

Goose monitoring in Norway





Northern Norway
Vesterålen



barnacle



(greylag)
pinkfoot

Mid-Norway
Trøndelag



(greylag)
pinkfoot

Southern Norway
Vestfold and Telemark



barnacle

Østfold



greylag

Artsobservasjoner
Rapportsystem for arter

English (United Kingdom)

Home Submit sightings Search sightings Lists Themes Images Create account Login

Today's images 230 Images

Today's sightings

OBSERVERT SPECIES GROUP

Today Yesterday 34 Sightings 23 Species

SPESIES GROUP: All

News

2023-06-20 [Artsobservasjoner er tilgjengelig i ny mobilversjon](#)

2023-05-17 [Hurra for dere artsinteresserte rapportører!](#)

2023-04-20 [Artsobservasjoner får en ny vår – til sommeren](#)

2022-11-14 [Endringer på presentasjon av navn i](#)

Recently seen this year

2023-11-19 [Linospora capreae](#)
Rune Zakariassen (Solkollen øst, Solkollen, Bærum, Vi)

2023-11-18 [Palio nothus](#)
Geir Næss (Rongesundet 2, Helleskjera, Øygarden, Ve)

Online platform for all observations, mainly from amateurs

- Basically reflects the observers' activities
- Still rather useful in some contexts...

The context in which monitoring takes place

All sites

Monitoring sponsored by

- The Norwegian Environment Agency (national)
- The County Governors (regional)
- Research Council in some years (Vesterålen and Trøndelag)
- All data adds to EGMP where, and when, relevant

Data also included in various **research projects** and **scientific studies**

Student theses (bachelor, master, PhD)

Organisation of fieldwork

Vesterålen

SPRING

Goose counts/ring readings: at present- mainly by one person

(barnacle & pink-footed goose)

Dropping counts: (assessments for the subsidy scheme)
5-7 persons, researcher + municipality staff

SUMMER

Counts & juvenile assessments: mainly by one person

(greylag goose)

(project related...)

Johnny Bakken



Organisation of fieldwork

Trøndelag

SPRING (pink-footed goose)

Goose counts: 4-5 persons (contracts) at the coordinated count day (PfG)

Ring readings: mainly by one person (contract)

AUTUMN (pink-footed and greylag goose)

Goose counts/ring readings: 2 persons (contracts)

Per Ivar Nicolaisen



Organisation of fieldwork

Southern Norway

Goose counts: (greylag goose, *barnacle goose*)
mainly by a network of volunteers

Age assessments:

(greylag goose)
one or two researchers



Census scheme

Vesterålen, spring

- Spring counts of barnacle geese and pink-footed geese
- Limited area available for geese
- All sites visited (including the zeros!)
- 7-10 counts each spring; *daily averages*

