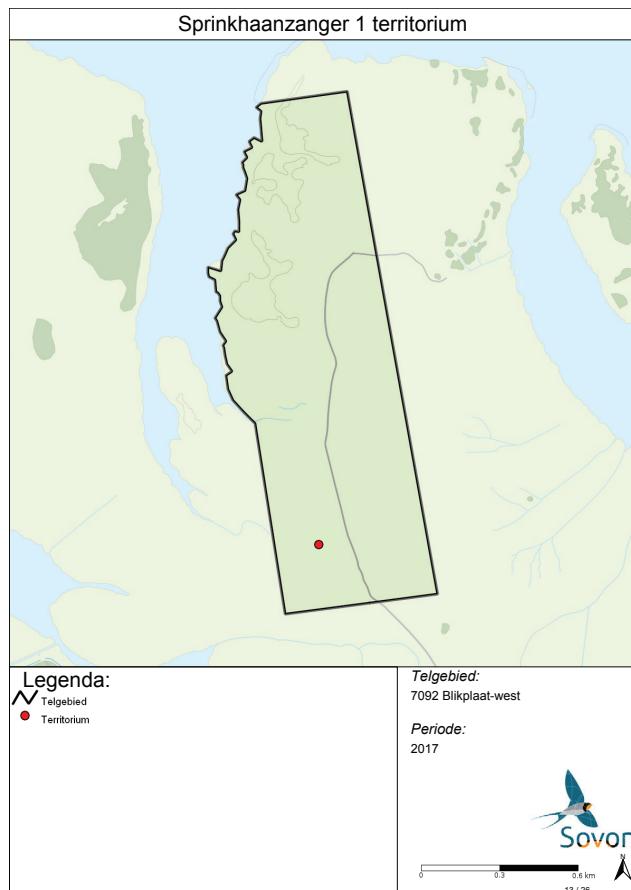


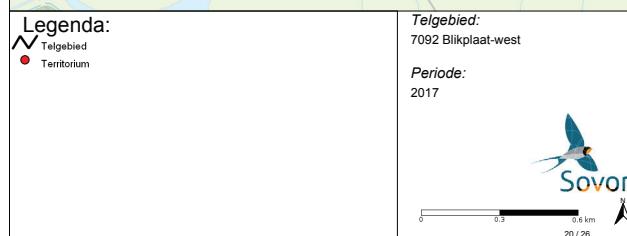
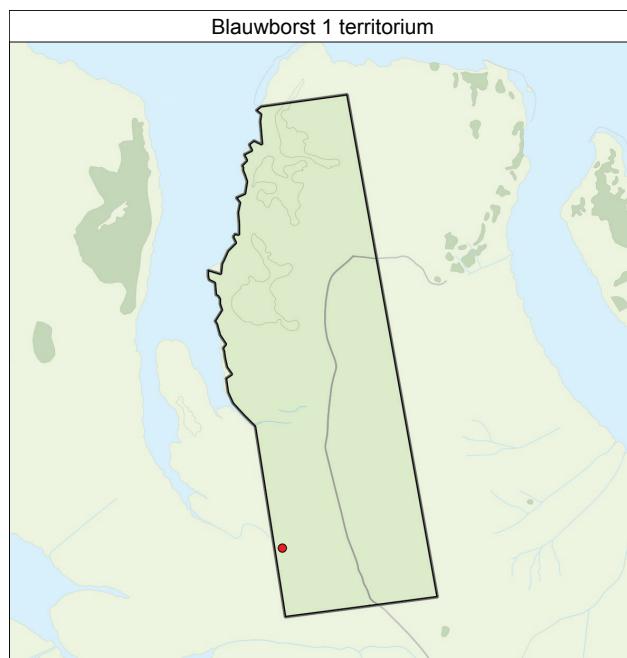
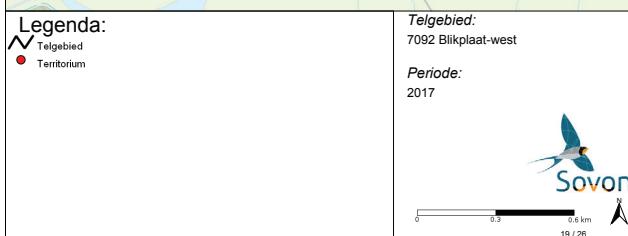
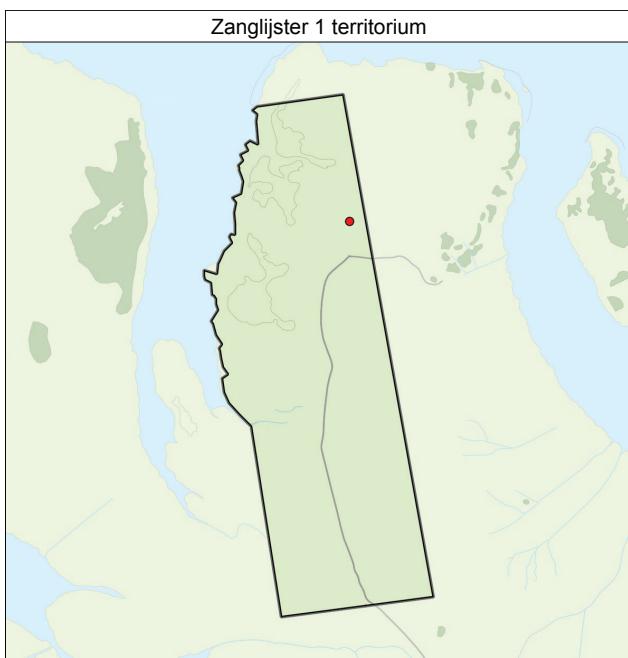
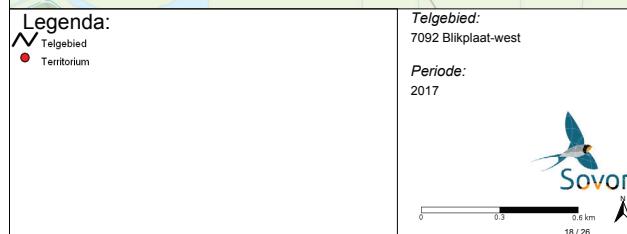
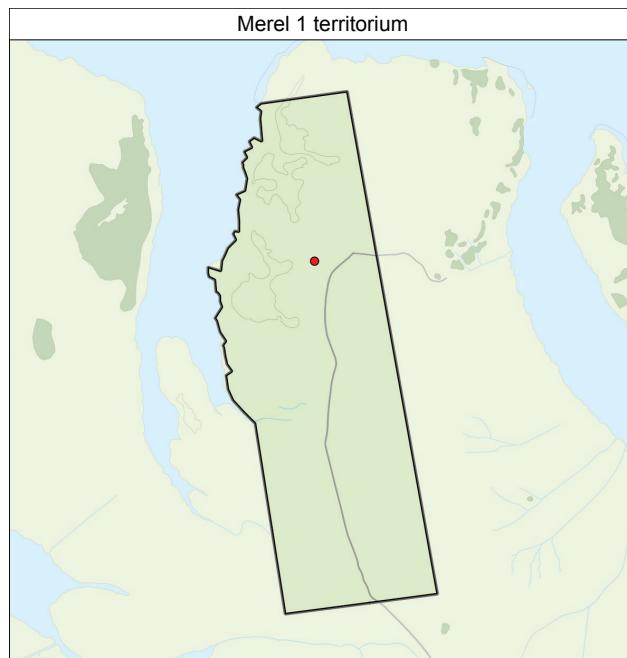
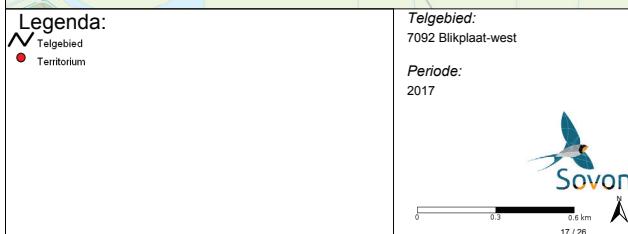
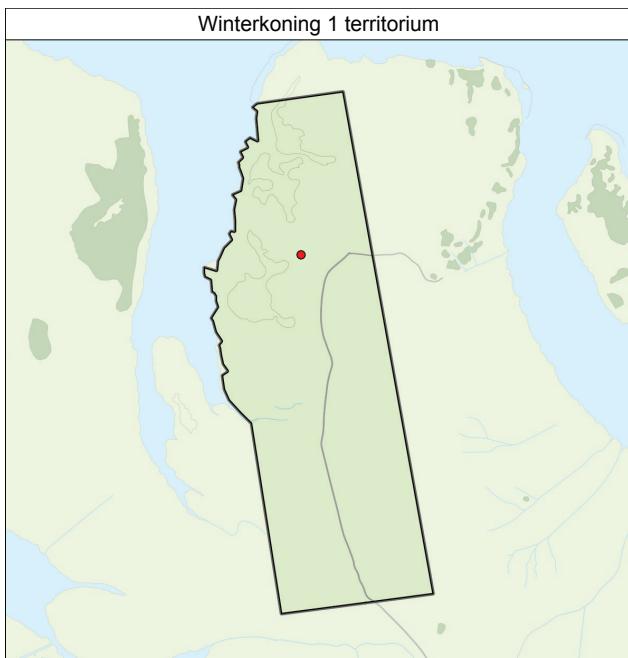
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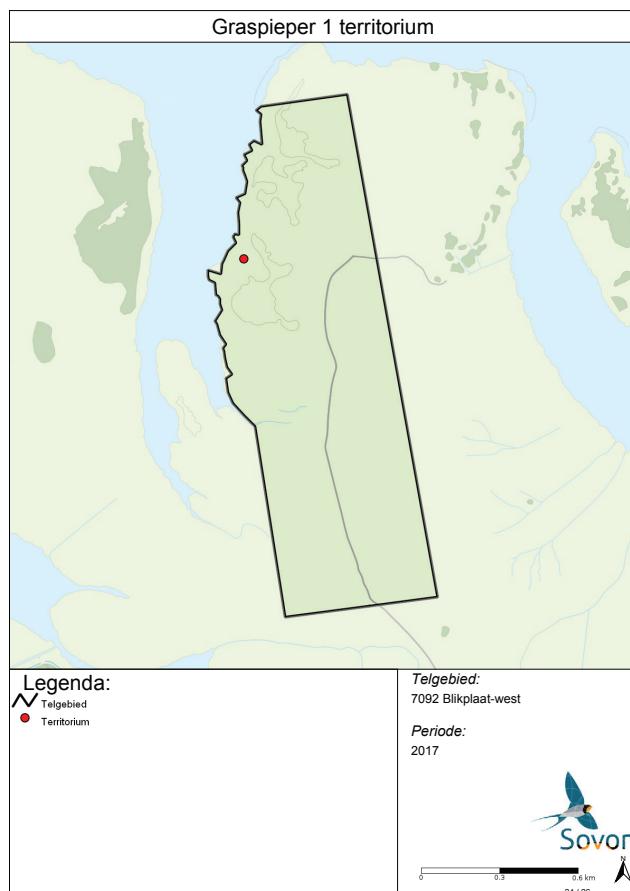
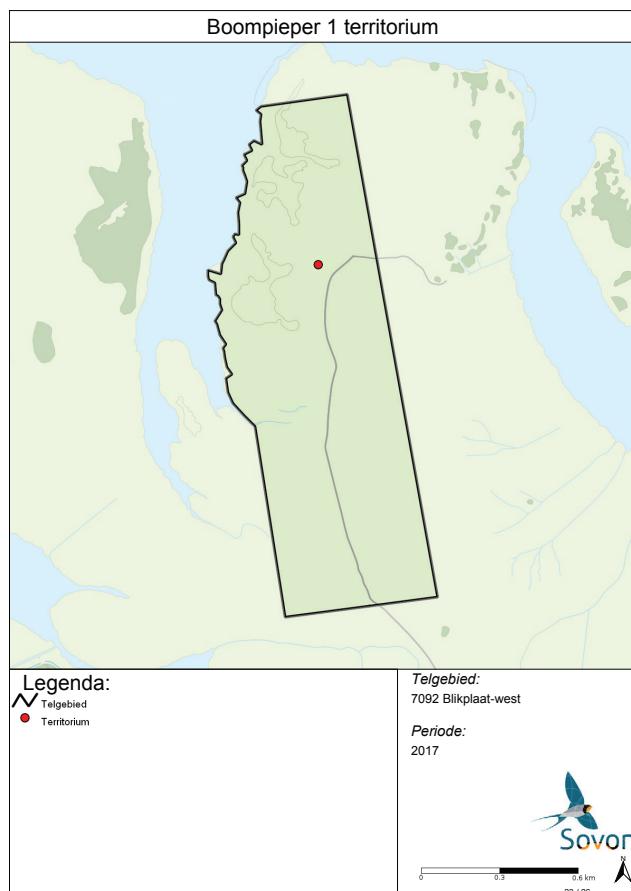
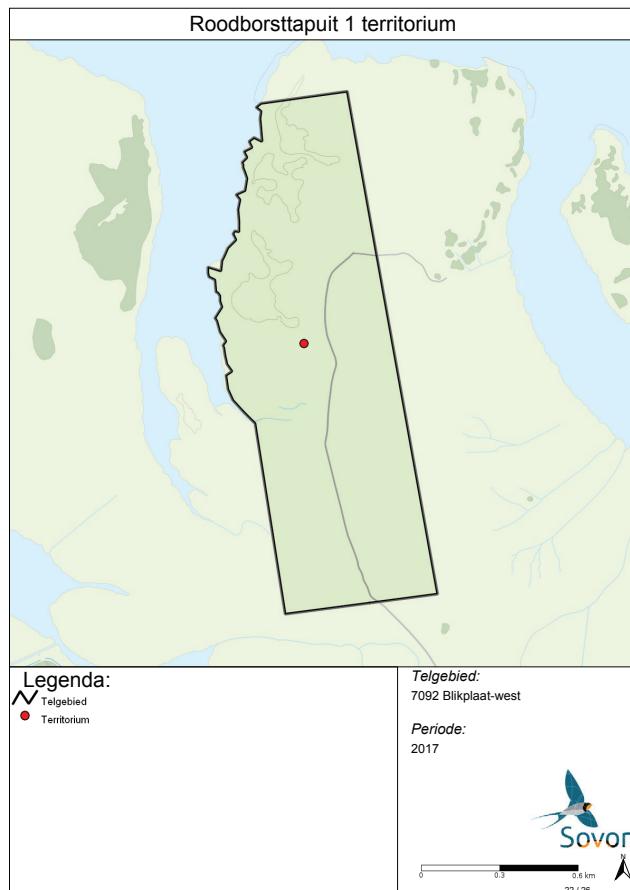
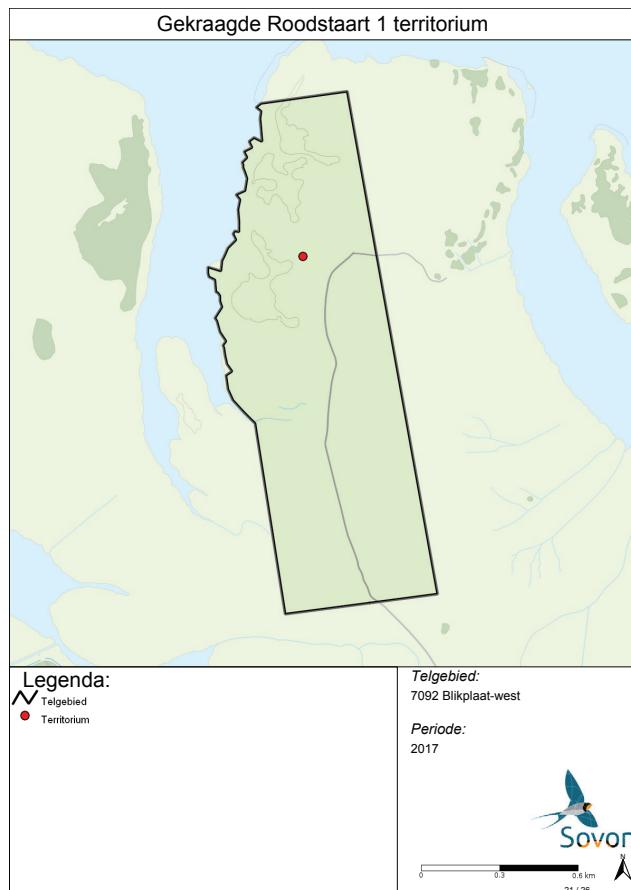


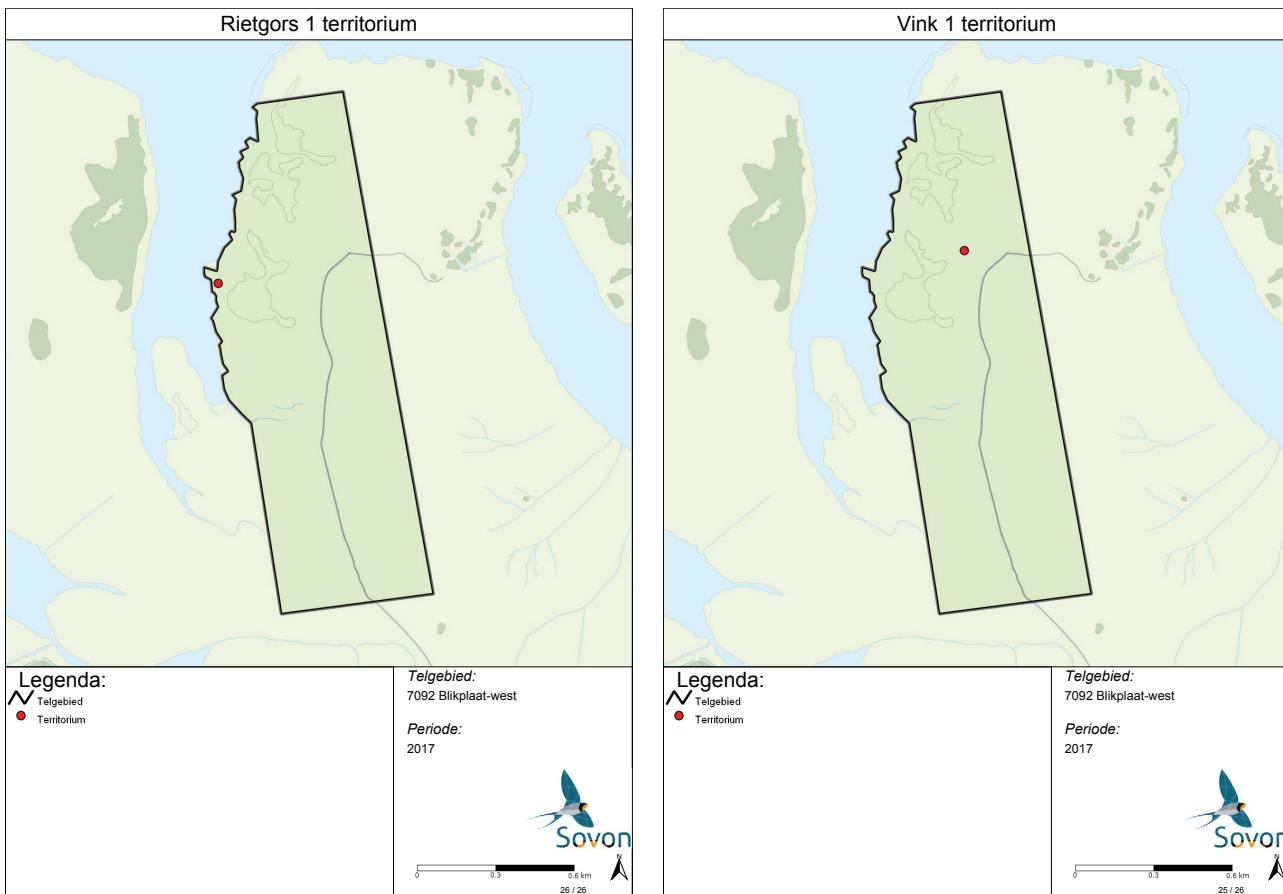




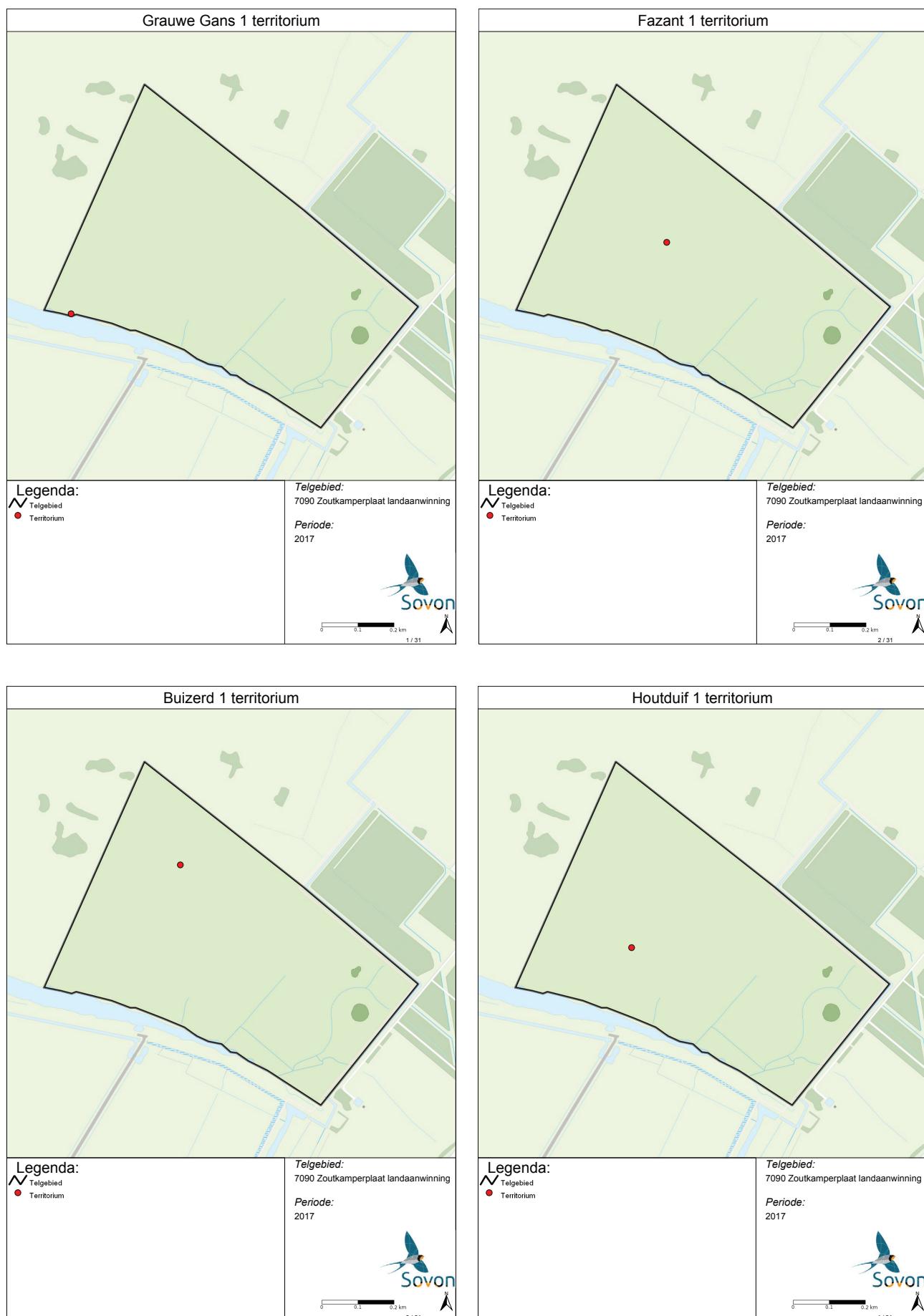


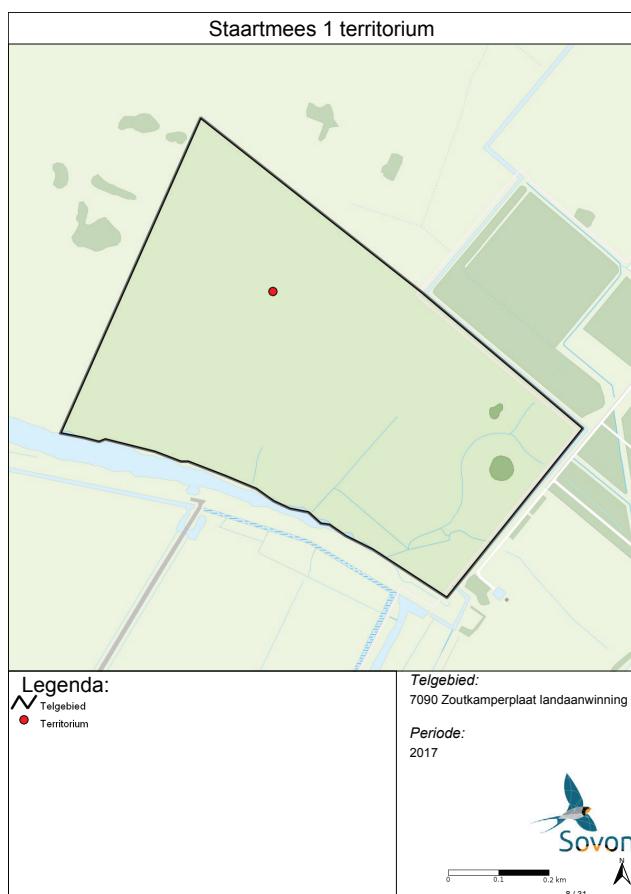
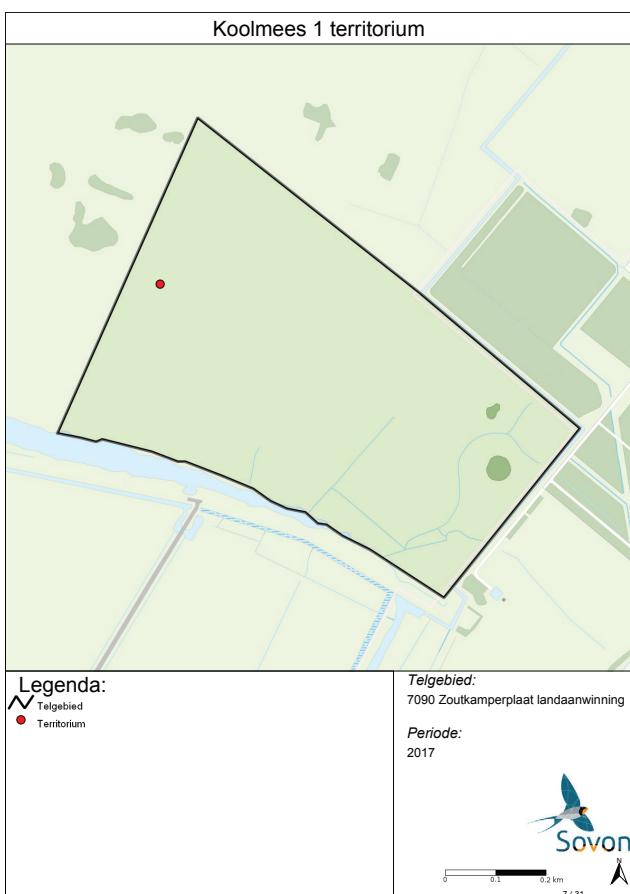
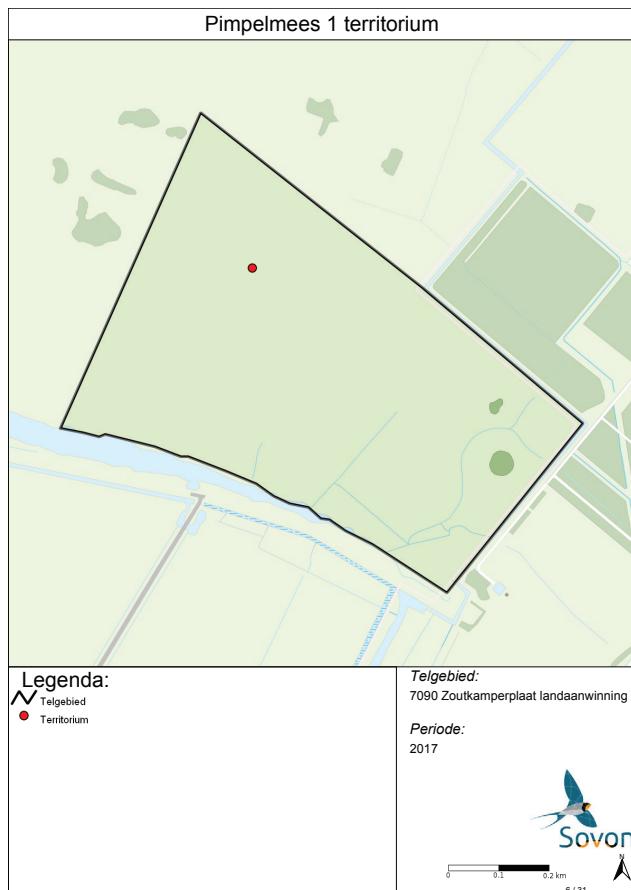
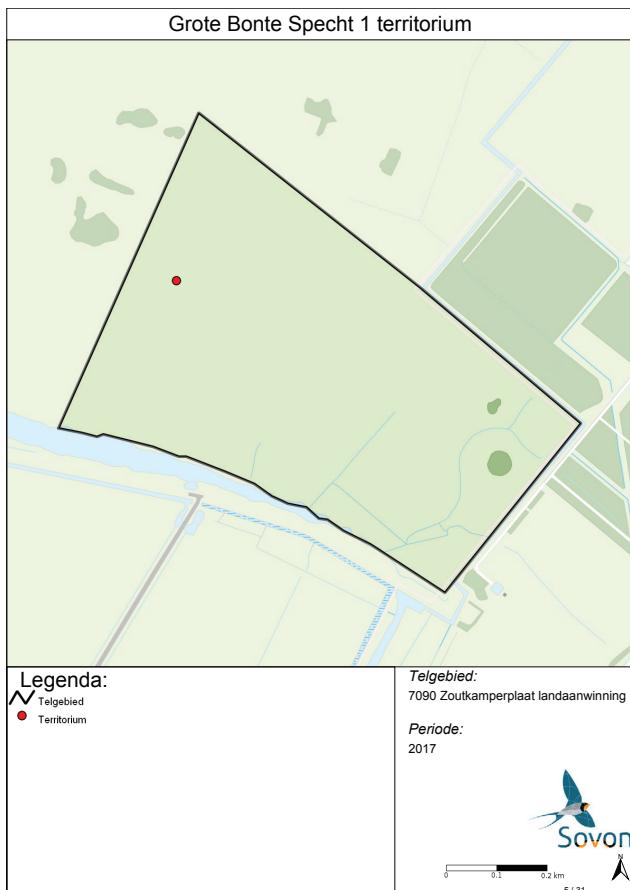


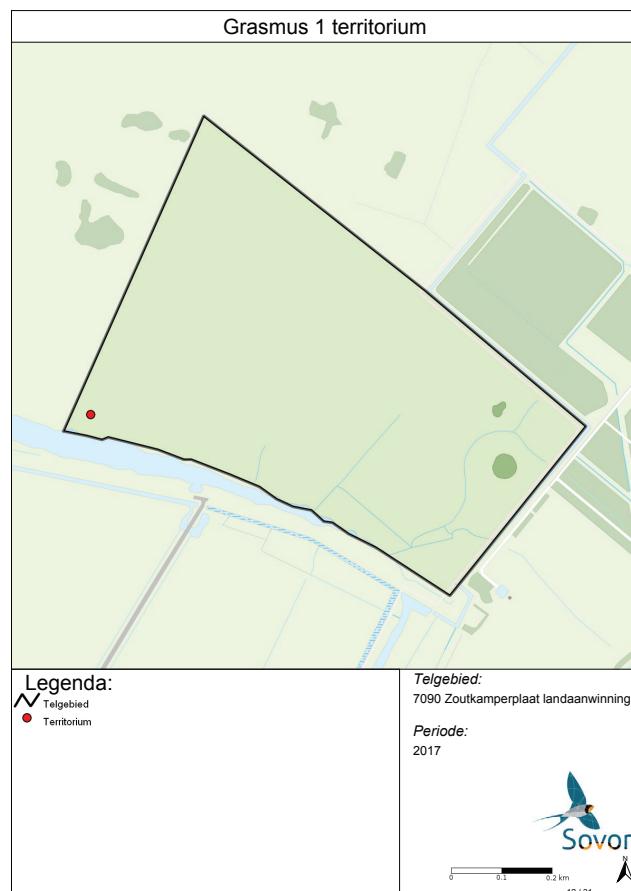
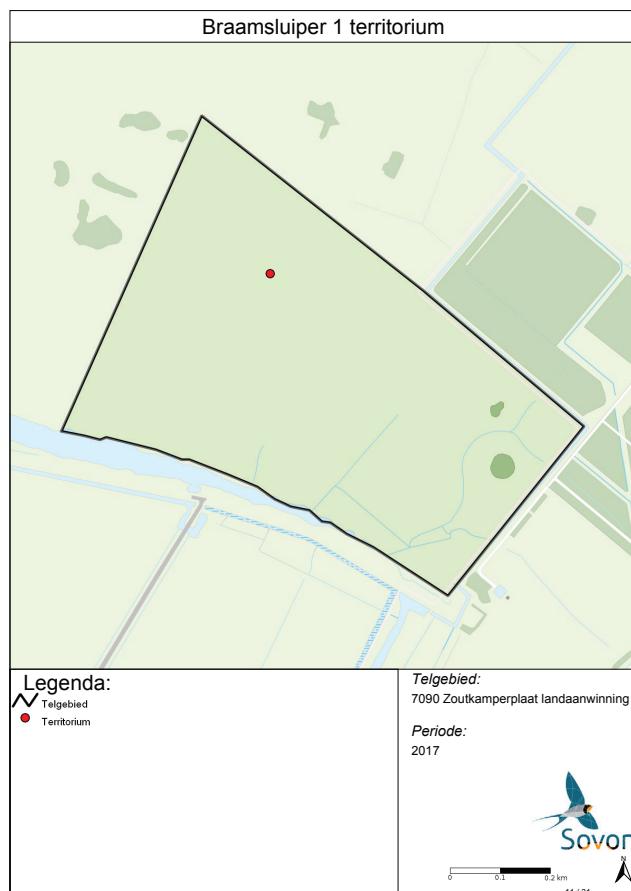
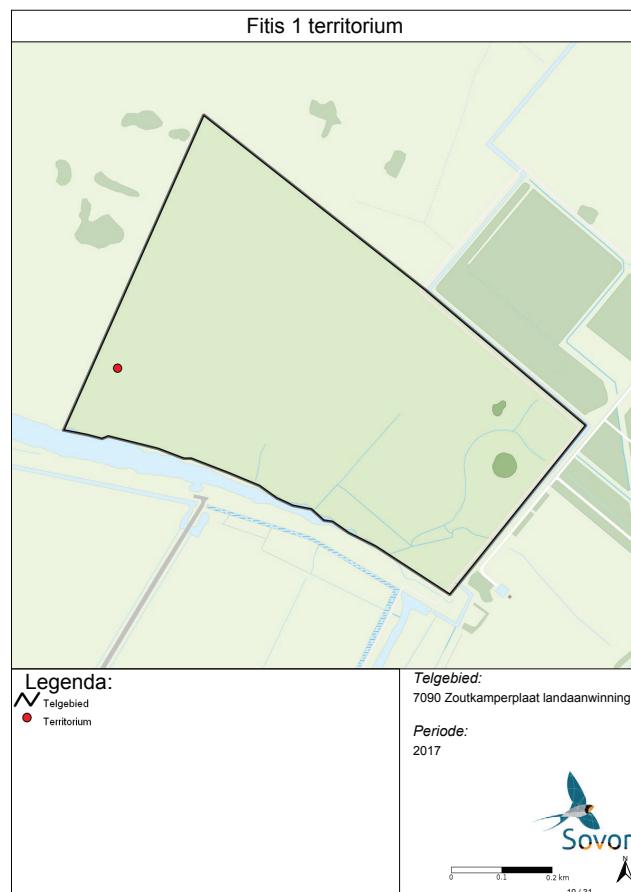
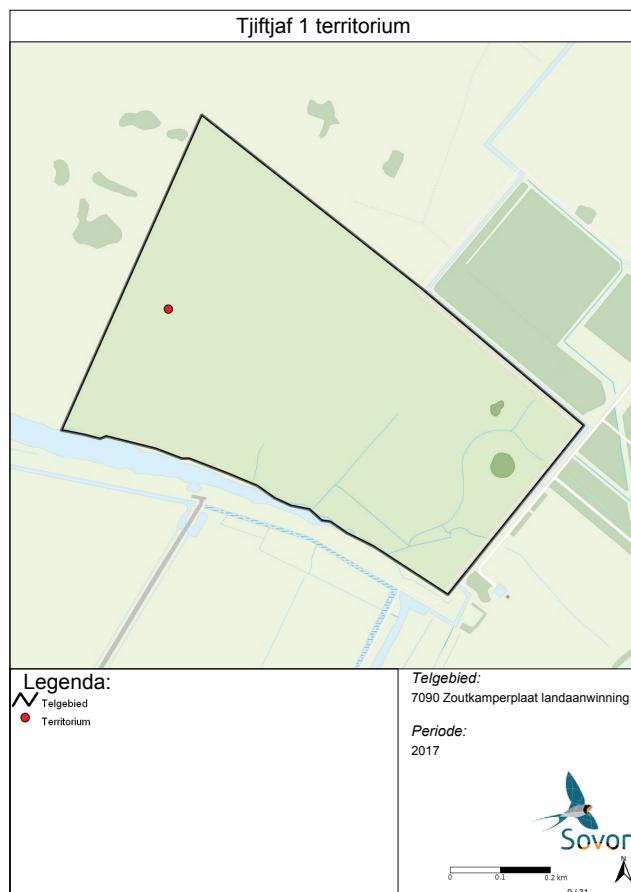


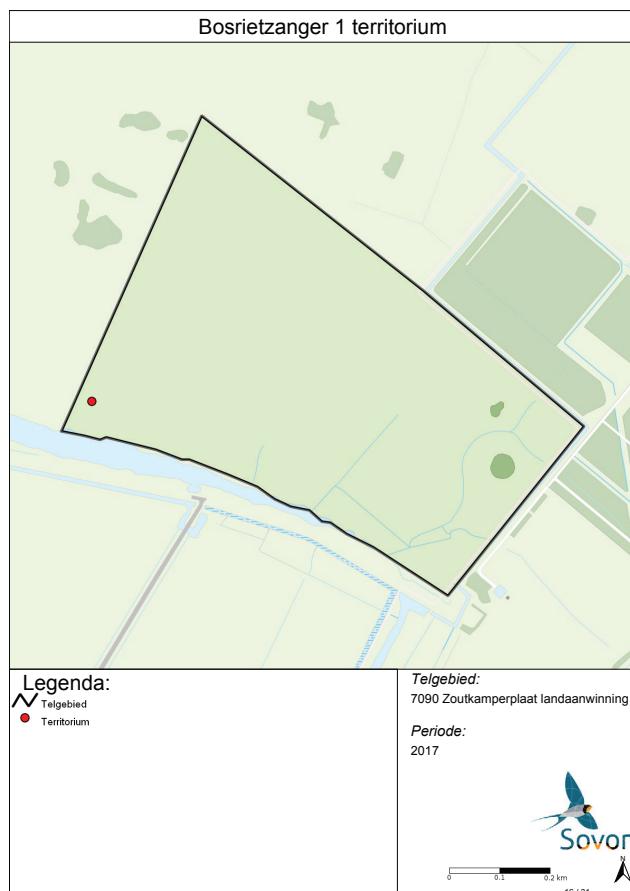
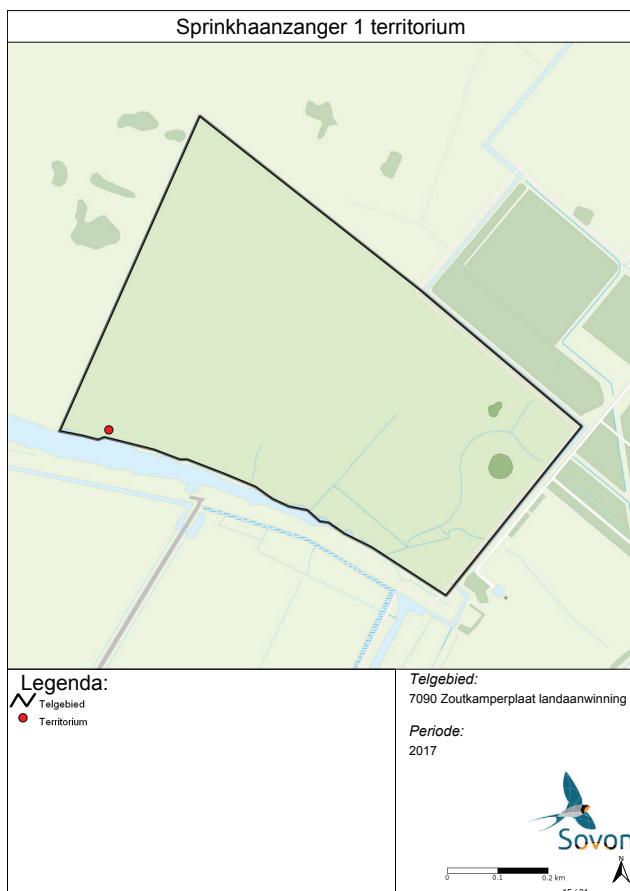
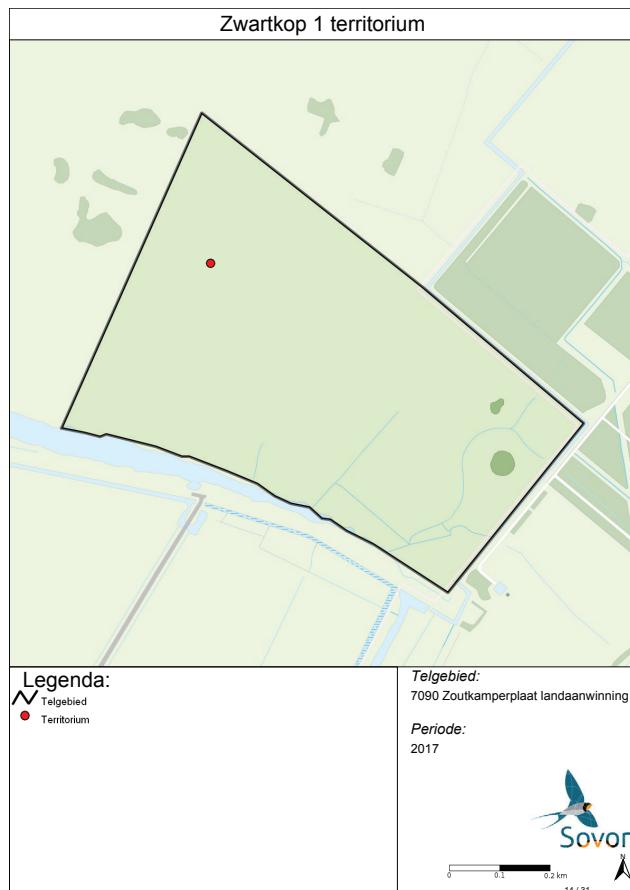
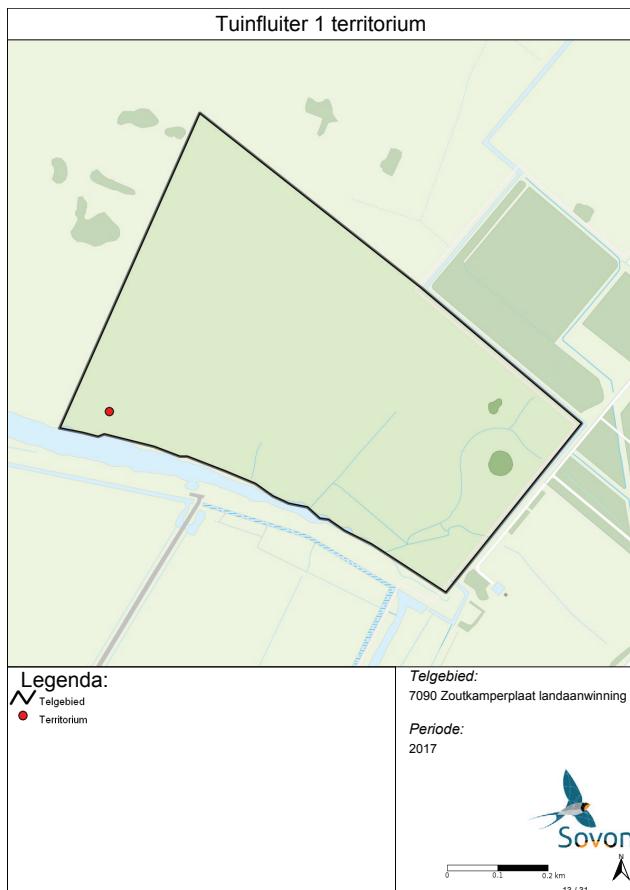