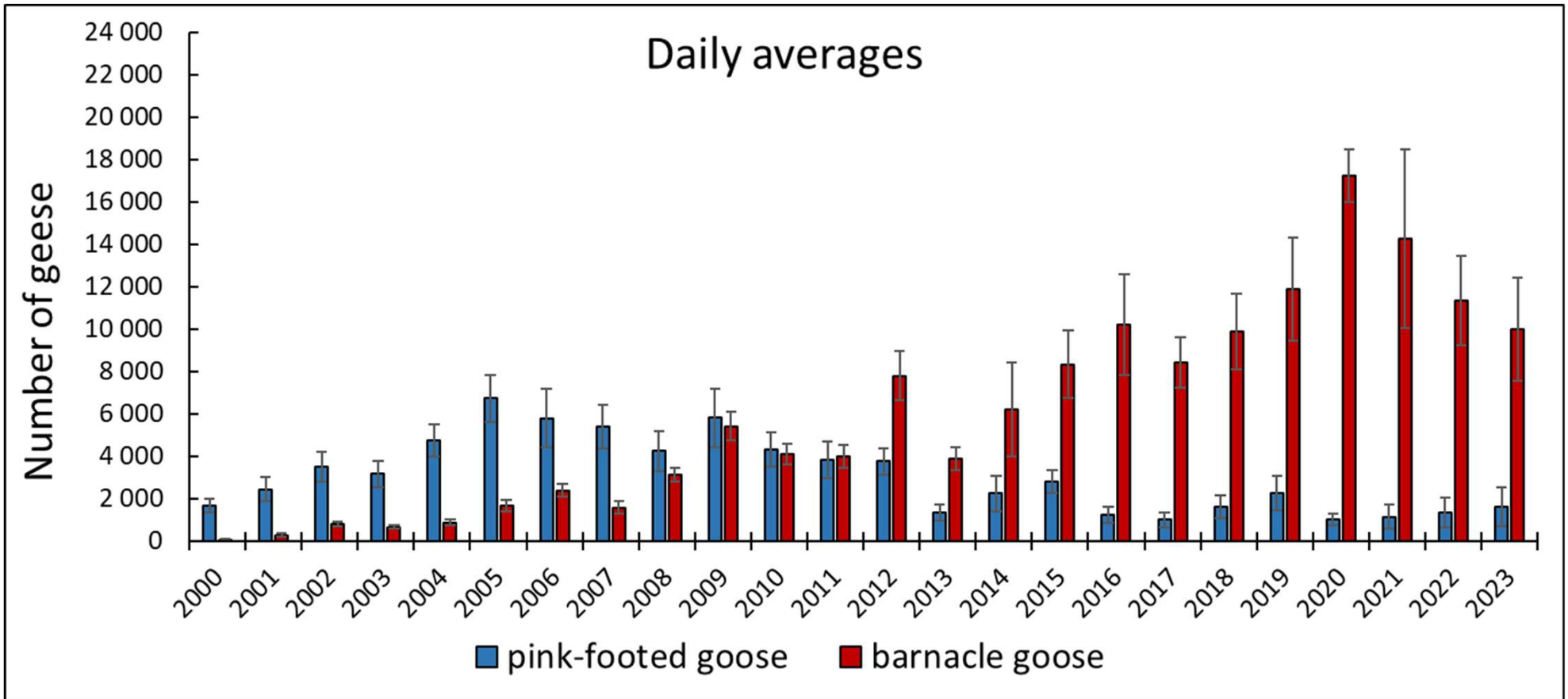


1	YEAR	Date	Species	Totgoose	Location	Municip	Macrosite
27716	2023	14	pinkfoot	0	Lovik	Andøy	Andøy
27717	2023	14	pinkfoot	46	Ramså	Andøy	Andøy
27718	2023	14	pinkfoot	520	Saura	Andøy	Andøy
27719	2023	14	pinkfoot	950	Sellevoll	Andøy	Andøy
27720	2023	14	pinkfoot	1100	Å	Andøy	Andøy
27721	2023	14	pinkfoot	1000	Åknes	Andøy	Andøy
27722	2023	14	pinkfoot	850	Åse	Andøy	Andøy
27723	2023	14	pinkfoot	0	Bitterstad	Hadsel	Hadsel
27724	2023	14	pinkfoot	66	Grytting	Hadsel	Hadsel
27725	2023	14	pinkfoot	0	Hadseløya	Hadsel	Hadsel
27726	2023	14	pinkfoot	352	Haukenes	Hadsel	Hadsel
27727	2023	14	pinkfoot	65	Holmsnes	Hadsel	Hadsel
27728	2023	14	pinkfoot	0	Sandnes	Hadsel	Hadsel
27729	2023	14	pinkfoot	68	Skagen	Hadsel	Hadsel
27730	2023	14	pinkfoot	210	Bø	Sortland	SortS
27731	2023	14	pinkfoot	0	Fagernes	Sortland	SortN
27732	2023	14	pinkfoot	0	Frøskeland	Sortland	SortN
27733	2023	14	pinkfoot	0	Gåshol	Sortland	SortN
27734	2023	14	pinkfoot	0	Holand	Sortland	SortS
27735	2023	14	pinkfoot	22	Holmstad	Sortland	SortN
27736	2023	14	pinkfoot	118	Jennestad-Breivik	Sortland	SortN
27737	2023	14	pinkfoot	1250	Rise	Sortland	SortS
27738	2023	14	pinkfoot	274	Sandstrand	Sortland	SortN
27739	2023	14	pinkfoot	0	Selnes - Brenna	Sortland	SortN
27740	2023	14	pinkfoot	86	SelnesÅnstadBygd	Sortland	SortN
27741	2023	14	pinkfoot	270	Steiro	Sortland	SortN
27742	2023	14	pinkfoot	0	Strand	Sortland	SortS
27743	2023	14	pinkfoot	15	Stranda	Sortland	SortN
27744	2023	14	pinkfoot	76	Vik	Sortland	SortN
27745	2023	14	pinkfoot	0	Vikeid	Sortland	SortN
27746	2023	14	pinkfoot	.	Alsvåg	Øksnes	Øksnes
27747	2023	14	pinkfoot	.	Gisløy	Øksnes	Øksnes
27748	2023	14	pinkfoot	.	Klo	Øksnes	Øksnes
27749	2023	14	pinkfoot	.	Meløy-Instøy	Øksnes	Øksnes
27750	2023	14	pinkfoot	.	Rødsand	Øksnes	Øksnes