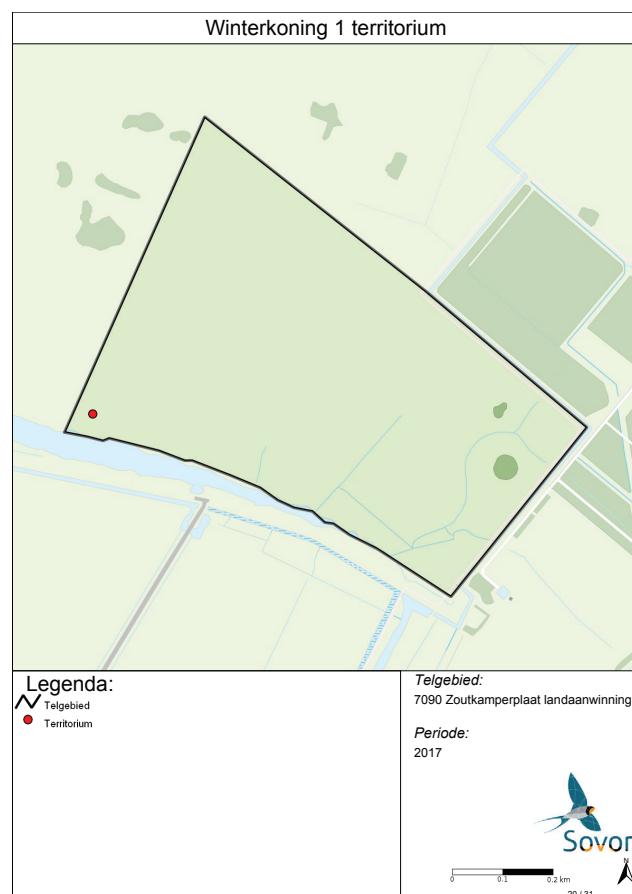
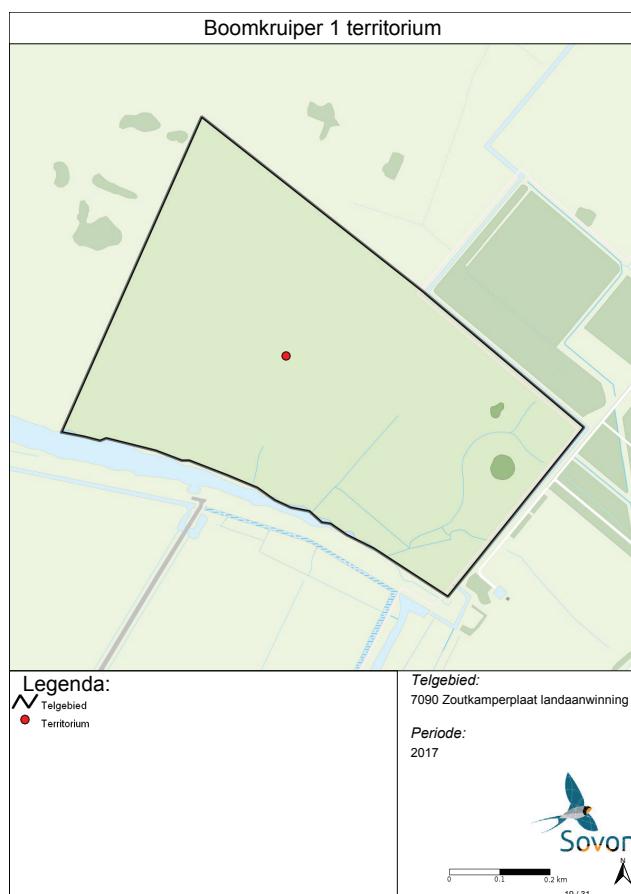
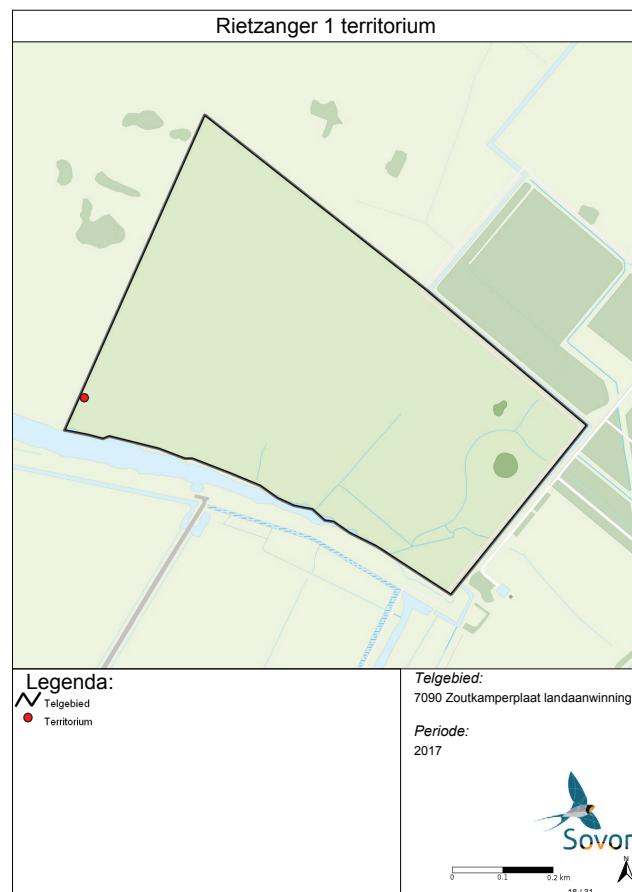
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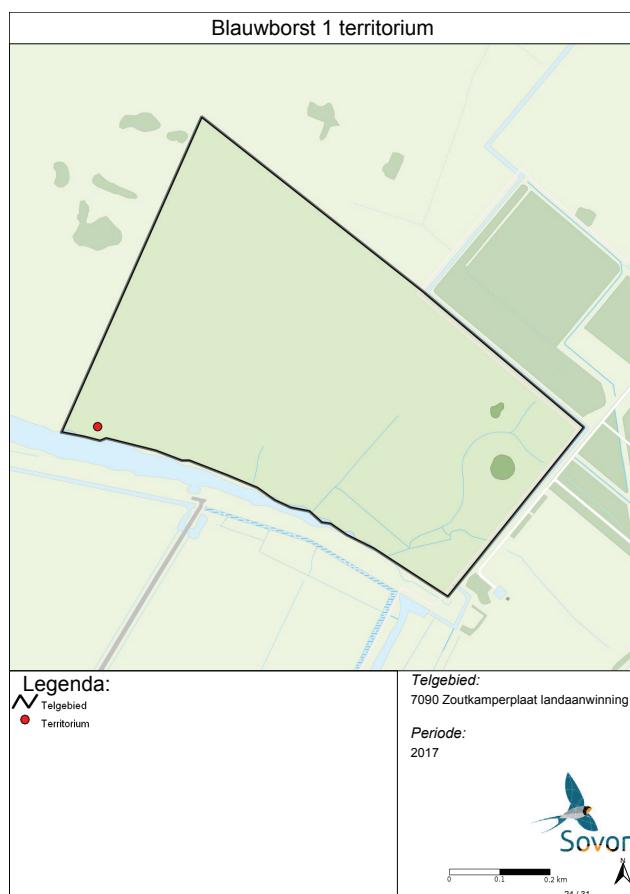
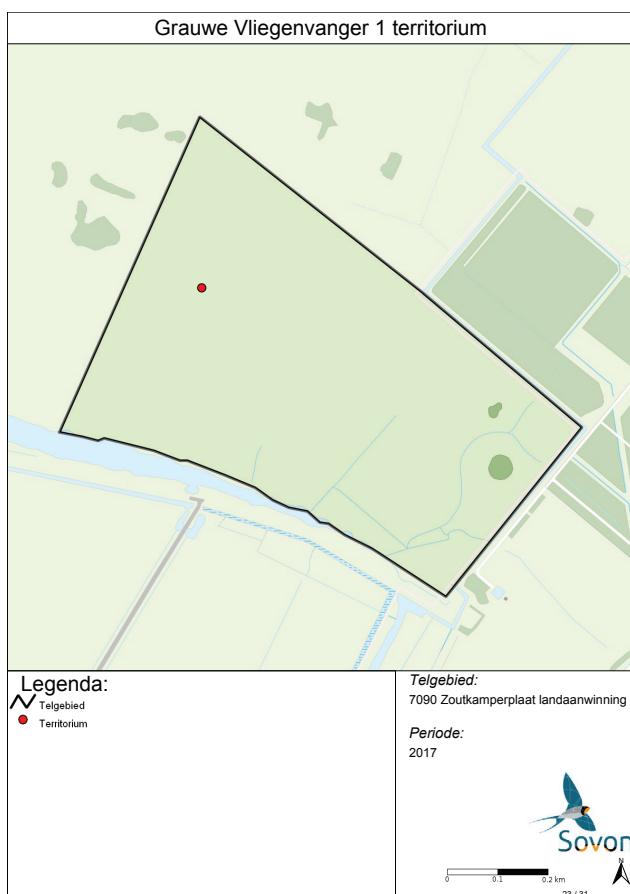
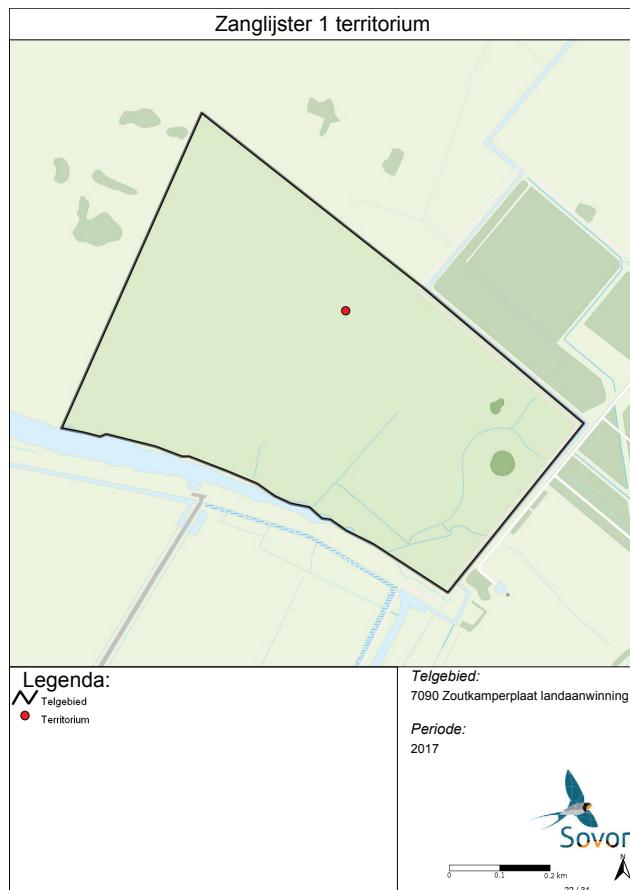
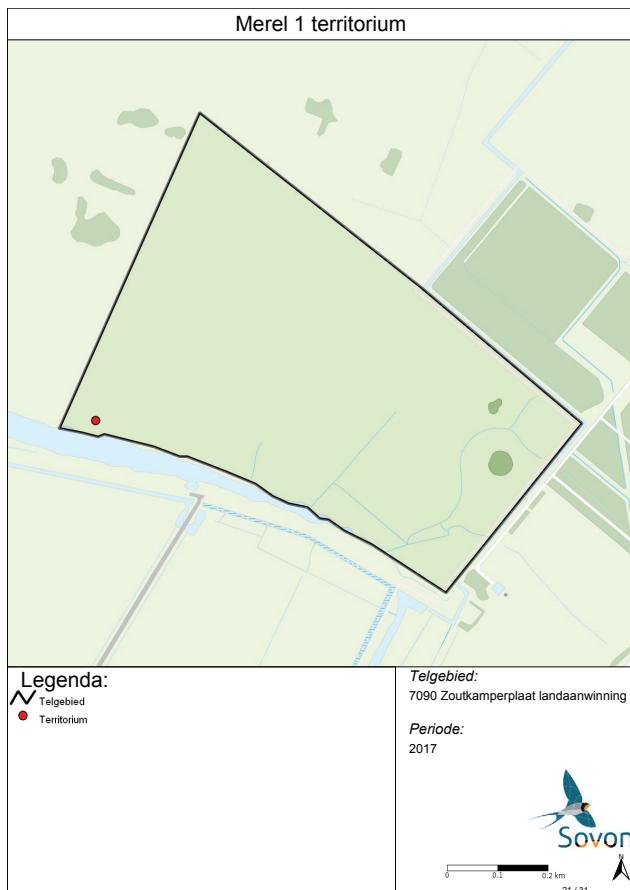


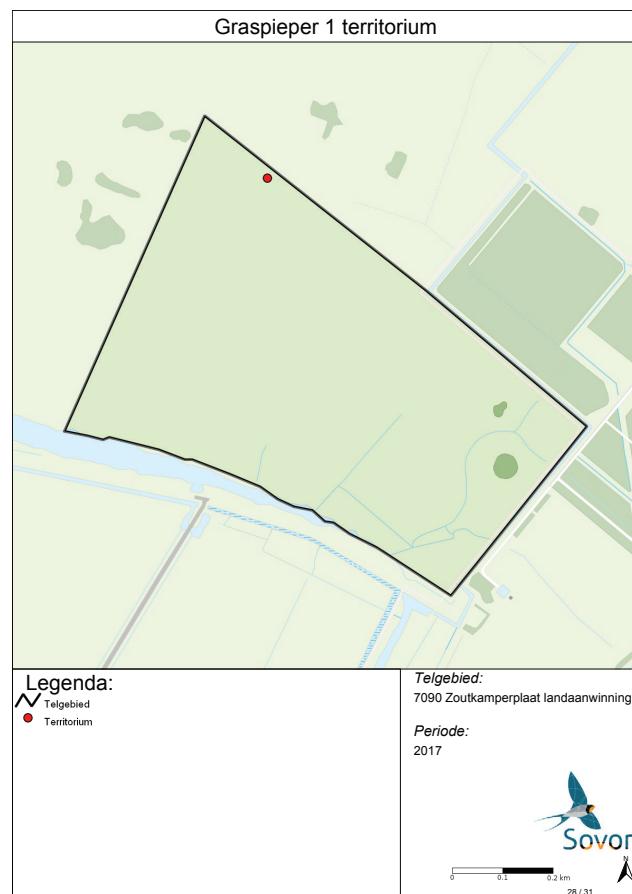
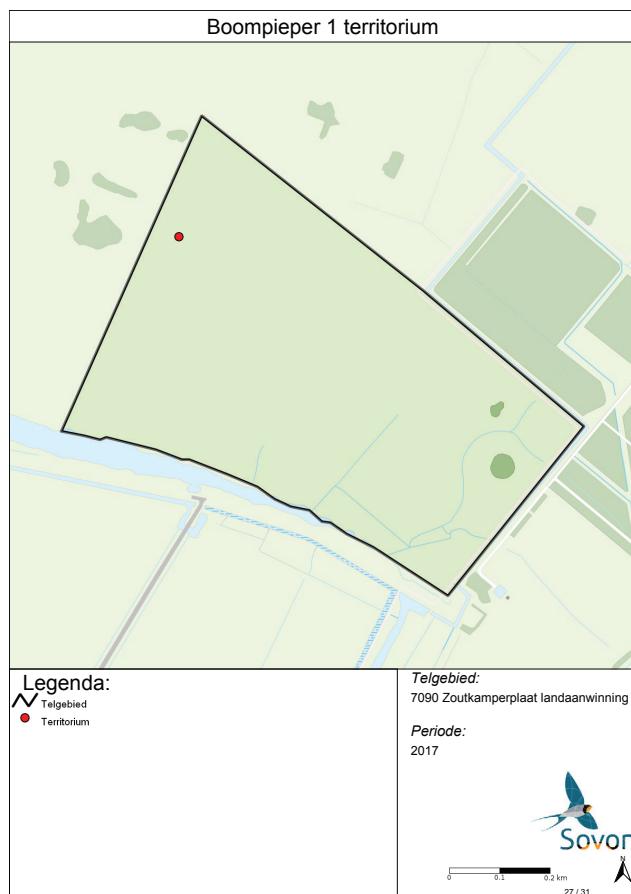
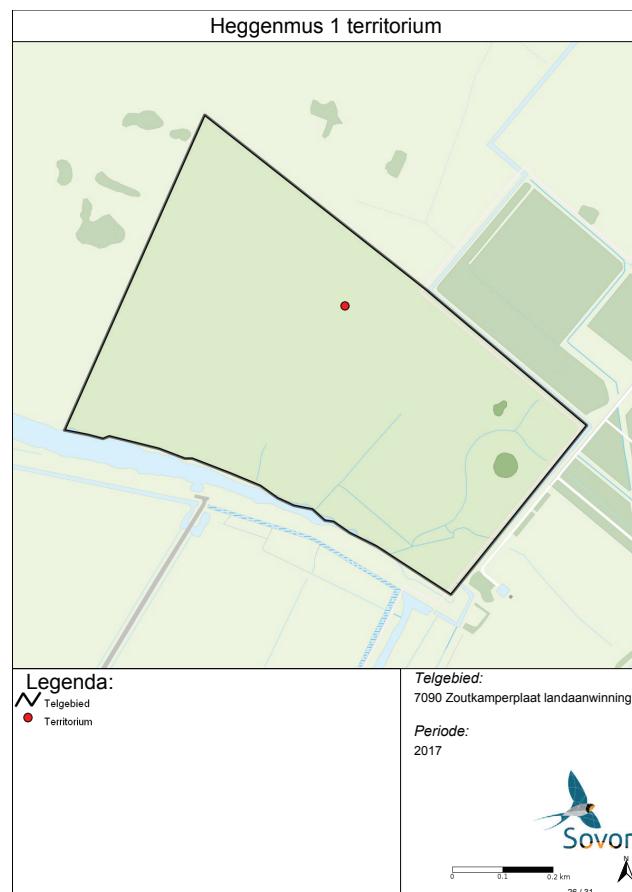


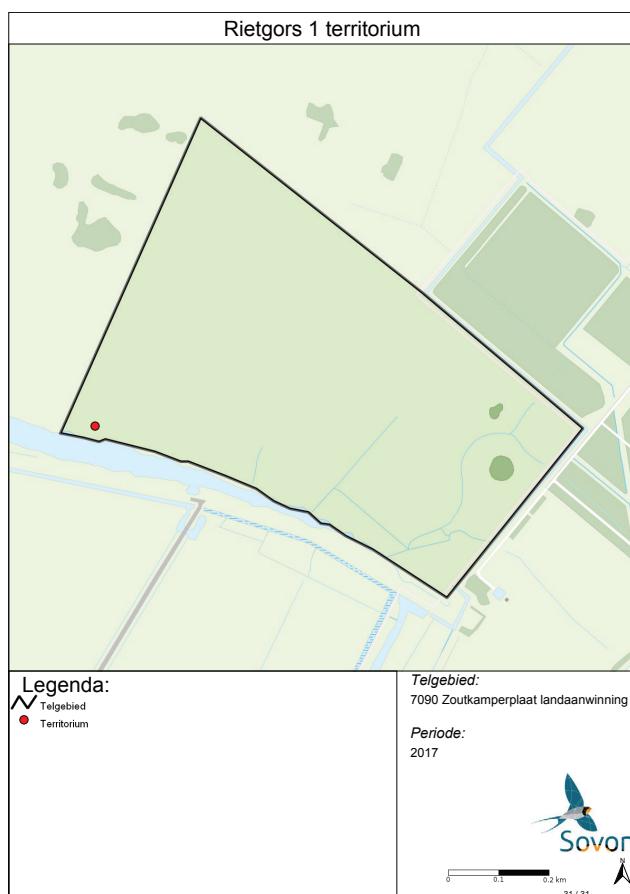
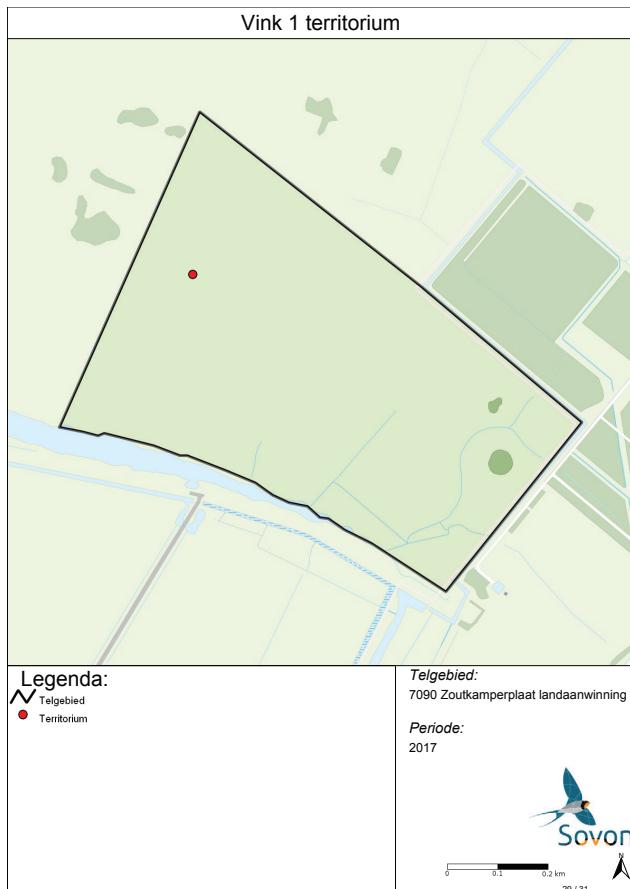




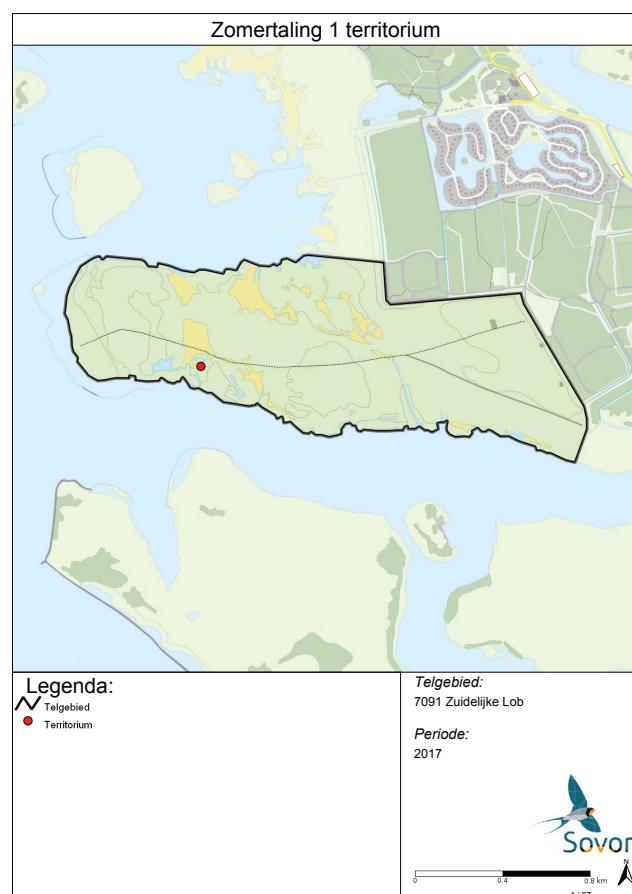
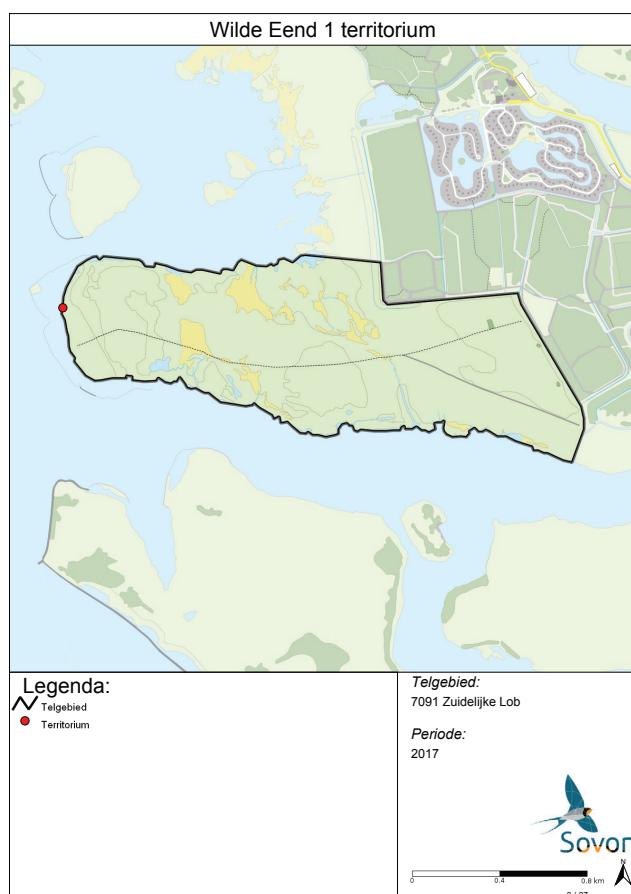
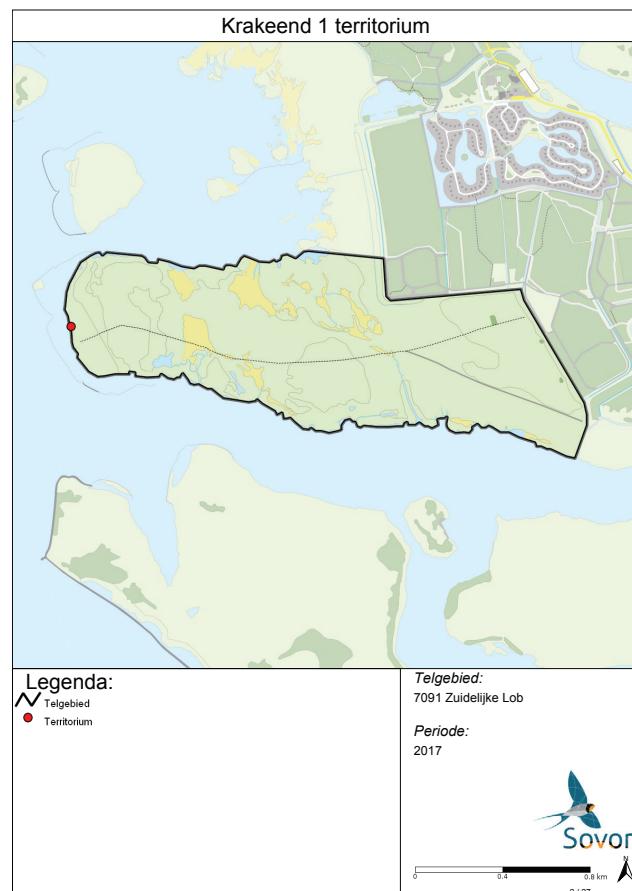
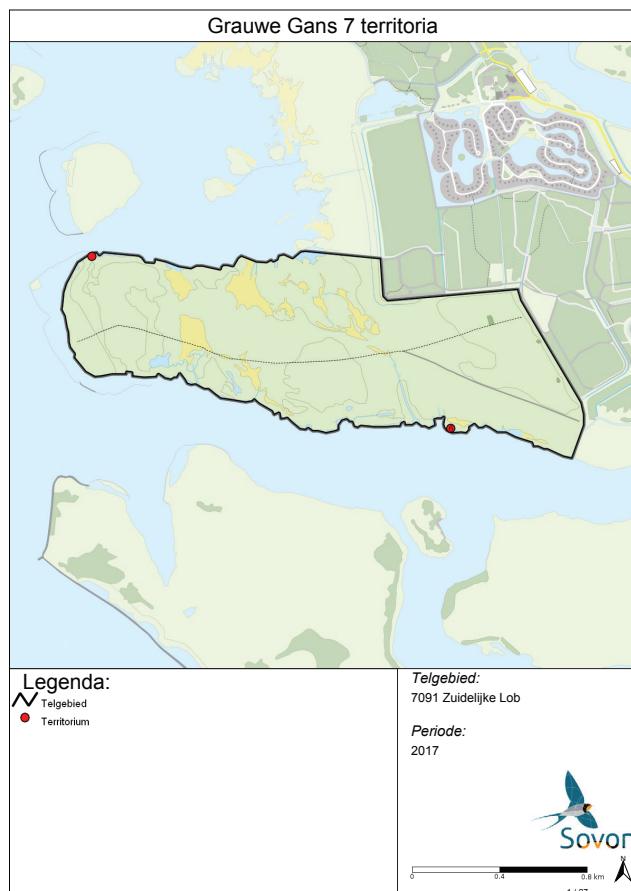


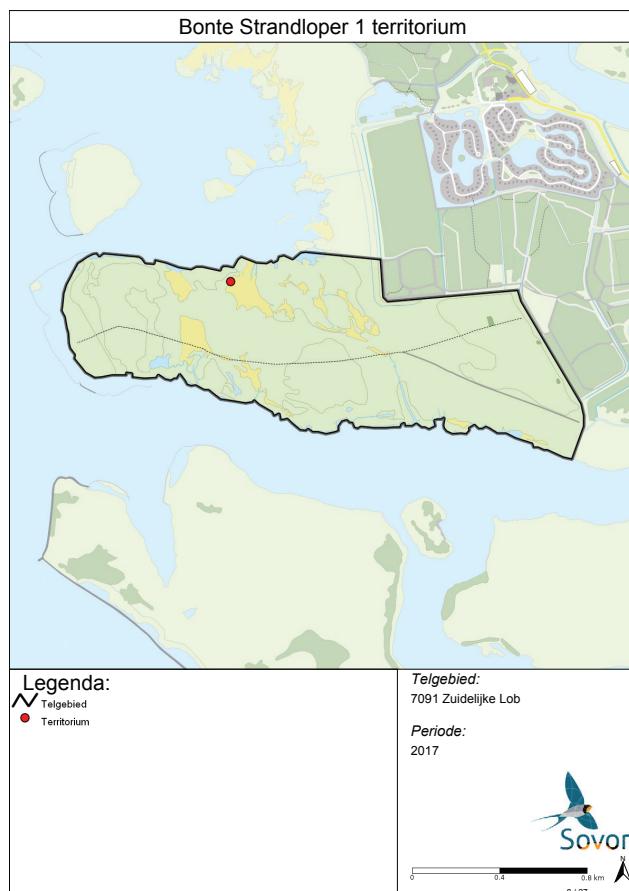
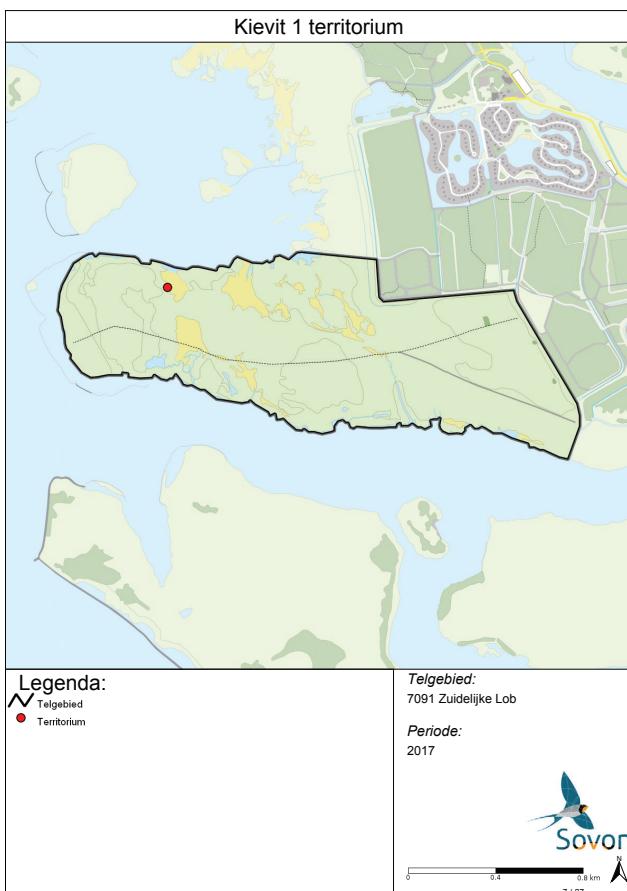
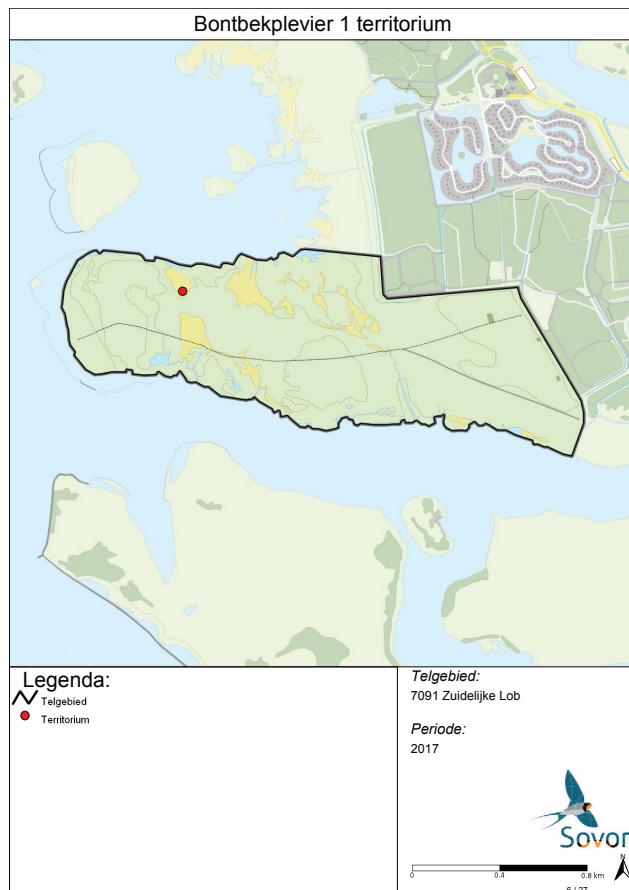
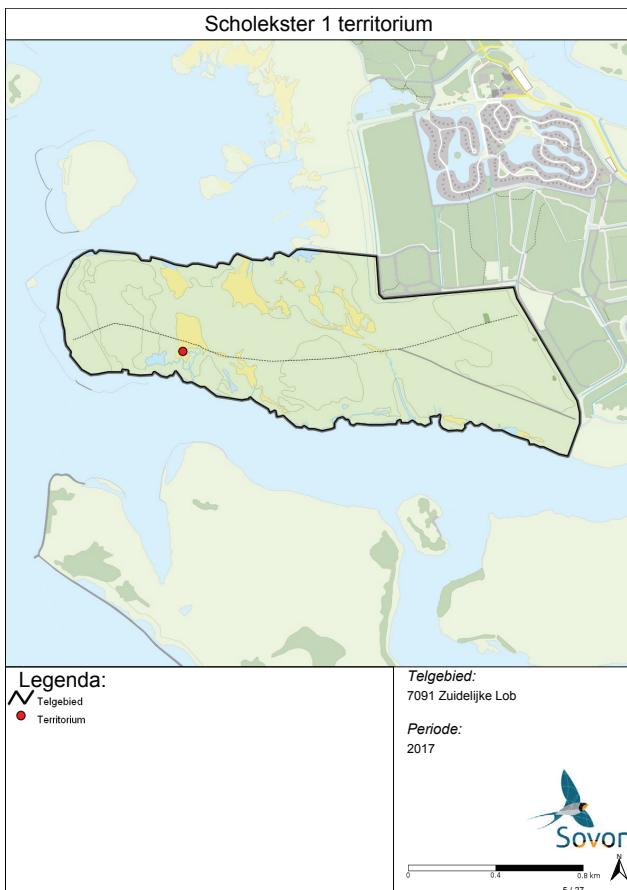


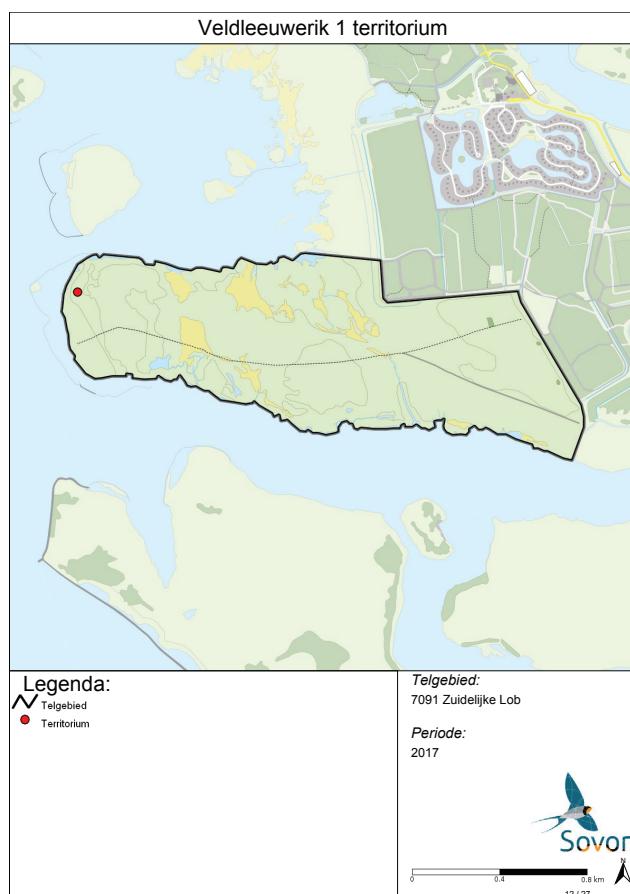
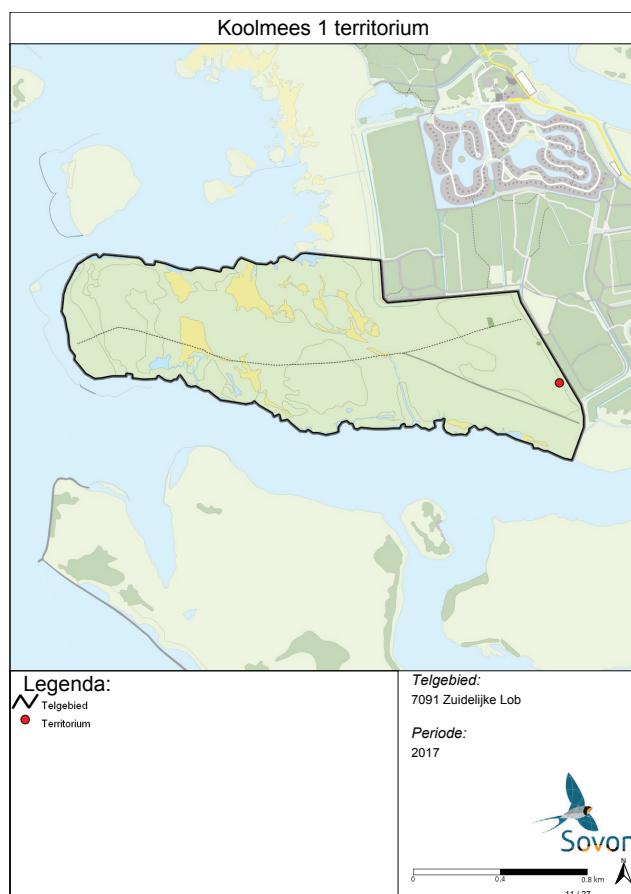
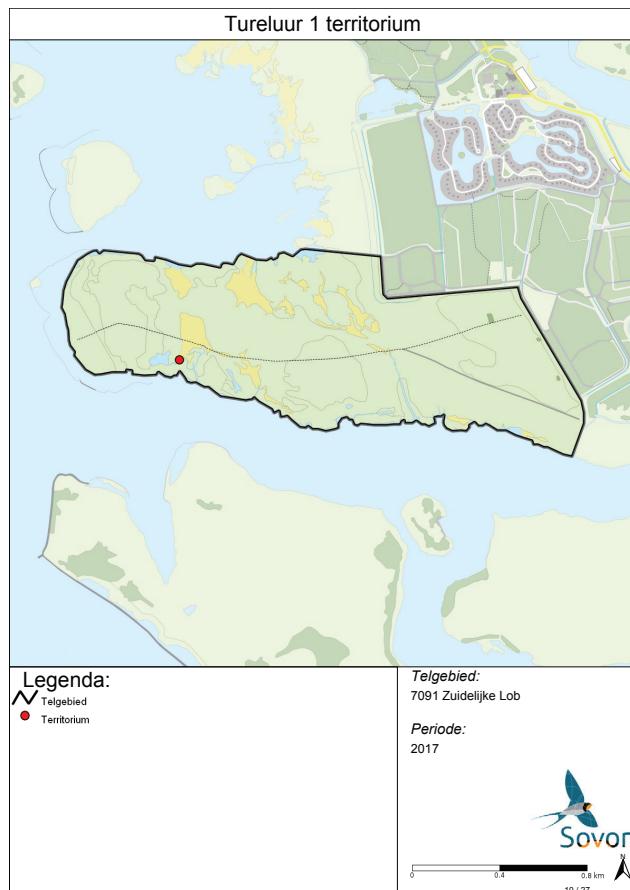
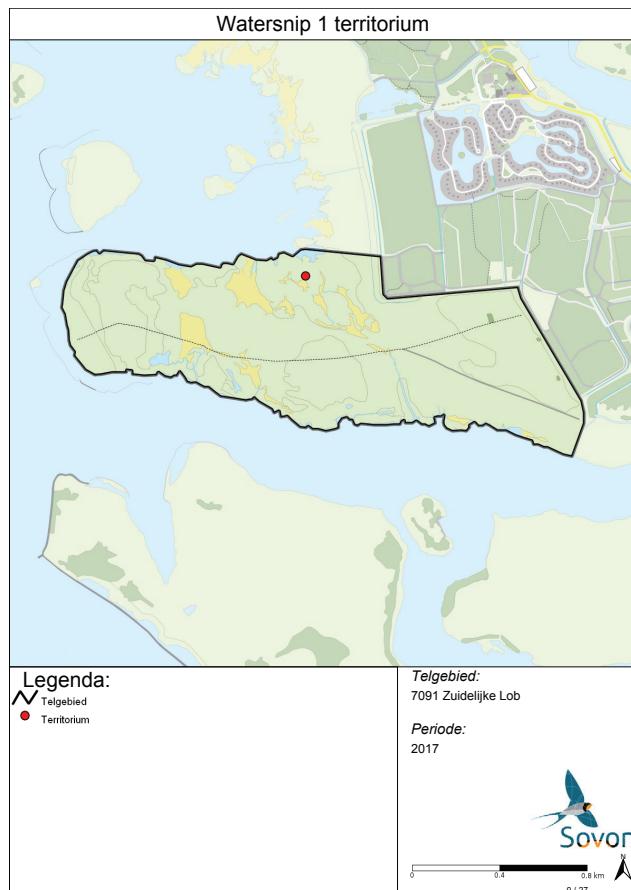