All location names

Zeros

Missing values



Census scheme

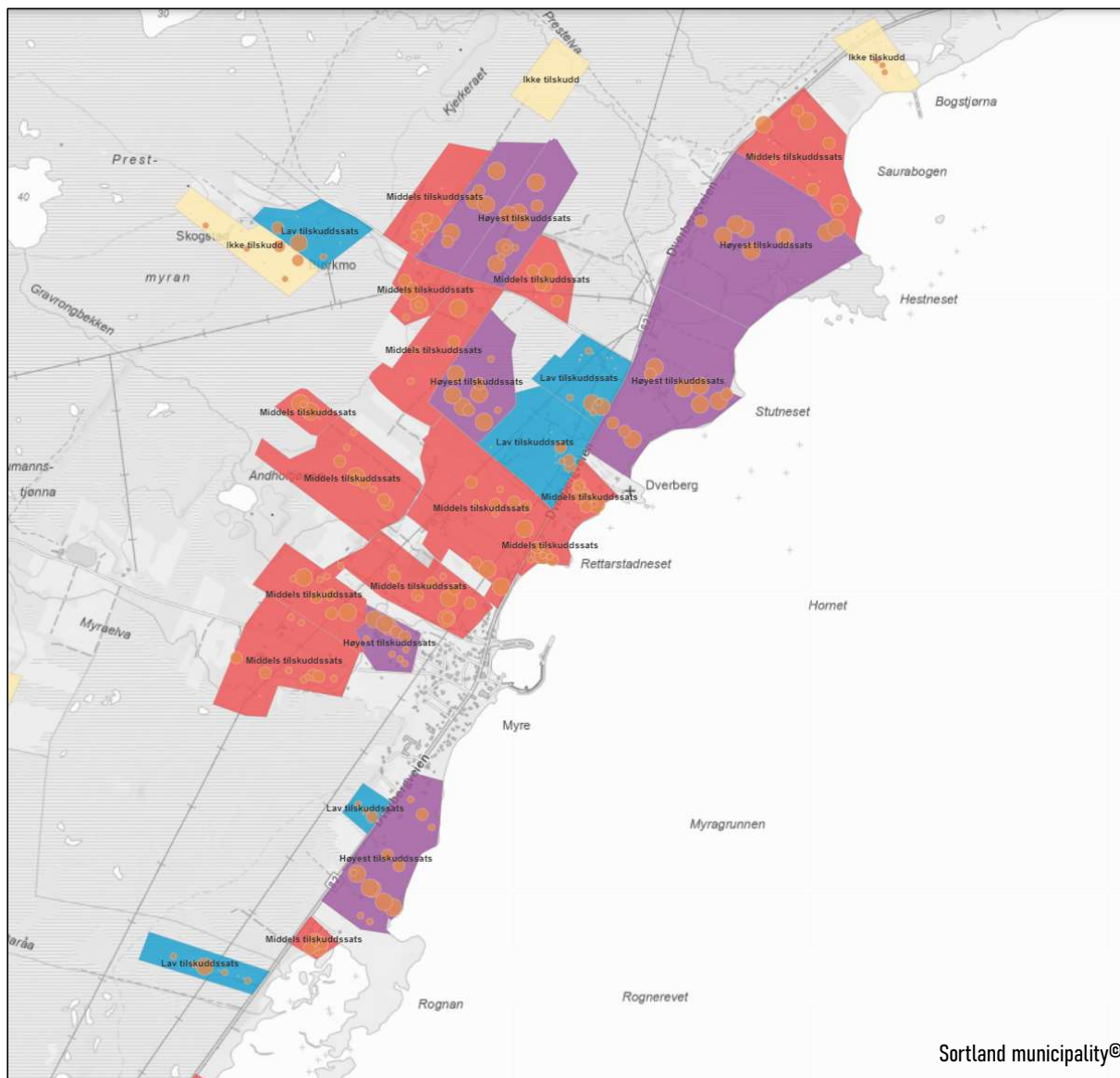
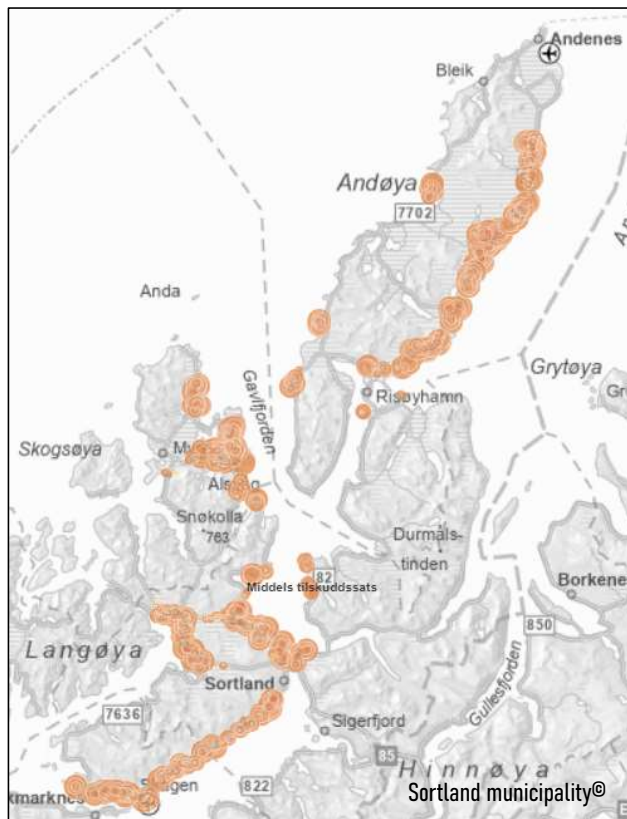
Vesterålen, spring

- Goose droppings & The Subsidy Scheme
- Counts within 2m radius circles at several hundred fields (average per field)
- Mobile phone application
- One municipality collects and calculates (three rates)



The subsidy

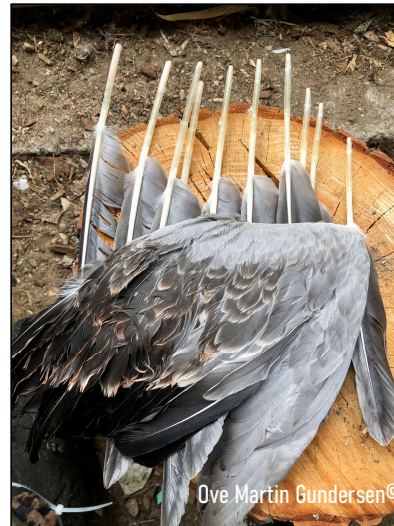
Three different rates based on averages per field (last three years)



Census scheme

Vesterålen, summer

- Project-based:
Assessment of timing of hunting start and wing development after moulting
- Includes counts and juvenile assessments of greylag geese (2-3 days...)

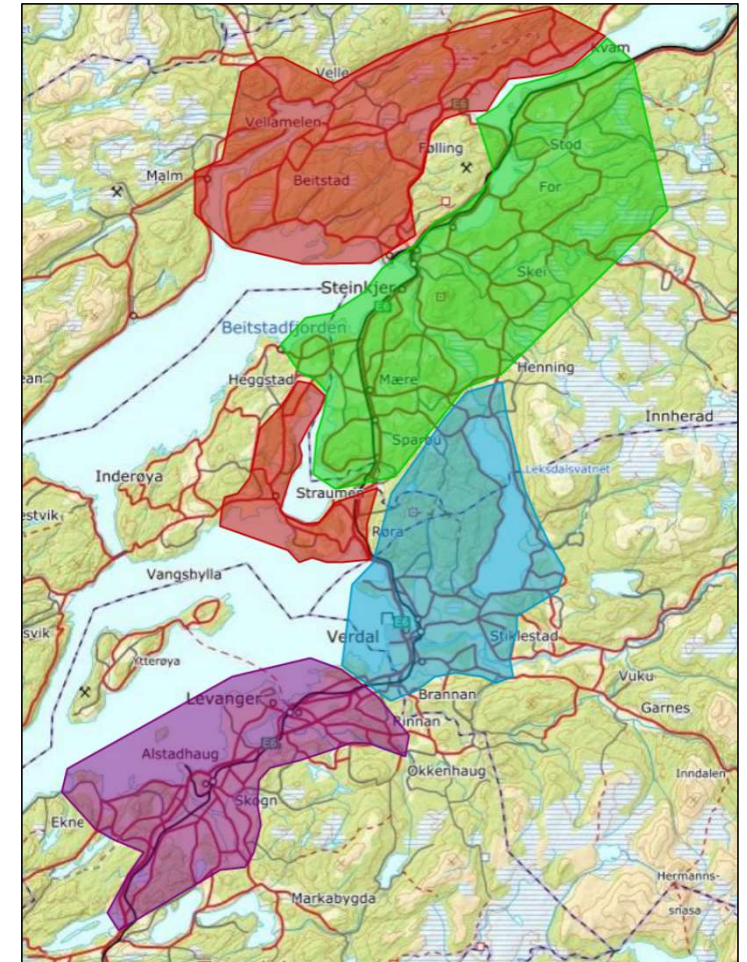


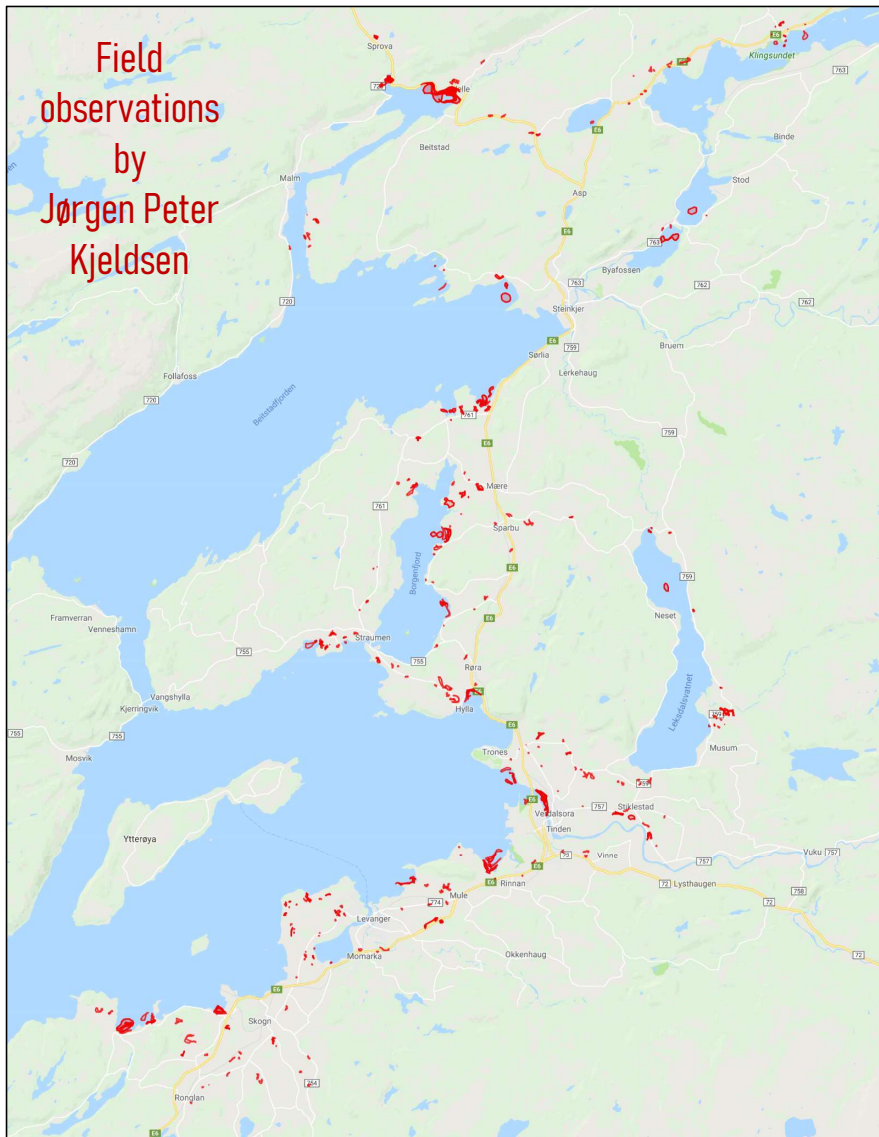
Census scheme

Trøndelag, spring

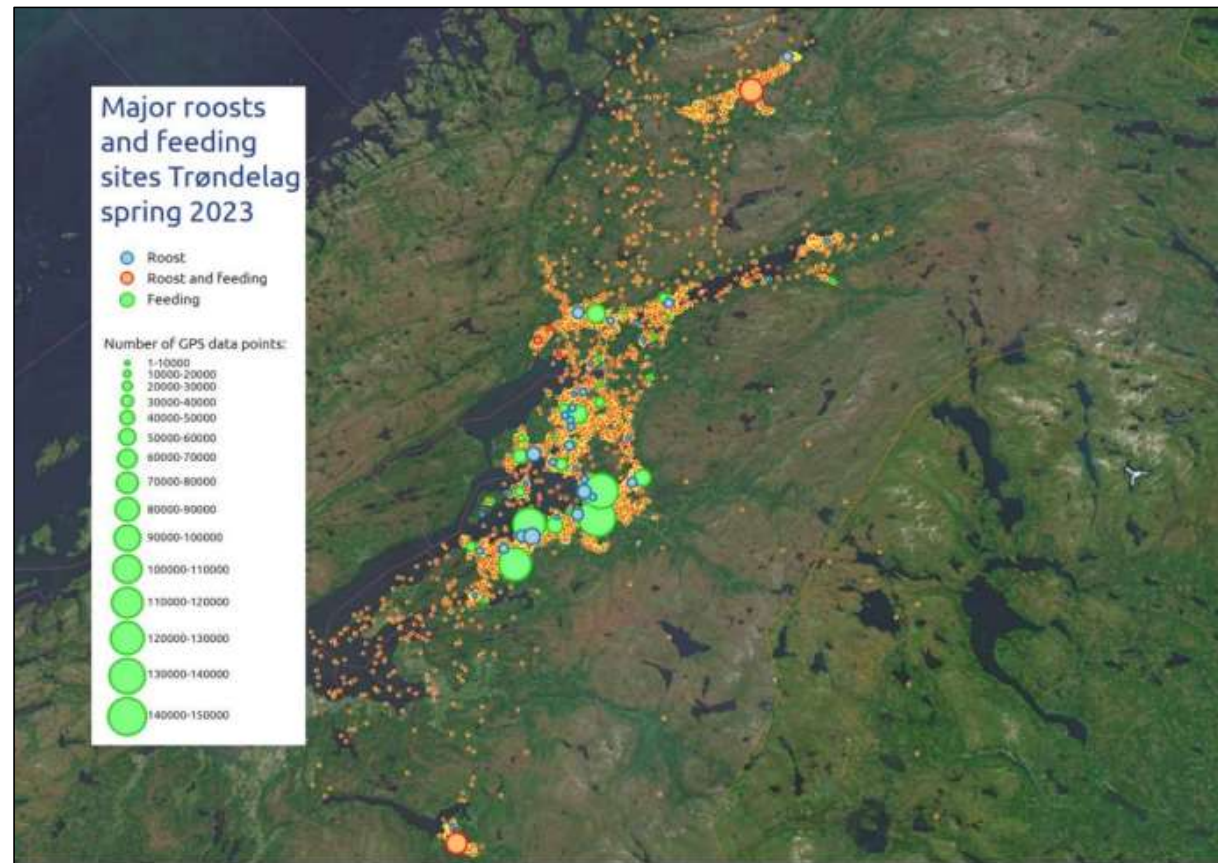
(pink-footed goose)

- «Vacuum cleaning» the region for PFG
- Part of the Norwegian monitoring
- EGMP input
- Annually
 - Count: one day
 - Ring reading: daily, one month





Satellite-tagged pink-footed geese compiled by Jørgen Peter Kjeldsen



Census scheme

Trøndelag, autumn

(pink-footed and greylag goose)

Counts and site-use, ring reading, hunting activities, etc.