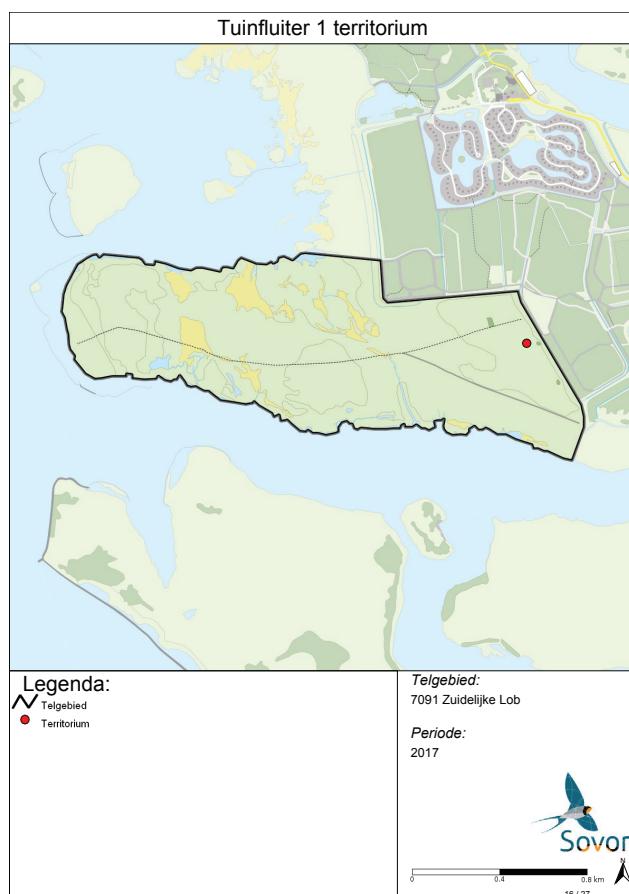
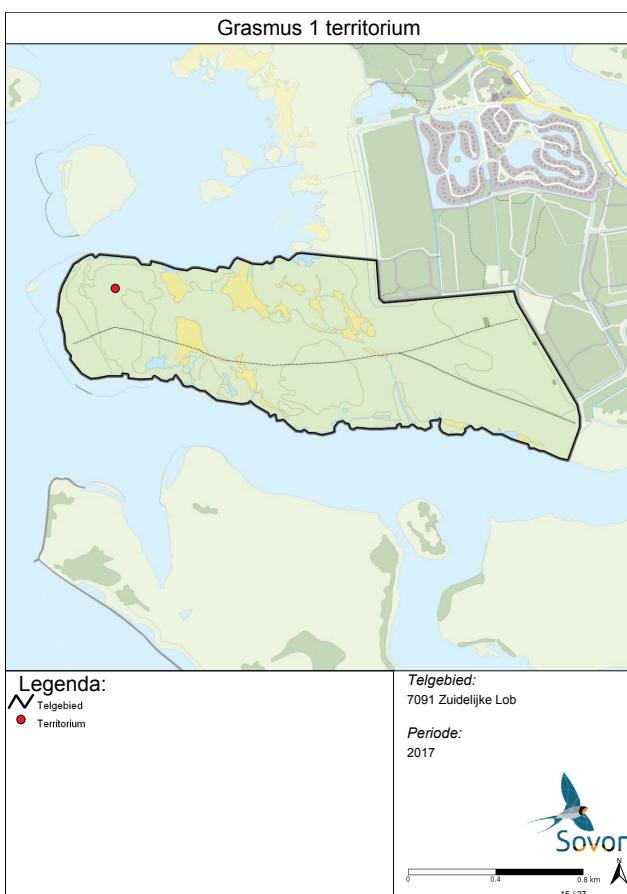
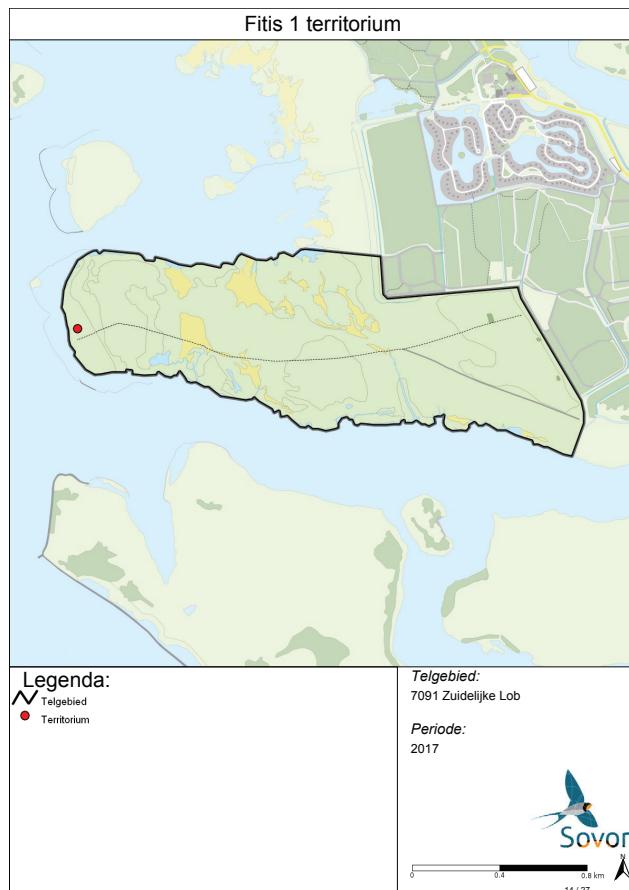
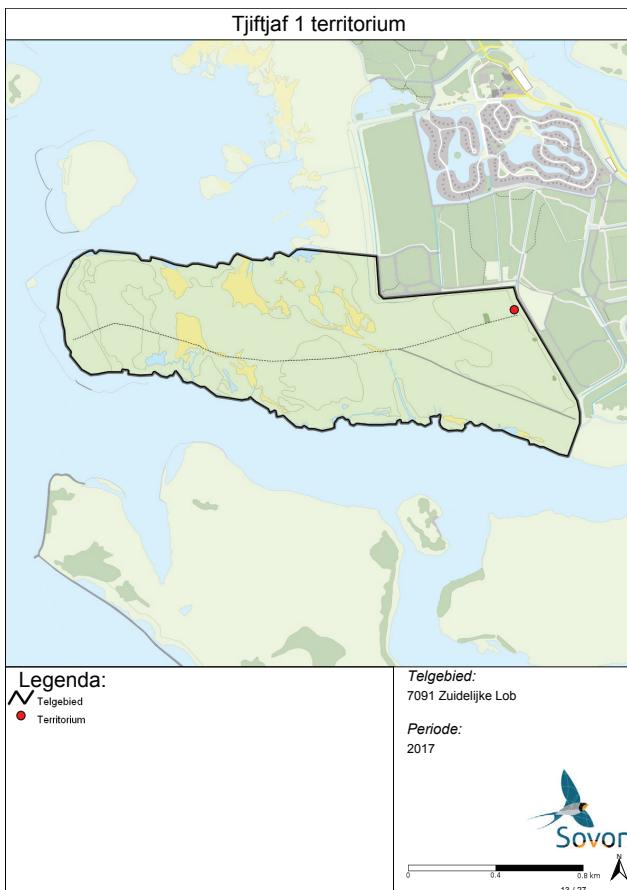


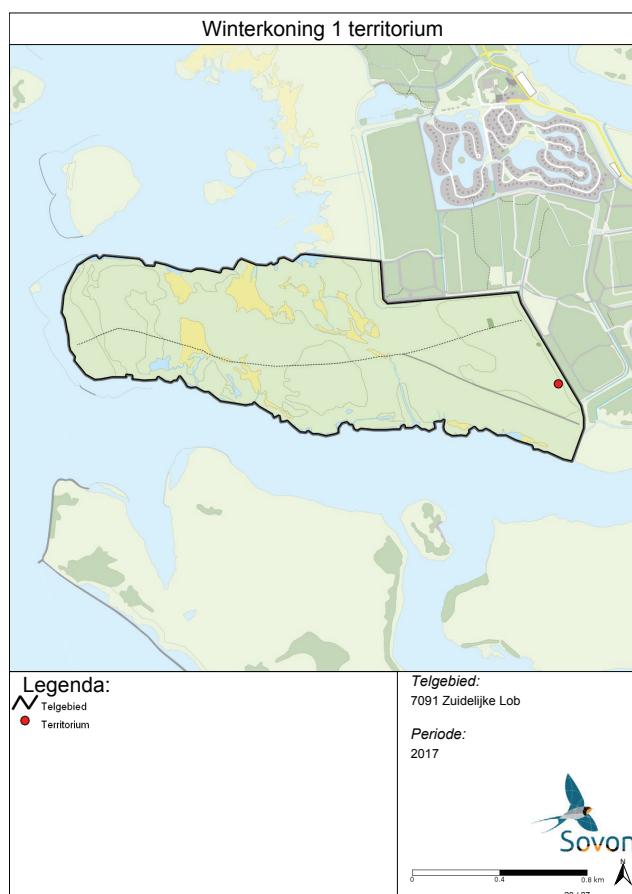
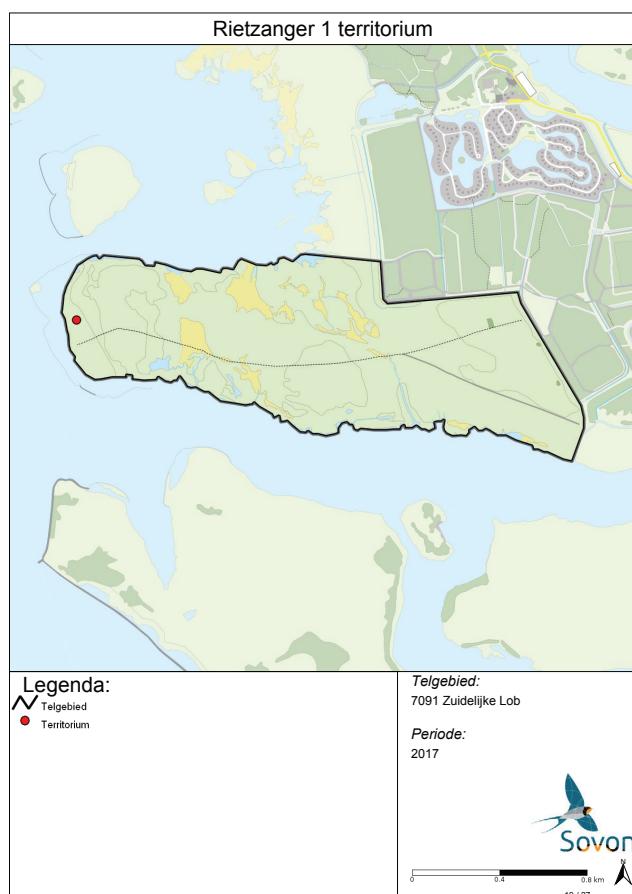
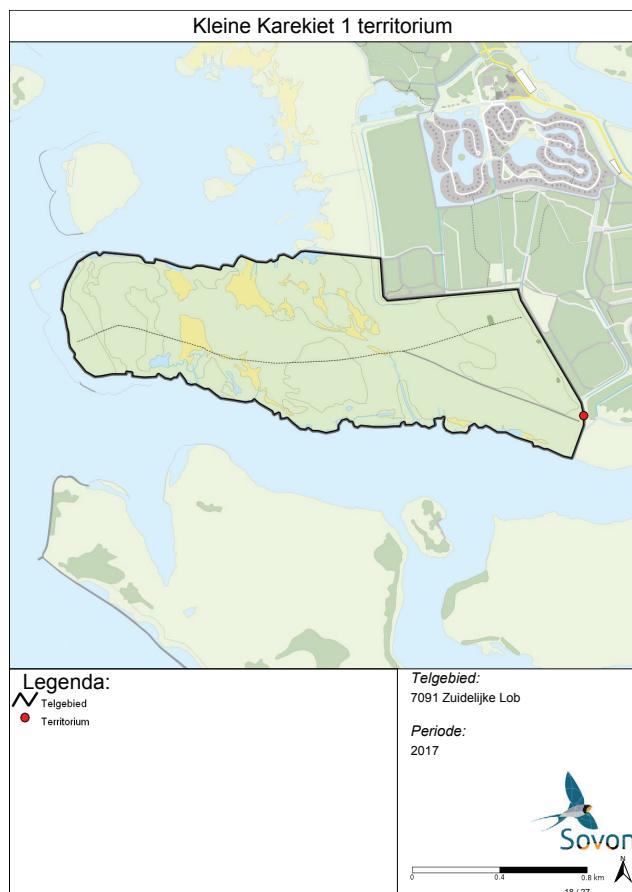
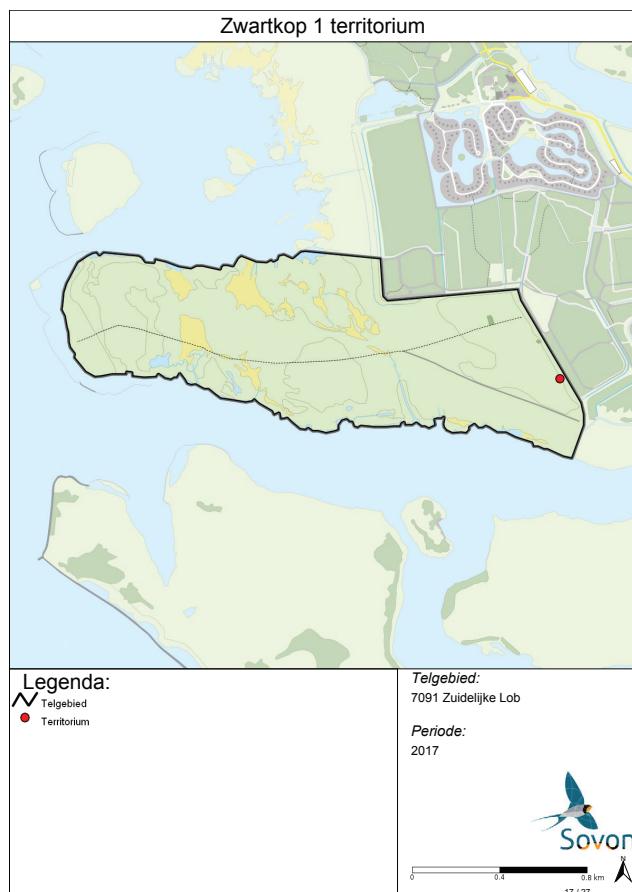
## Bijlage 19k. Zuidelijke Lob 2017

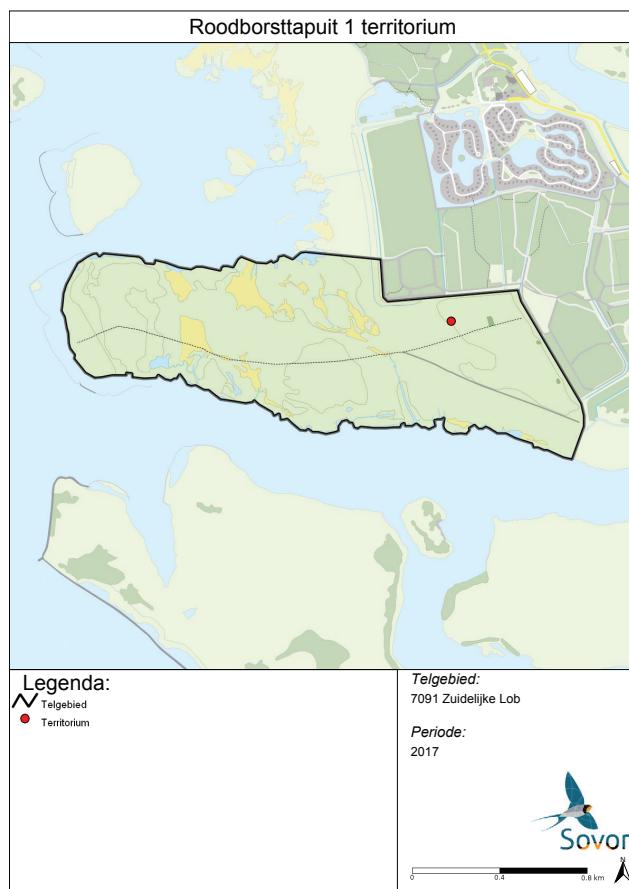
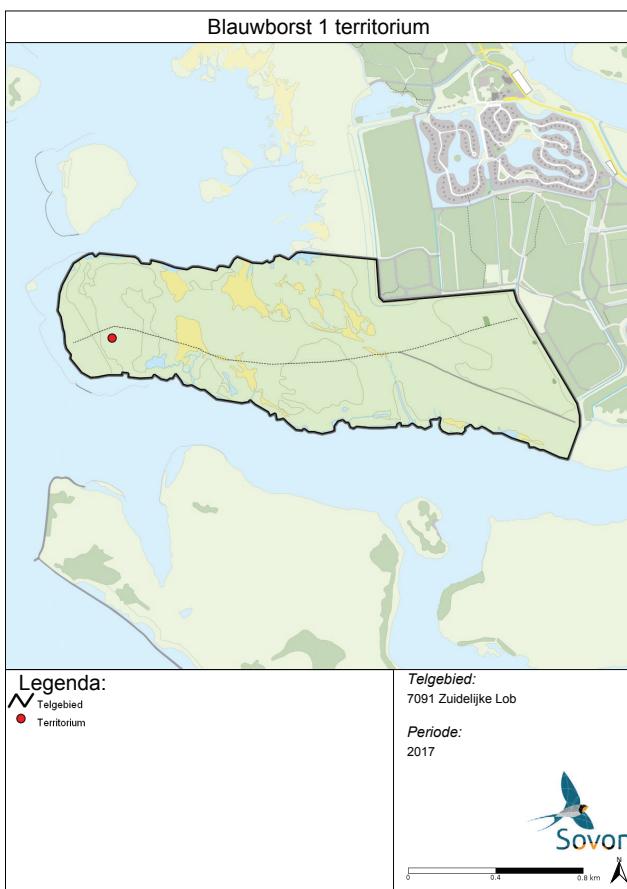
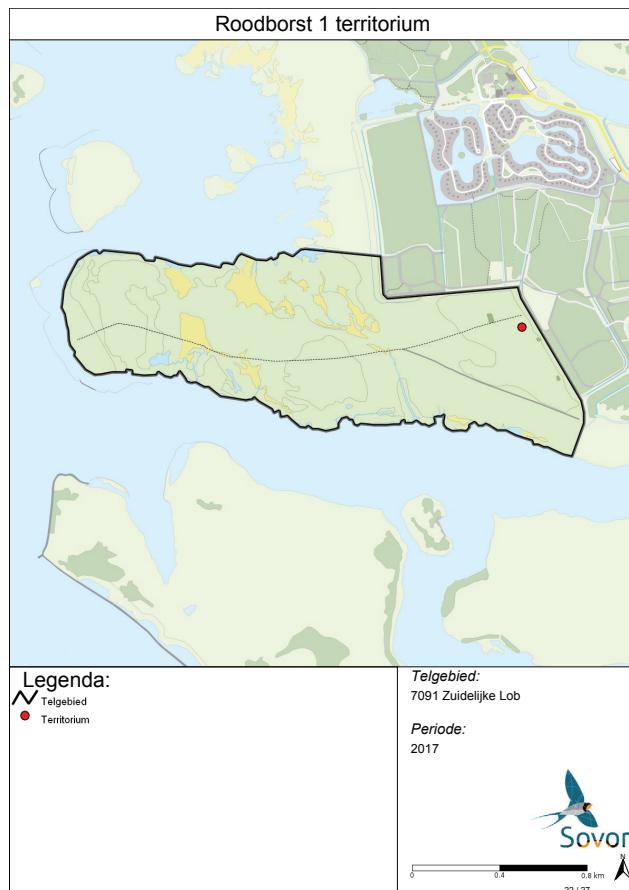
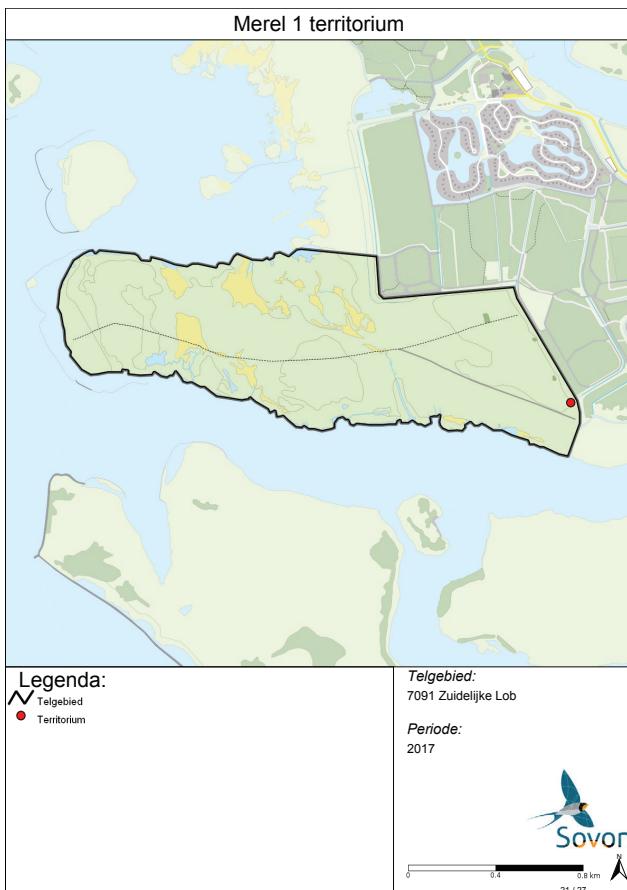


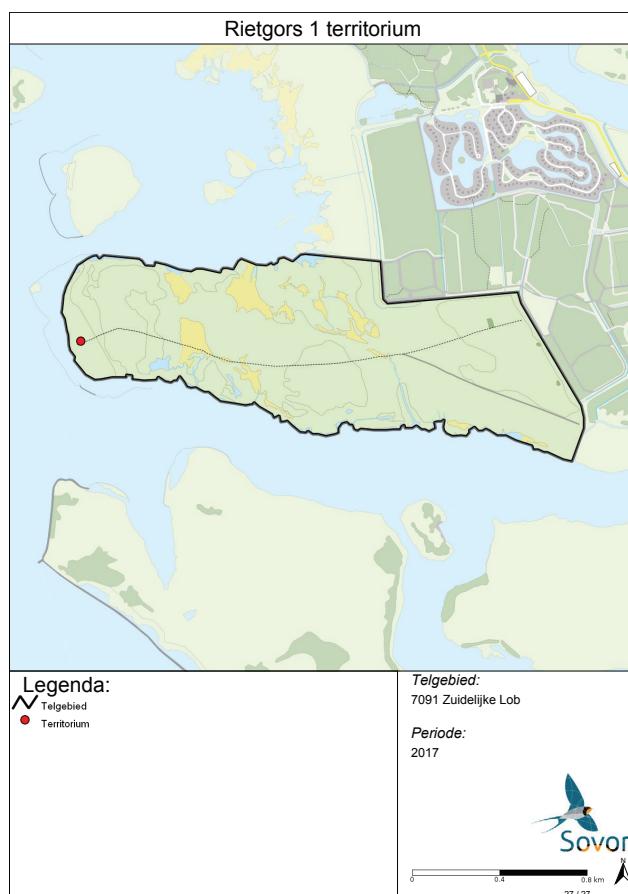
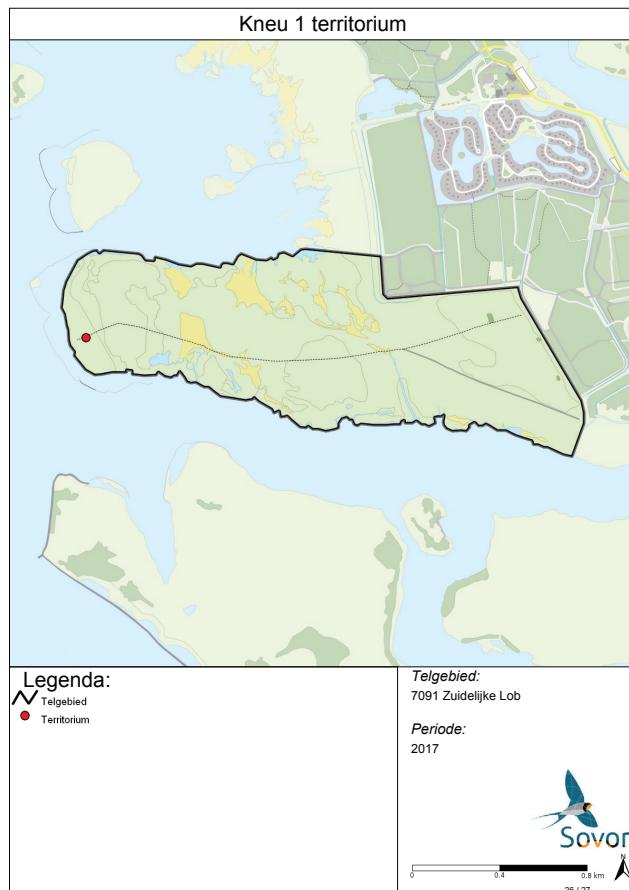
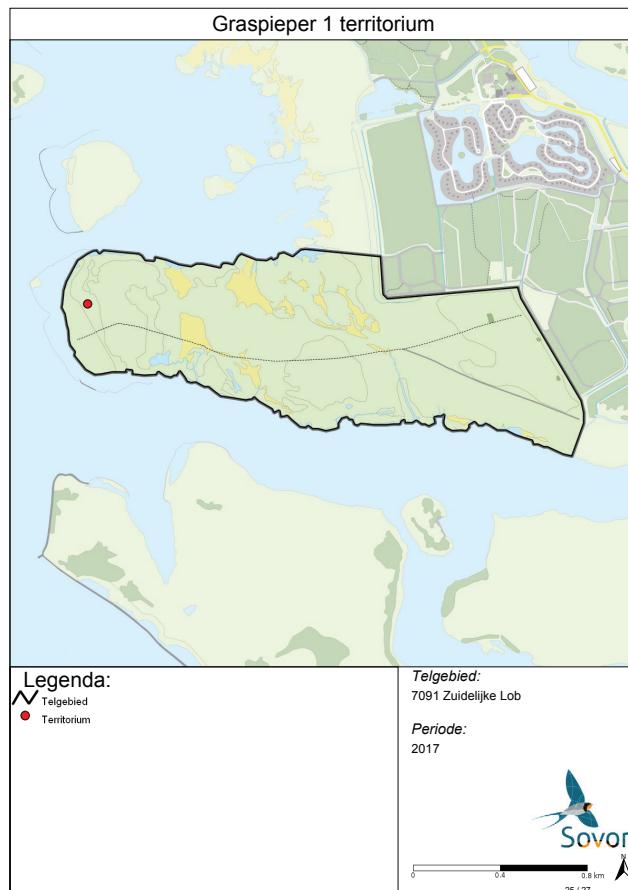






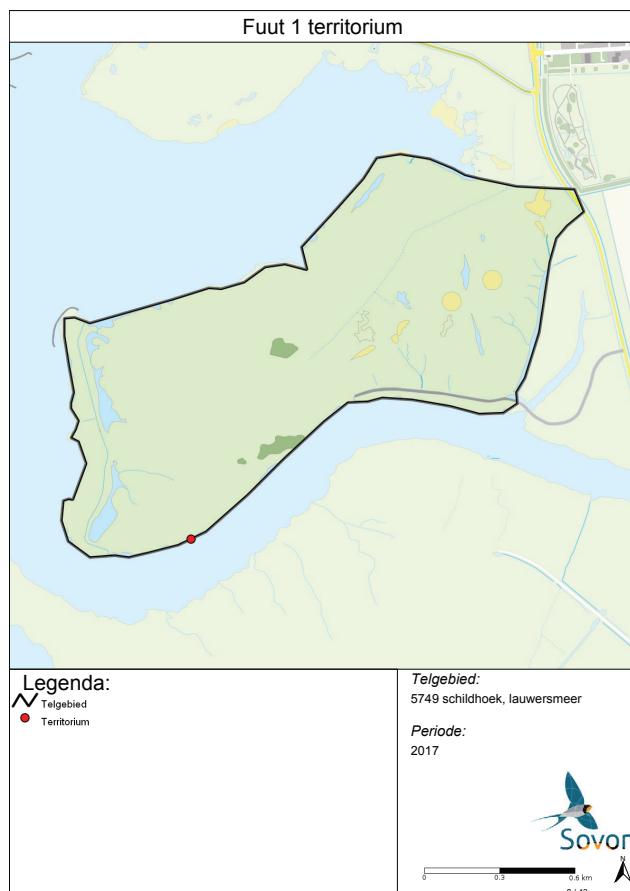
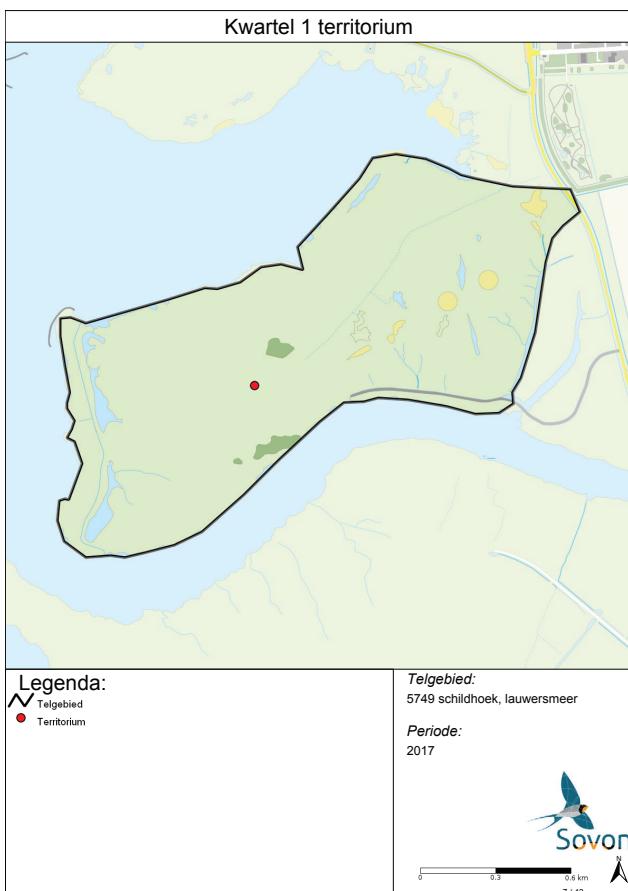
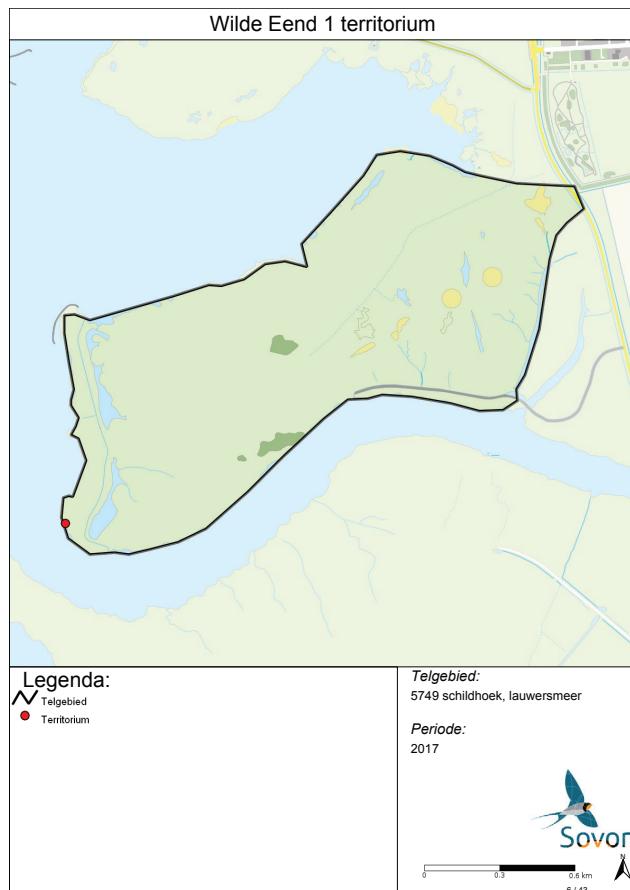
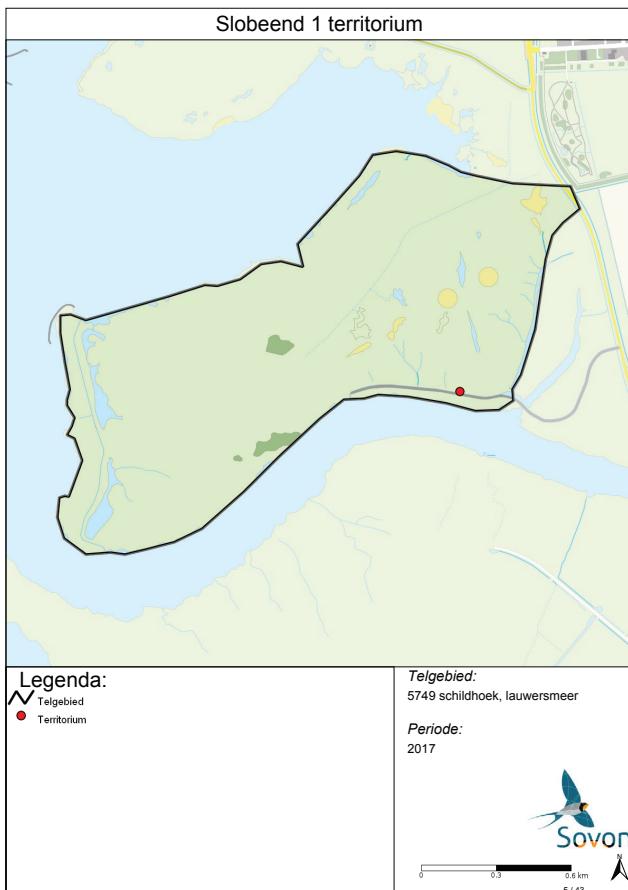


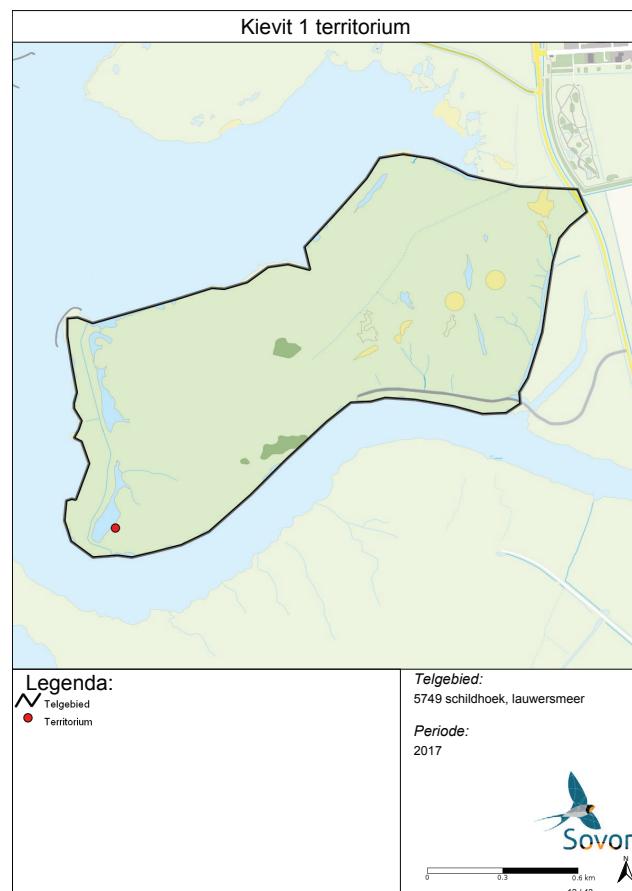
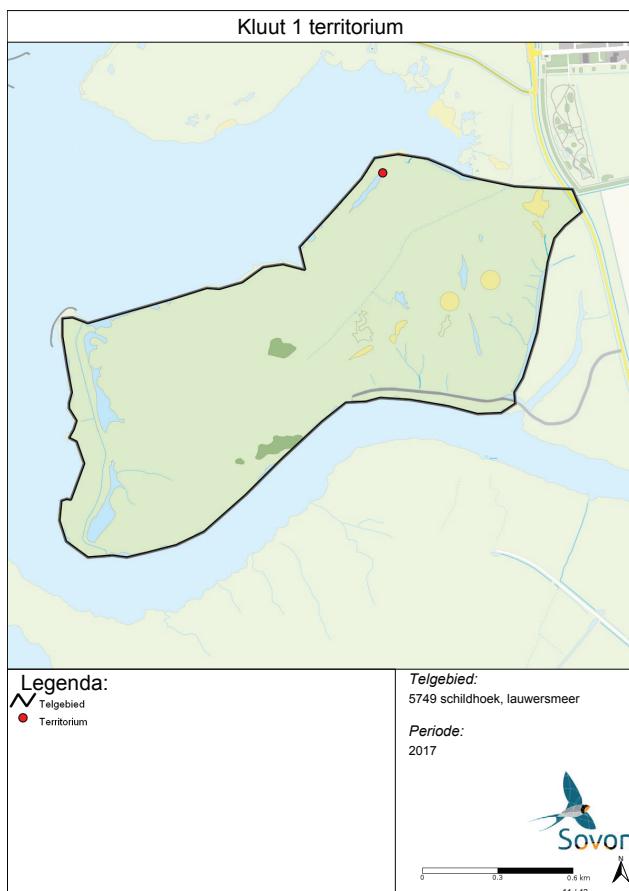
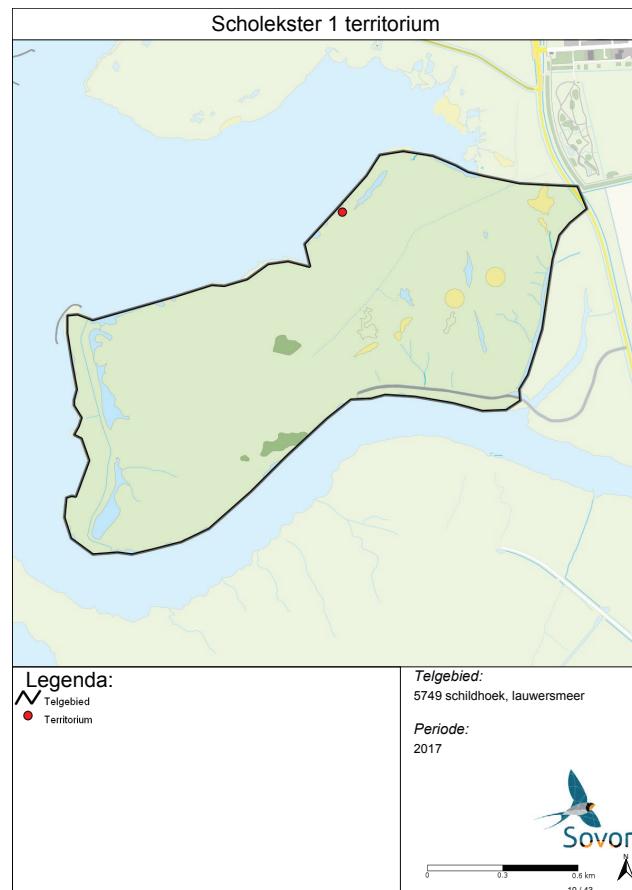
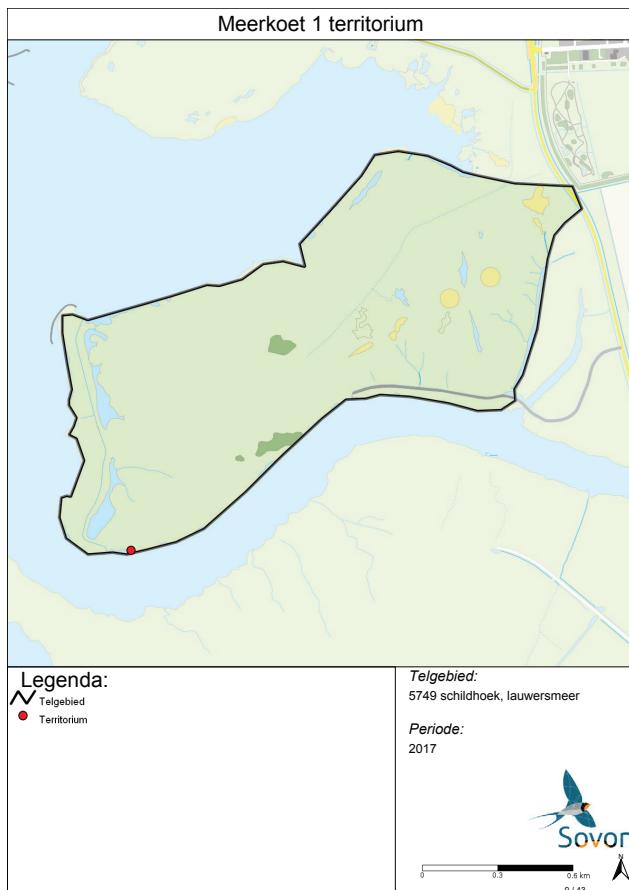


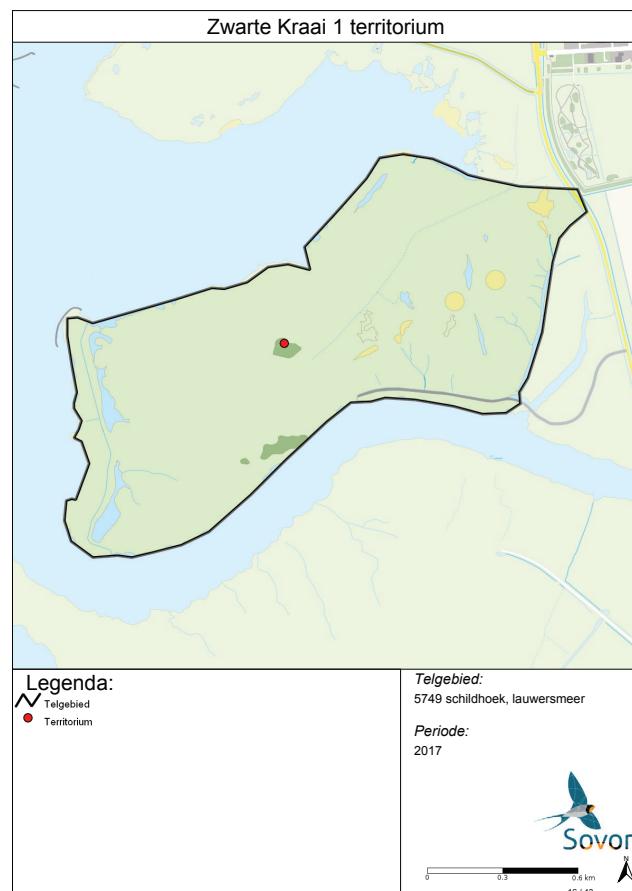
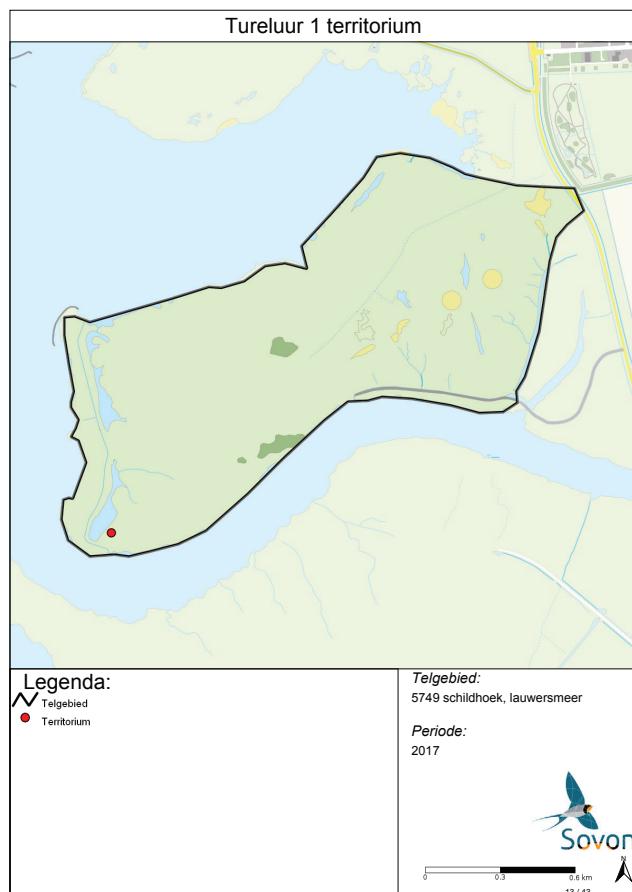