- Part of the Norwegian monitoring
- EGMP input
- Annually, 7-10 days
(from mid-September to end of October)



1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
Year	Date	Date1	Municipality	Location	Nøyaktig	ID	Macro-site	Pink	Grey	Barnie	Canada	Habitat	North	East	Observer	
3968	2023	10	10.10.2023	Levanger	Skogn (Lunmo, Lælo, Løveng)	500 m	95	SkognRonglan	0	0	0	0	stubbåker	63.66947	11.16184	Tore Reinsbo
3969	2023	10	10.10.2023	Levanger	Skogn (Remyra, Moslett, Hove, Småland, Skogn Folkehøgskole)	500 m	112	SkognRonglan	1250	230	0	0	gresseng, stubbåke	63.66975	11.20796	Tore Reinsbo
3970	2023	10	10.10.2023	Levanger	Skogn (Røysing, Solvang)	500 m	107	SkognRonglan	0	0	0	0	stubbåker	63.66980	11.20925	Tore Reinsbo
3971	2023	10	10.10.2023	Levanger	Skogn (Skille, Hynne, Myrtun, Storaunet, Nordheim)	500 m	135	SkognRonglan	0	0	0	0	stubbåker	63.67546	11.20282	Tore Reinsbo
3972	2023	10	10.10.2023	Levanger	Skogn (Øver-Holan)	500 m	102	SkognRonglan	0	0	0	0	stubbåker	63.70989	11.17982	Tore Reinsbo
3973	2023	10	10.10.2023	Levanger	Skånes	500 m	93	HalsanSkånesRinnleiret	430	0	1	0	fjæra, stubbåker	63.76693	11.41364	Tore Reinsbo
3974	2023	10	10.10.2023	Levanger	Sætersmyra, Engsvæet, Haugskott, Holmen, Mule, Ner-Tynes, R	1000 m	104	HalsanSkånesRinnleiret	19	103	0	0	stubbåker	63.75408	11.35615	Tore Reinsbo
3975	2023	10	10.10.2023	Levanger	Tynesfjæra	500 m	30	HalsanSkånesRinnleiret	0	0	0	0	fjæra	63.75929	11.33188	Tore Reinsbo
3976	2023	10	10.10.2023	Levanger	Øver-Eggen, Nordaker, Skoglund	500 m	16	SkognRonglan	90	0	0	0	stubbåker	63.70579	11.22072	Tore Reinsbo
3977	2023	10	10.10.2023	Steinkjer	Aunbukta, Klingssundet	1000 m	1	KvamFossem	0	0	0	0	innsjø	64.11913	11.67090	Tore Reinsbo
3978	2023	10	10.10.2023	Steinkjer	Bartnes	500 m	5	MalmBartnes	0	0	0	0	.	64.05530	11.23409	Tore Reinsbo
3979	2023	10	10.10.2023	Steinkjer	Binde, Østerdyen	500 m	6	KvamFossem	0	0	0	0	.	64.08924	11.70607	Tore Reinsbo
3980	2023	10	10.10.2023	Steinkjer	Byafossen	500 m	11	KvamFossem	0	0	0	0	.	63.03081	11.55549	Ove Martin G
3981	2023	10	10.10.2023	Steinkjer	Egge	500 m	13	Egge	0	0	0	0	.	64.02579	11.43758	Tore Reinsbo
3982	2023	10	10.10.2023	Steinkjer	Egge, Lundleiret	300 m	15	Egge	0	0	0	0	fjæra	64.02527	11.43642	Tore Reinsbo
3983	2023	10	10.10.2023	Steinkjer	Elnan	500 m	23	Egge	0	0	0	0	.	63.69746	11.03346	Tore Reinsbo
3984	2023	10	10.10.2023	Steinkjer	Fossem	500 m	33	KvamFossem	0	29	0	0	stubbåker	64.05713	11.63743	Ove Martin G
3985	2023	10	10.10.2023	Steinkjer	Fossemvatnet v. Aksnes	500 m	34	KvamFossem	0	0	0	0	innsjø	64.05940	11.63040	Tore Reinsbo
3986	2023	10	10.10.2023	Steinkjer	Frøsetvågen, Hildrum	500 m	35	KroksvågenFrøsetvågen	0	0	0	0	.	63.97283	11.41191	Tore Reinsbo
3987	2023	10	10.10.2023	Steinkjer	Hammar	500 m	44	Egge	0	0	0	0	.	64.03673	11.36992	Tore Reinsbo
3988	2023	10	10.10.2023	Steinkjer	Heløy, Joddåren	500 m	48	TessemLømsenFølling	0	0	0	0	stubbåker	64.09442	11.45377	Tore Reinsbo
3989	2023	10	10.10.2023	Steinkjer	Henning	500 m	49	Henning	0	0	0	0	.	63.93860	11.59452	Tore Reinsbo
3990	2023	10	10.10.2023	Steinkjer	Klingsundet	500 m	63	KvamFossem	0	0	0	0	innsjø	64.13460	11.74079	Tore Reinsbo
3991	2023	10	10.10.2023	Steinkjer	Kne, Snåsavatnet	500 m	65	KvamFossem	0	0	0	0	.	64.11345	11.62102	Tore Reinsbo
3992	2023	10	10.10.2023	Steinkjer	Kroksvågen	500 m	69	KroksvågenFrøsetvågen	0	0	0	0	.	63.96875	11.37467	Tore Reinsbo
3993	2023	10	10.10.2023	Steinkjer	Kvam, Steinkjer	500 m	70	KvamFossem	0	0	0	0	.	64.13216	11.70609	Tore Reinsbo
3994	2023	10	10.10.2023	Steinkjer	Leksdalsvatnet North, Figgjaosen	500 m	78	LeksdalNord	0	0	0	0	.	63.90850	11.57306	Tore Reinsbo
3995	2023	10	10.10.2023	Steinkjer	Leksdalsvatnet North, Neset	500 m	79	LeksdalNord	0	0	0	0	.	63.90850	11.57306	Tore Reinsbo
3996	2023	10	10.10.2023	Steinkjer	Lerkehaug	500 m	89	Lerkehaug	0	0	0	0	.	63.97320	11.50933	Tore Reinsbo
3997	2023	10	10.10.2023	Steinkjer	Lorvikleiret, Borgenfjorden	500 m	90	BossnesLorvikaLorås	0	0	0	0	fjæra	63.88669	11.37569	Tore Reinsbo
3998	2023	10	10.10.2023	Steinkjer	Lømsen	500 m	96	TessemLømsenFølling	0	0	0	0	innsjø	64.10304	11.54093	Tore Reinsbo
3999	2023	10	10.10.2023	Steinkjer	Lønnessleiret	500 m	97	GjørvMære	0	0	0	0	.	63.56450	11.23000	Tore Reinsbo
4000	2023	10	10.10.2023	Steinkjer	Lønnavika, Borgenfjorden	500 m	98	GjørvMære	0	0	0	0	fjæra	63.94560	11.38684	Tore Reinsbo
4001	2023	10	10.10.2023	Steinkjer	Malm	500 m	99	MalmBartnes	0	0	0	0	.	64.05836	11.23585	Tore Reinsbo
4002	2023	10	10.10.2023	Steinkjer	Myrheim	500 m	4	GjørvMære	0	0	0	0	gress	63.92401	11.39198	Ove Martin G
4003	2023	10	10.10.2023	Steinkjer	Mære (Mære, Gilberg, Myrset, Lønnem)	1000 m	106	GjørvMære	0	0	0	0	.	63.93750	11.40173	Tore Reinsbo
4004	2023	10	10.10.2023	Steinkjer	Mære, Naust	500 m	109	GjørvMære	0	0	0	0	fjæra	63.93524	11.38339	Tore Reinsbo
4005	2023	10	10.10.2023	Steinkjer	Reinsvatnet	500 m	142	KvamFossem	0	0	0	7	innsjø	64.04317	11.59384	Ove Martin G
4006	2023	10	10.10.2023	Steinkjer	Røsegg, Tessem	1000 m	145	TessemLømsenFølling	0	0	0	0	.	64.08972	11.39146	Tore Reinsbo
4007	2023	10	10.10.2023	Steinkjer	Sparbu, Heistad, Dalem	1000 m	12	MæreSparbu	0	0	0	0	.	63.92923	11.45732	Tore Reinsbo
4008	2023	10	10.10.2023	Steinkjer	Stod, Vollset, Utgard	500 m	53	KvamFossem	0	0	0	0	stubbåker	64.12109	11.71747	Tore Reinsbo
4009	2023	10	10.10.2023	Steinkjer	Vellamelen, Hjellobtn (Heimly, Hjellosen, Ner-Velle)	500 m	51	HjellobtnVellamelen	0	0	0	0	fjæra	64.11283	11.36026	Tore Reinsbo
4010	2023	10	10.10.2023	Steinkjer	Øver-Kvarving	500 m	72	TessemLømsenFølling	0	0	0	0	.	64.09719	11.39574	Tore Reinsbo
4011	2023	10	10.10.2023	Stjørdal	Stjørdal, Halsøen, Langøra	500 m	43	Stjørdal	.	.	.	.	fjæra	63.46601	10.90694	Tore Reinsbo
4012	2023	10	10.10.2023	Stjørdal	Stjørdal, Hognes	500 m	54	Stjørdal	.	.	.	.	stubbåker	63.46539	10.96179	Tore Reinsbo
4013	2023	10	10.10.2023	Stjørdal	Stjørdal, Langøra	500 m	74	Stjørdal	.	.	.	.	fjæra	63.46208	10.90526	Tore Reinsbo