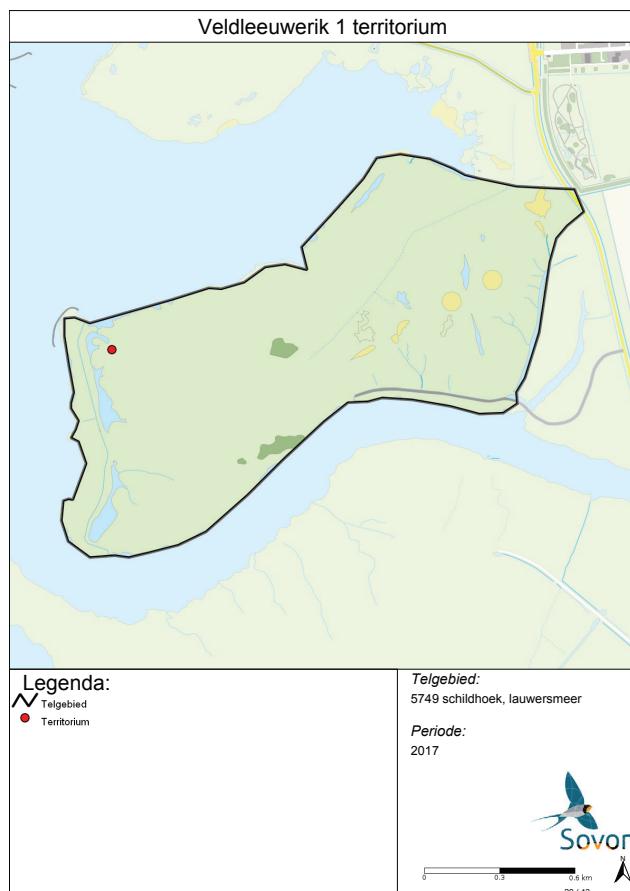
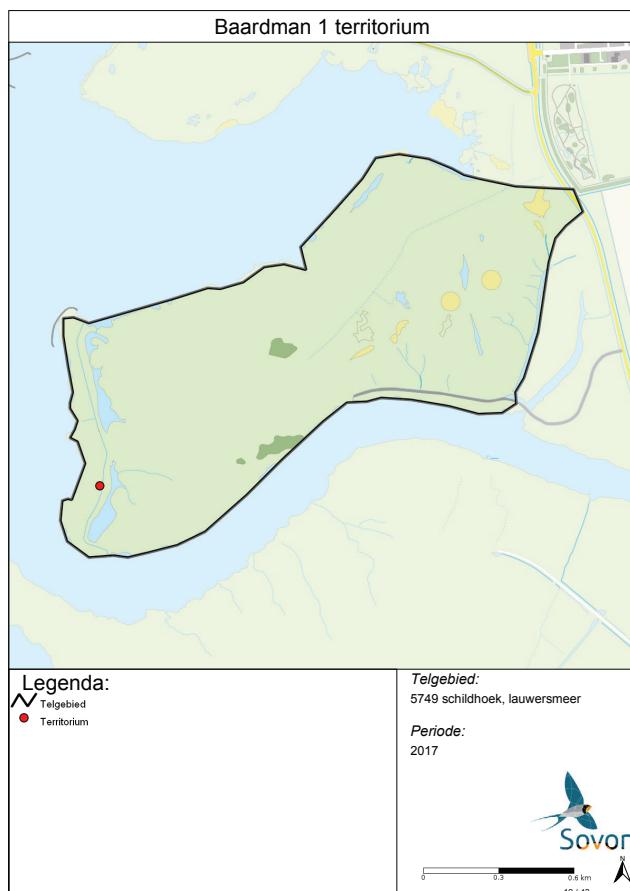
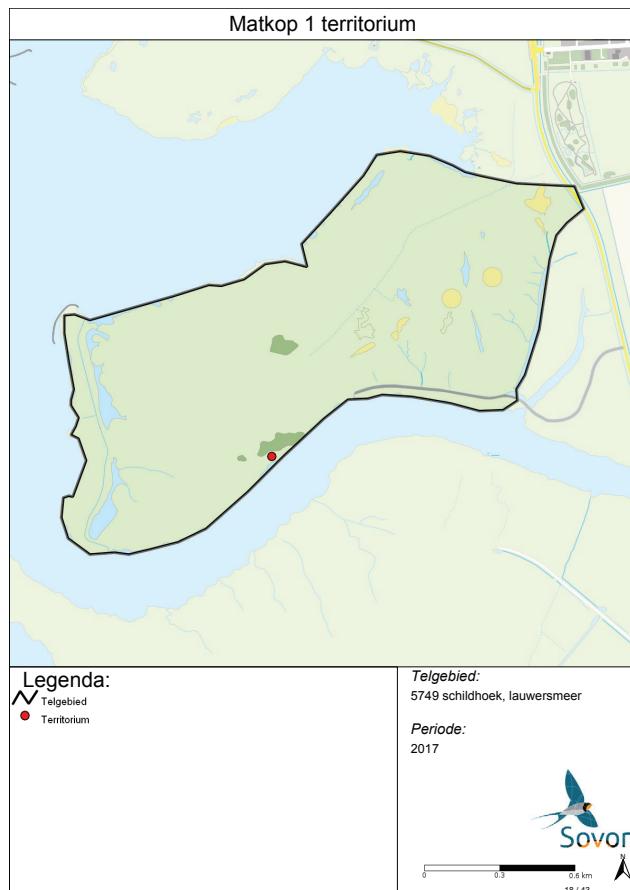
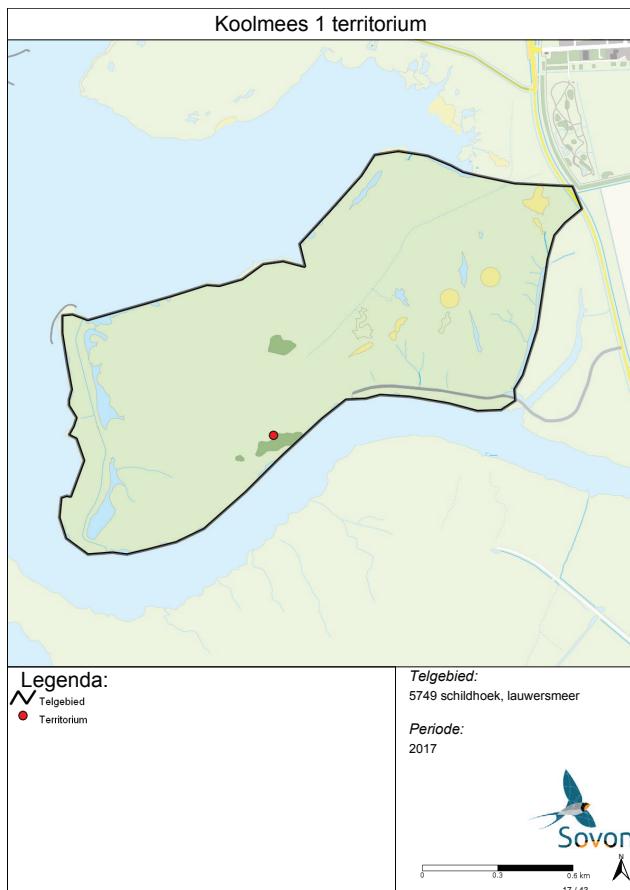
## Bijlage 19l. Schildhoek-Lauwersmeer 2017

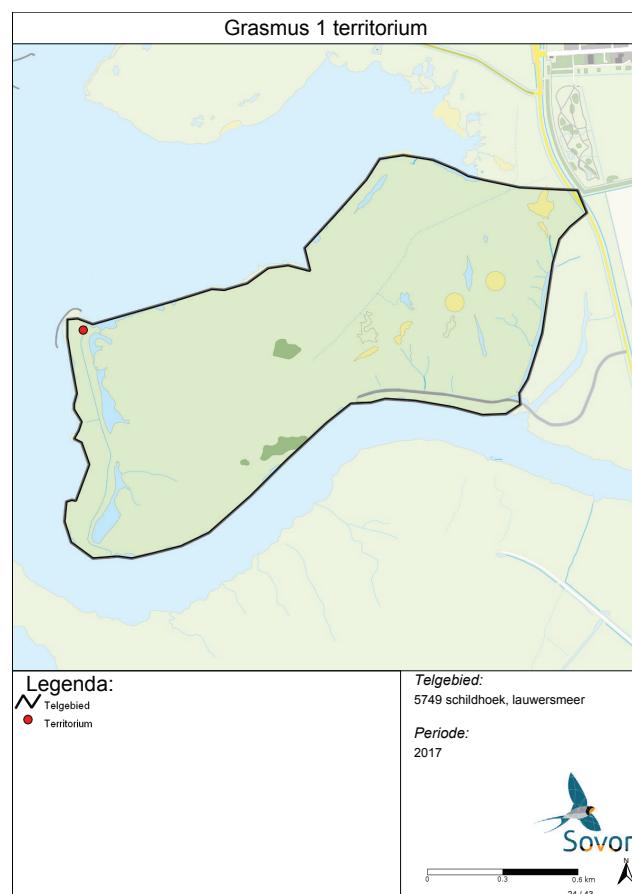
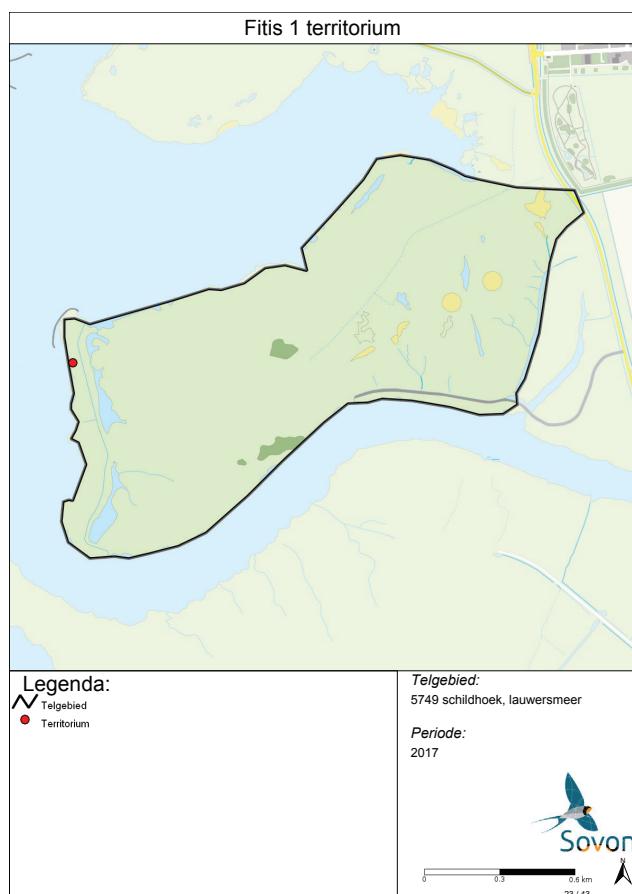
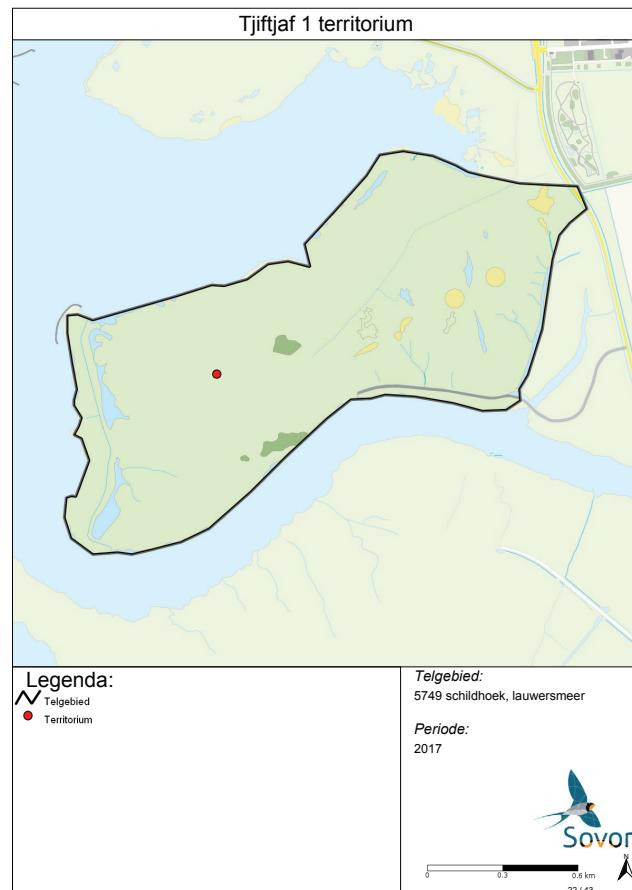
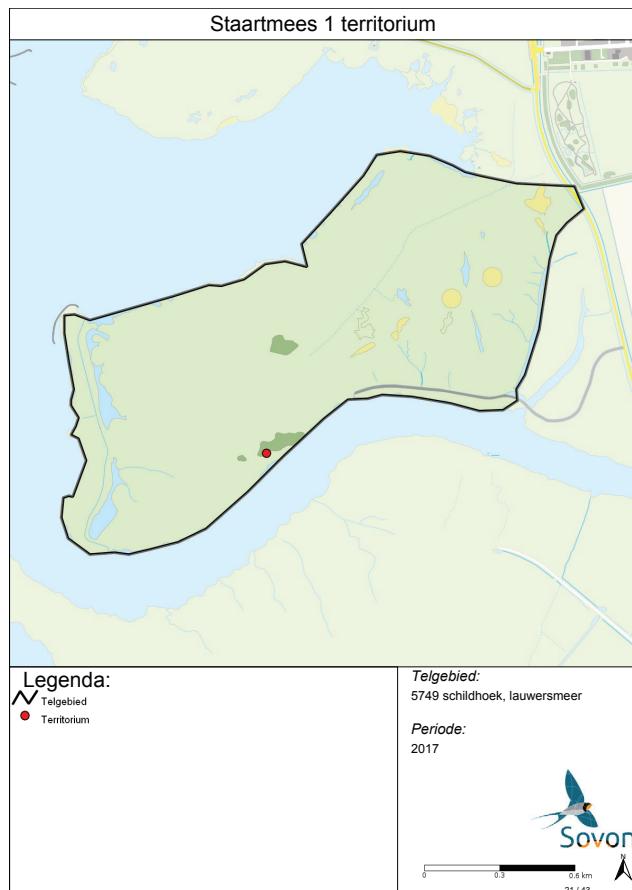


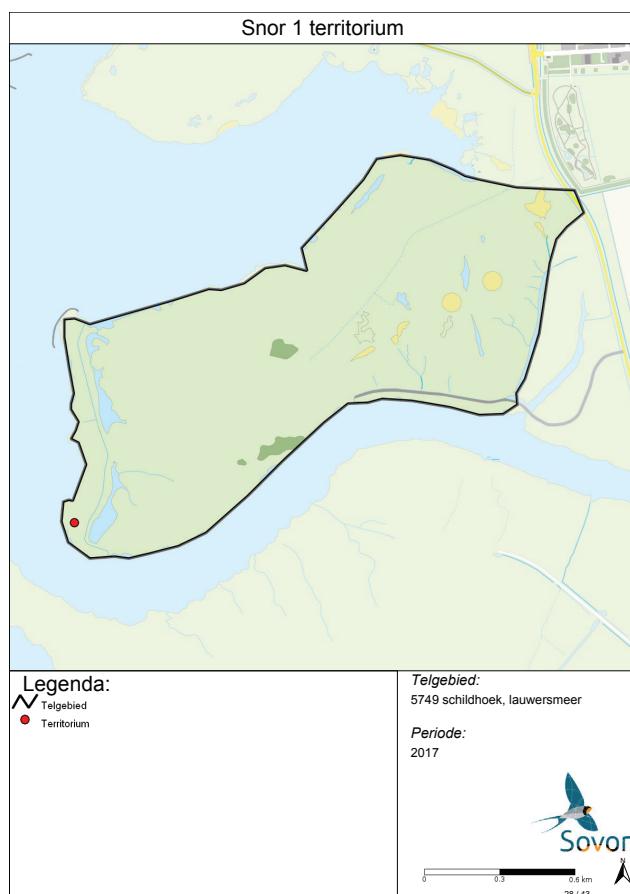
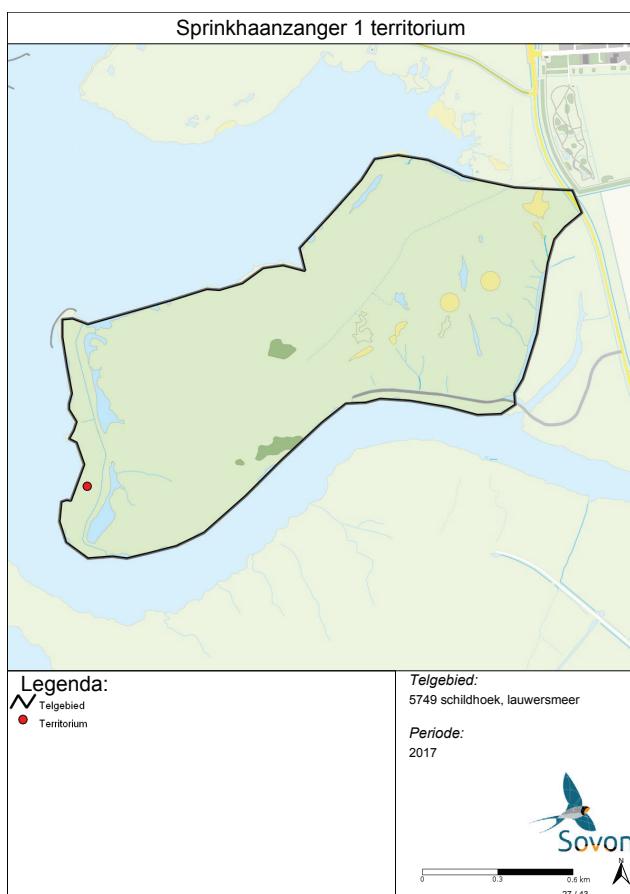
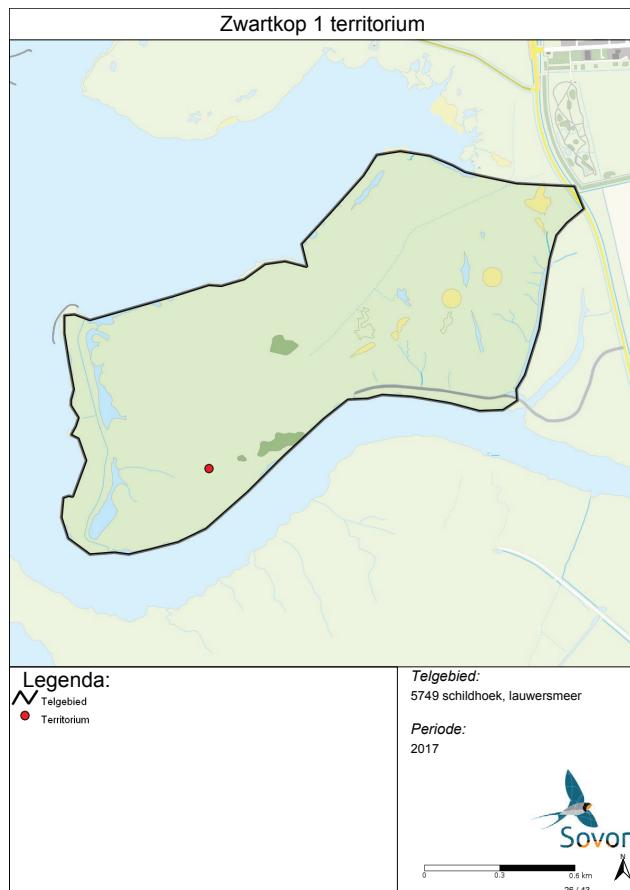
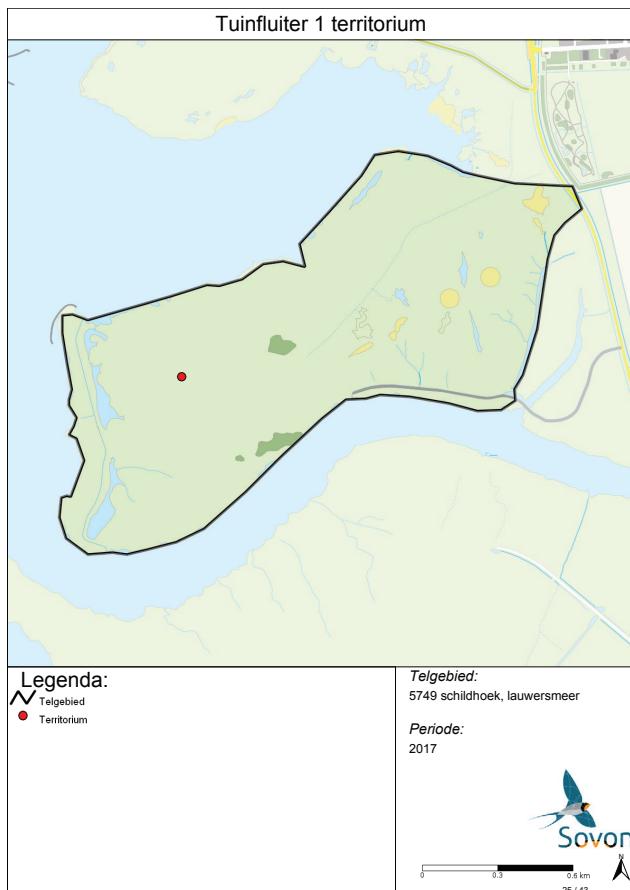


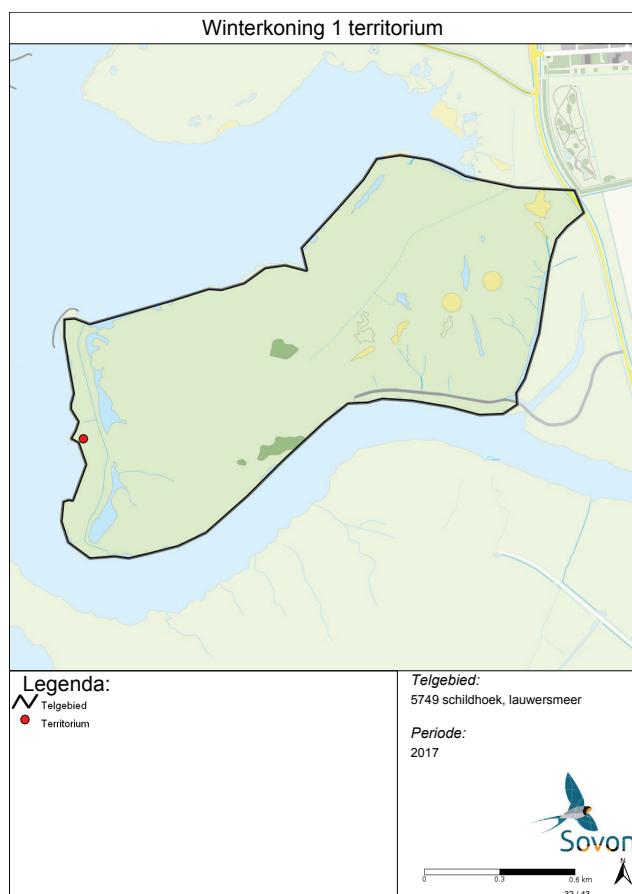
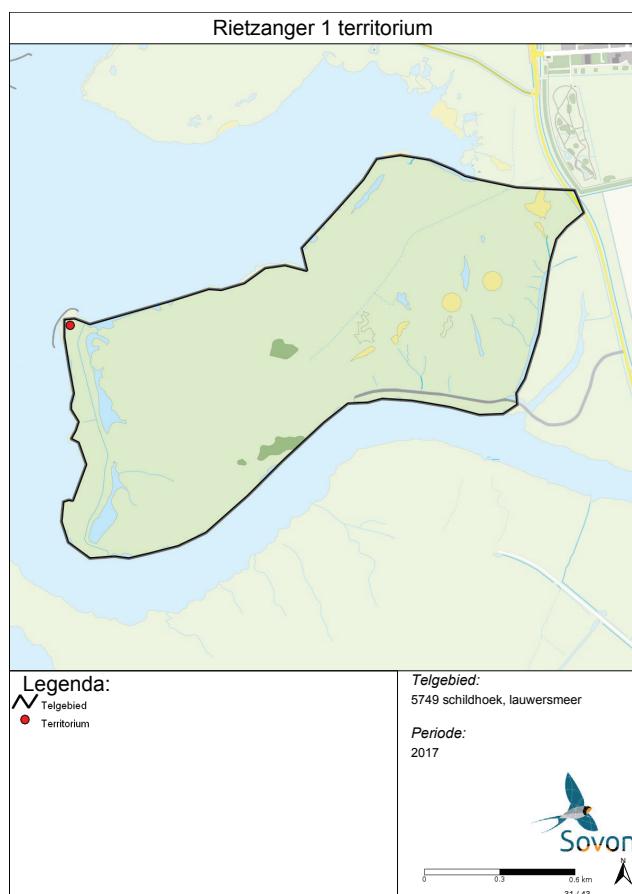
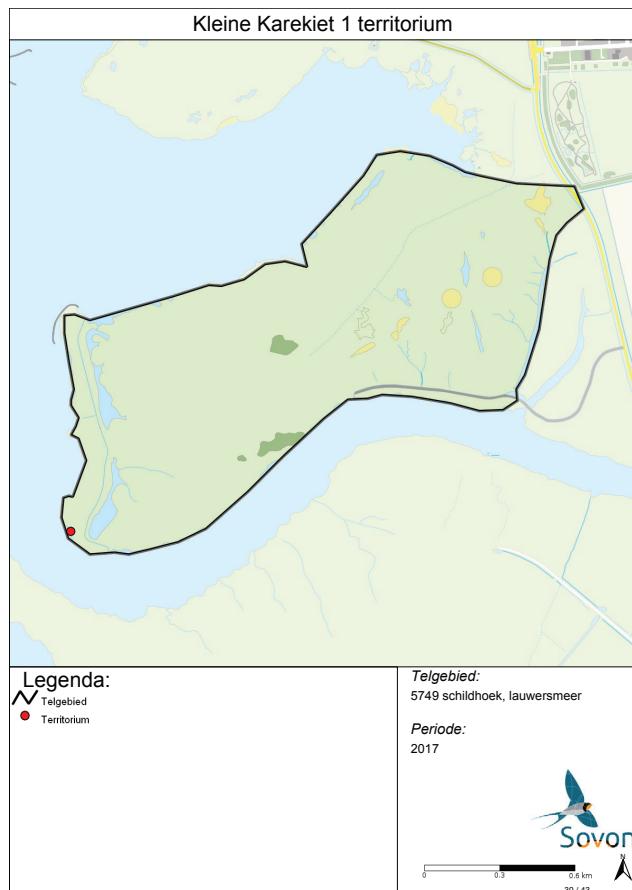
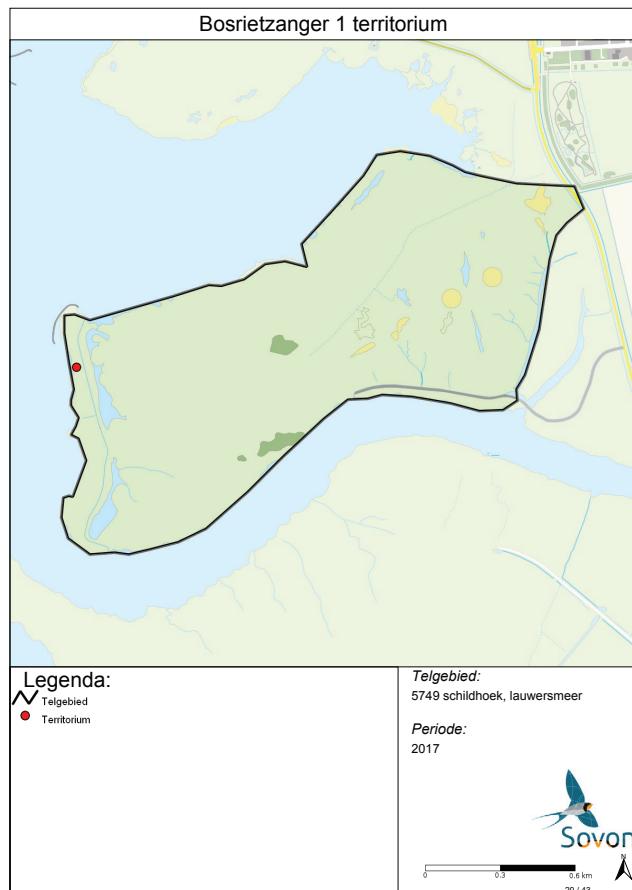