All location names

Zeros

Missing values

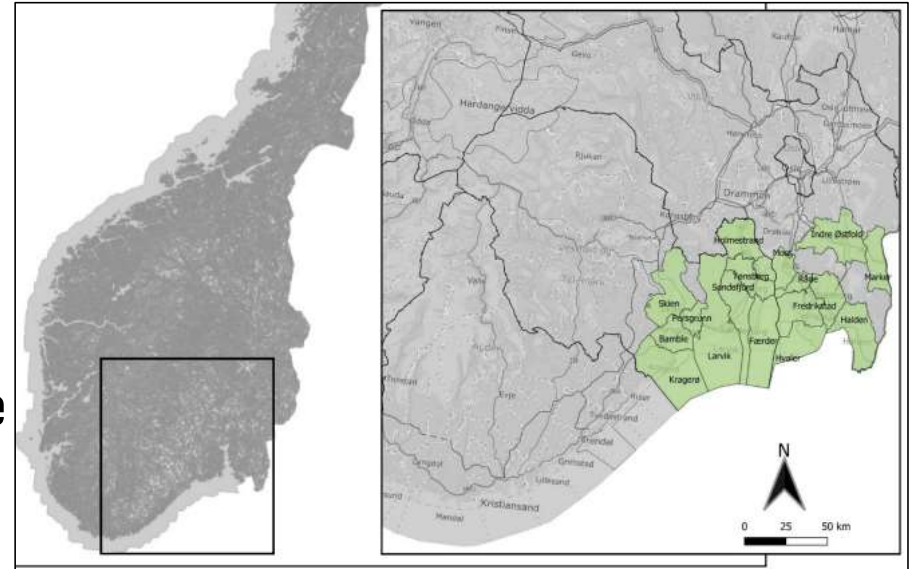
Census scheme

Southern Norway, summer

(greylag and *barnacle* goose)

- «Vacuum cleaning»
- Part of the regional monitoring
- EGMP input; juvenile assessments greylag geese

- Annually or every second year... varies...
 - Count: one weekend
 - Juvenile assessments: 2-3 days



No roost counts...



Techniques to overcome gaps in coverage

Aiming for (as much as possible!) standard and systematic registrations providing less need for extrapolation and modelling...

*Estimation of
the greylag goose population in Norway is in
progress*

*Here we need both
extrapolation and modelling!*

Must come back to this...



Age-ratios

Tøndelag

BirdLife Norway (Paul Shimmings)

*Make sure you get a **representative sample** of flocks of **varying sizes**. Small flocks often have a larger proportion of young birds.*

*In larger flocks (500 birds and upwards) you should aim either to age the **whole flock** or **sample from different parts** of the flock.... Dominant individuals and families of geese will be on the edges of the flocks.... vital to sample from different parts of the flock in order to get a representative sample.*



Pinkfoot ageing Trøndelag 2023 - Paul Shimmings														
Date	Place	Kommune	Habitat	Flock	no. aged	no. young in sample	Brood sizes							
							1	2	3	4	5	6	7	single juv.
14.10.2023	Værnes kirke	Stjørdal	cereal stubble	170	153	34	6	2	2					
16.10.2023	Gråmyra	Levanger	cereal stubble	4500	960	241	18	8	6	5	1	2		3
16.10.2023	Vester-Veske	Levanger	cereal stubble	2000	929	382	15	10	7	2	1	1		1
16.10.2023	Granlund, Håa	Levanger	cereal stubble	2500	343	96								
16.10.2023	Rindsem	Verdal	cereal stubble	1204	1204	349	4	4	5	3	1			1
16.10.2023	Trykstad, Rosvold	Verdal	cereal stubble	2935	502	140	5	7	6	5				7
16.10.2023	Vollset, Skogn	Levanger	cereal stubble	389	322	67	2	2	1					1
17.10.2023	Surhlandsøya	Selbu	cereal stubble	1580	837	224	19	32	9	6	5	2		7
2023 SUM				15278	5250	1533	69	65	36	21	8	5		20
<i>Mean brood size = 2.26 young (n=204 broods)</i>														
<i>Percentage young = 29.2 % (n=5250 aged)</i>														
<i>Percentage single juvs = 4.2 % without parents (n=481 young whose family status was assessed in field)</i>														



Kjell Heggelund

Age-ratios

Vestfold and Telemark (southern Norway)

- Smaller and scattered flock
- Register «whatever we find» and compile it all afterwards...



Data flow and storage

- Data validated and available following the various reporting deadlines (often mid-November)
- EGMP-requests as appropriate!