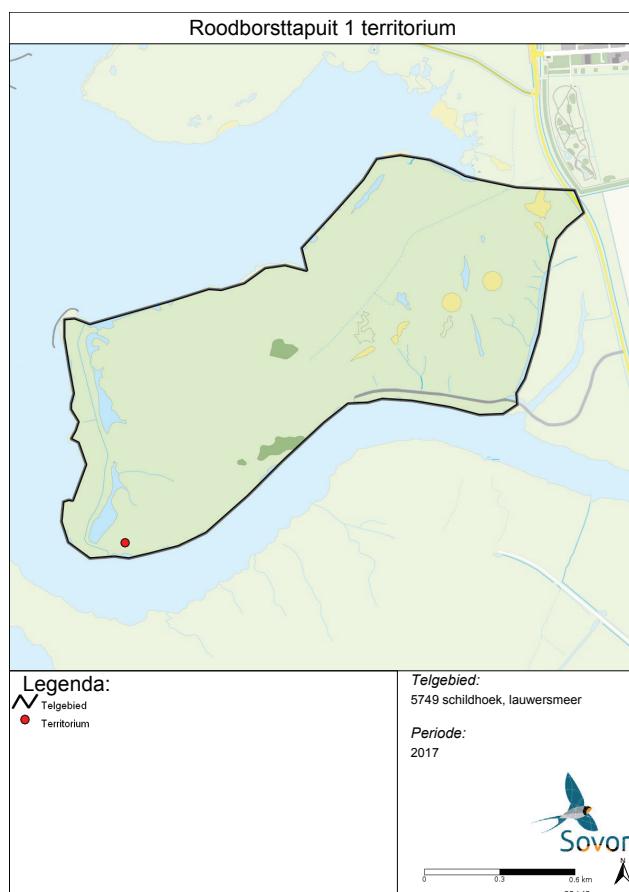
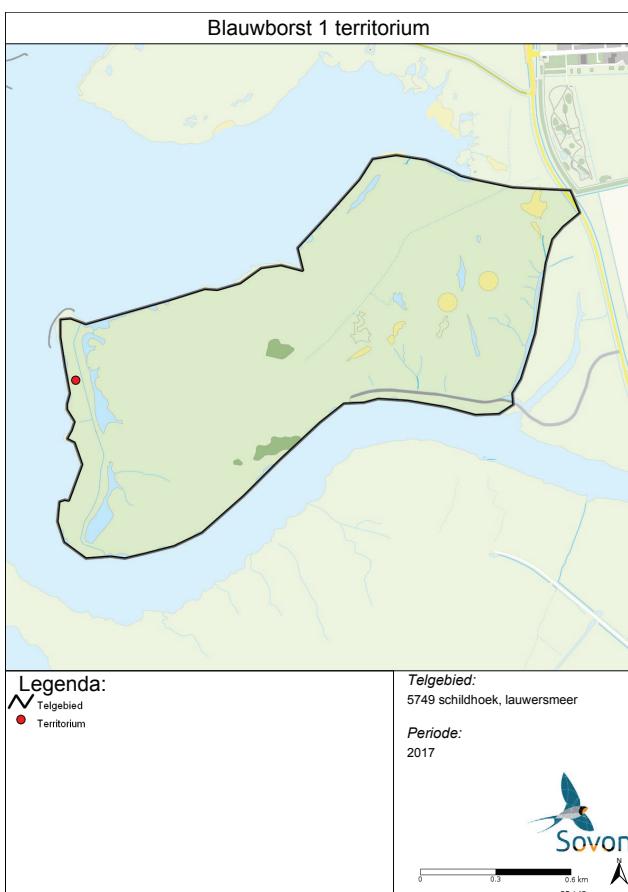
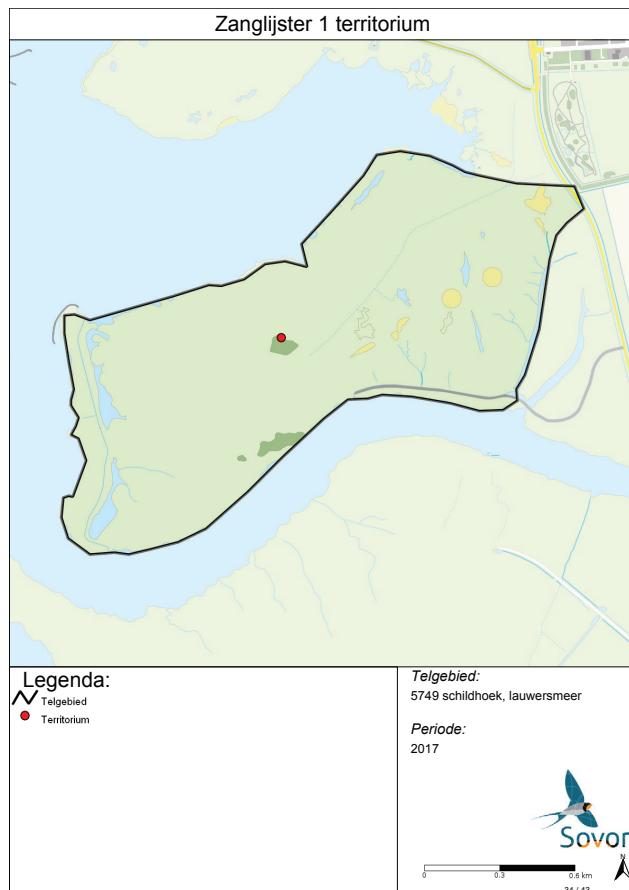
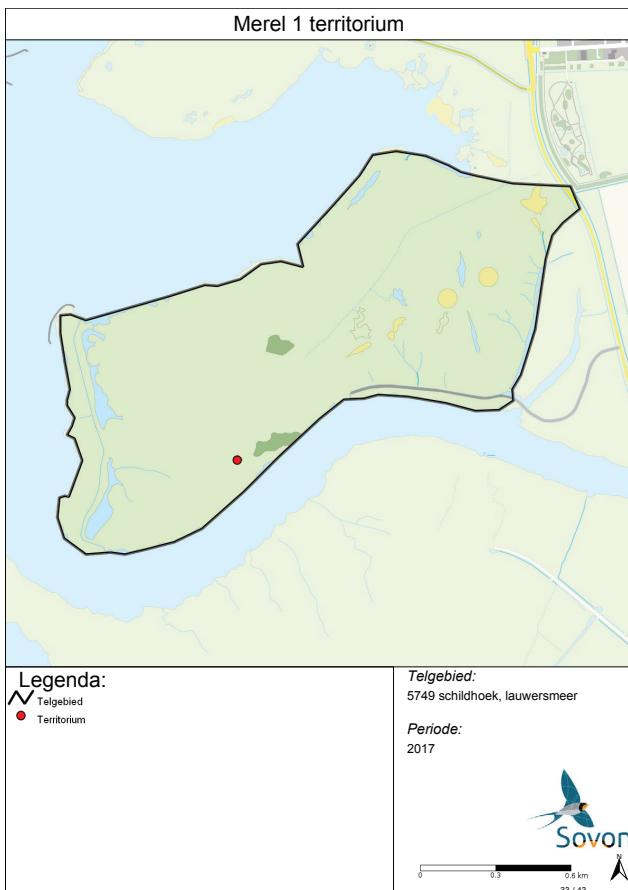


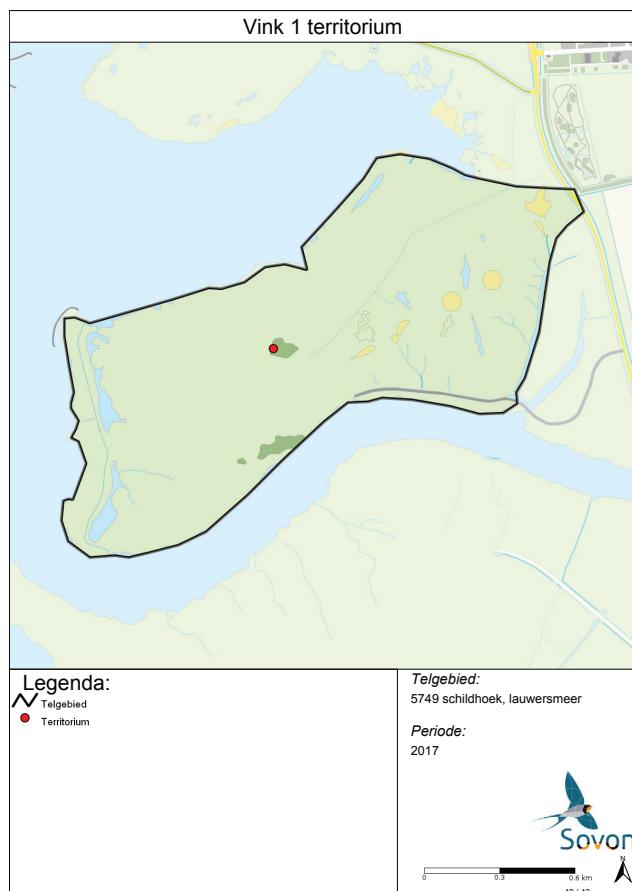
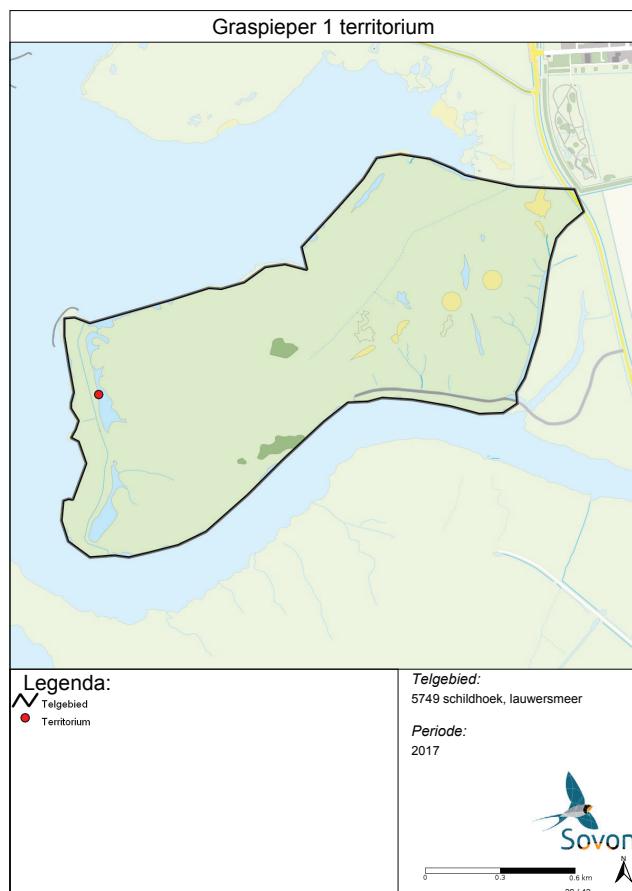
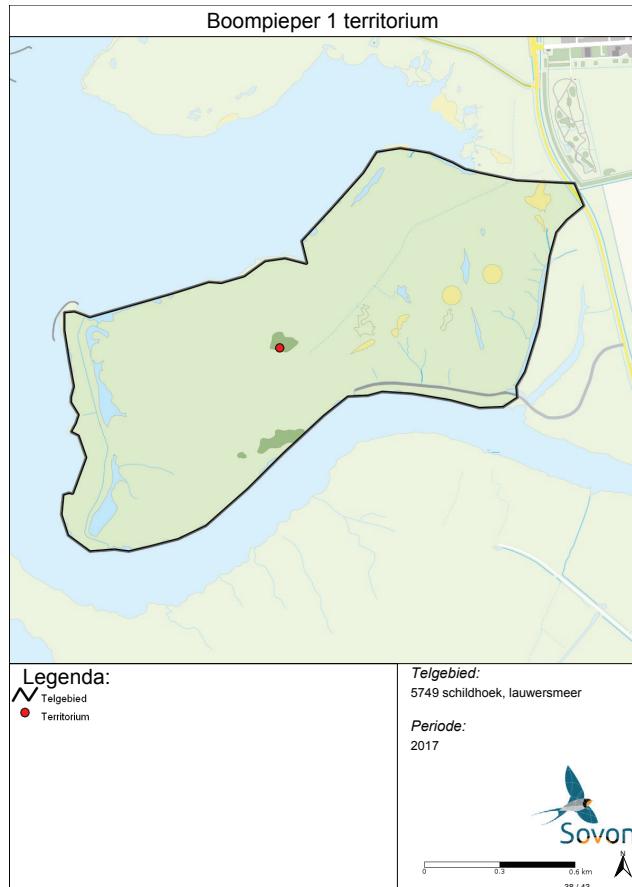
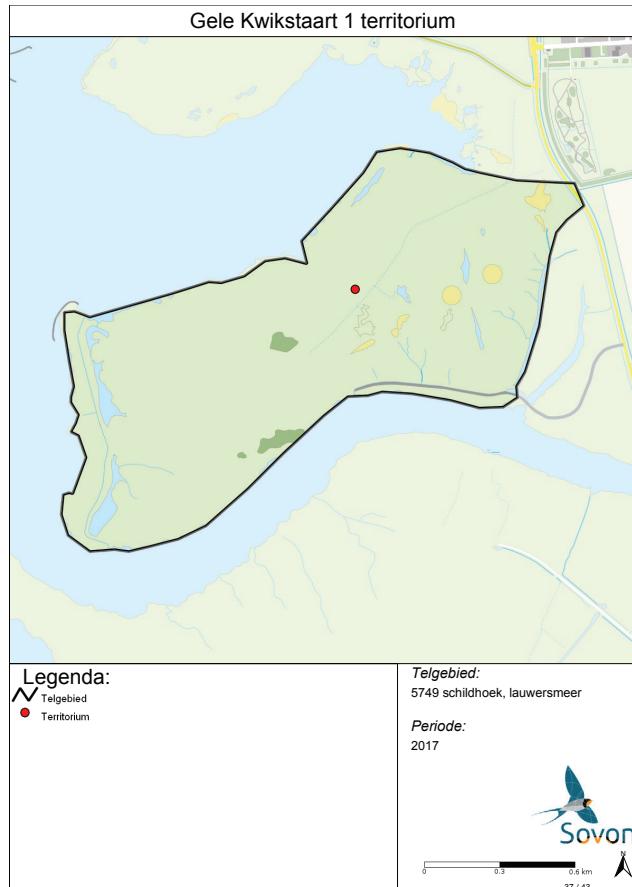


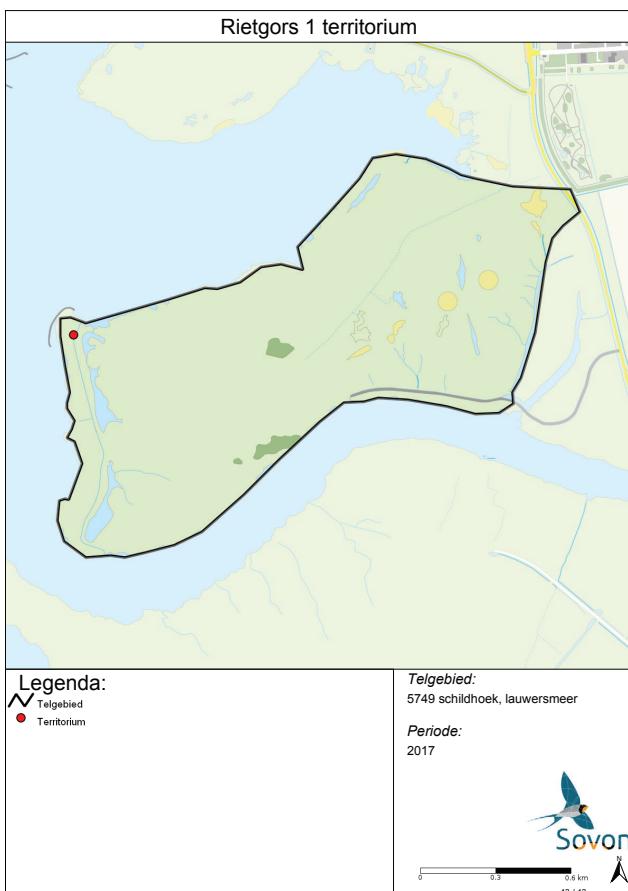
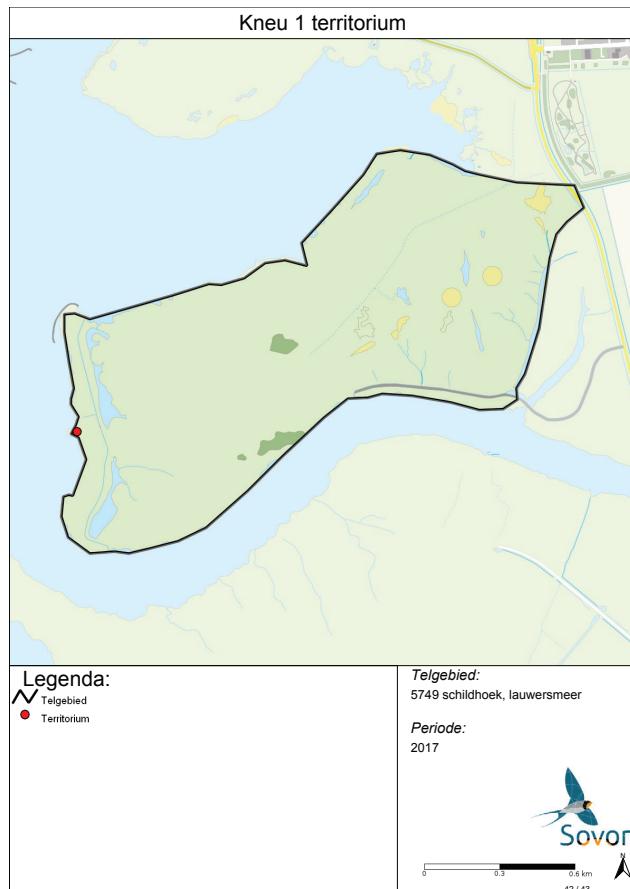
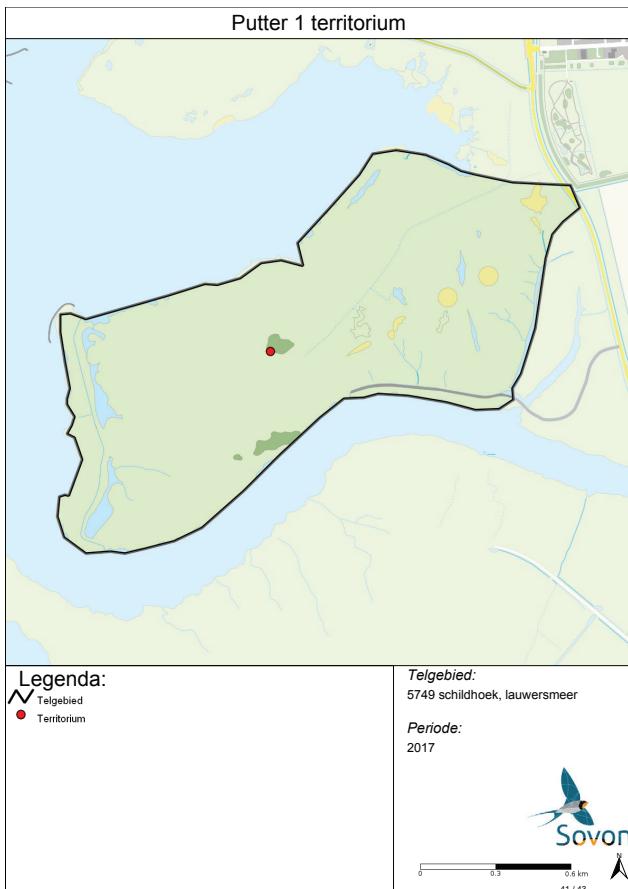












## Bijlage 19m. Bandsterwal 2017

