

Black-faced spoonbill conservation in Korea

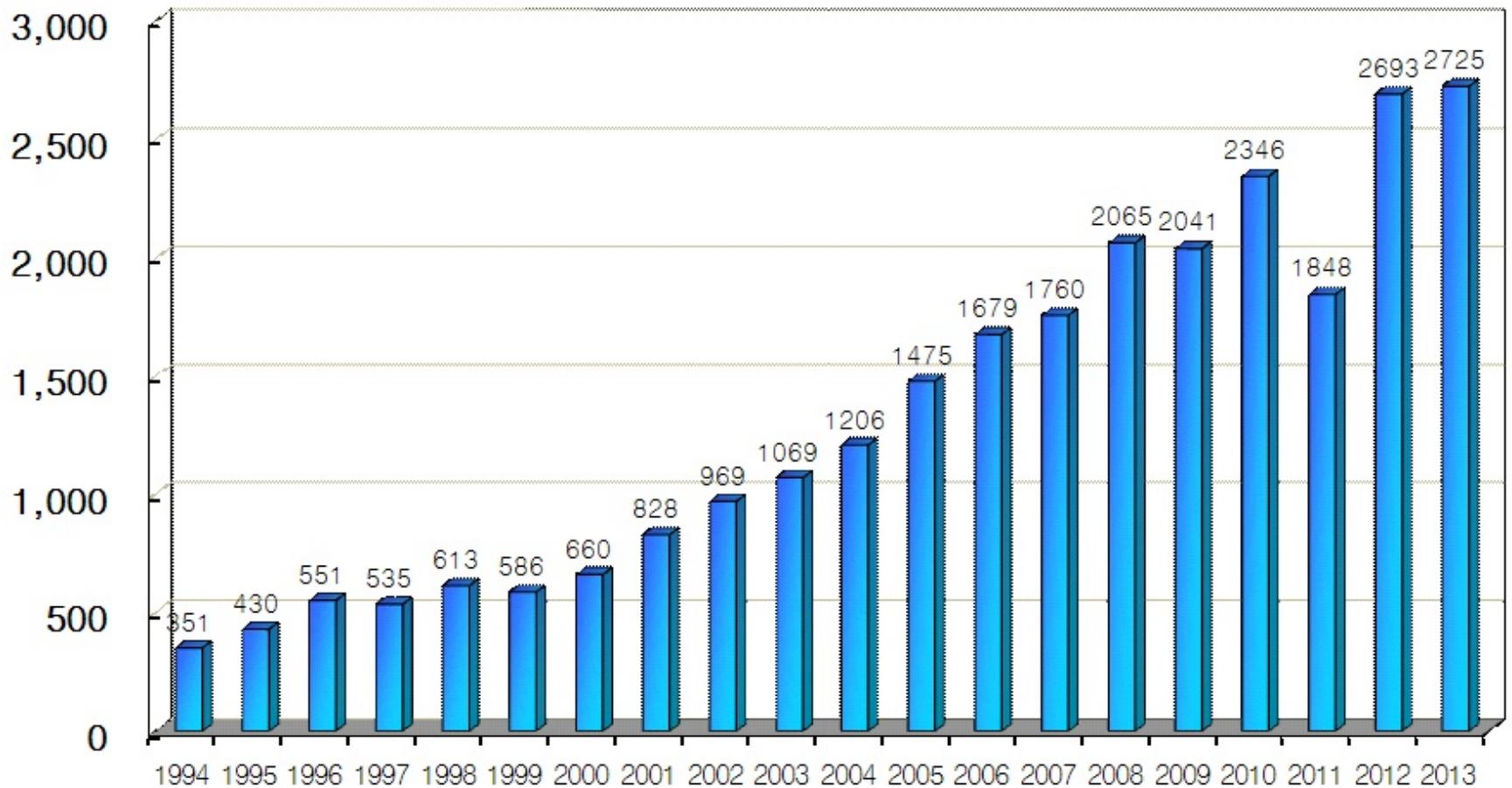


Kisup Lee
Waterbird Network Korea

Conservation activity and breeding situation of **Black-faced Spoonbills** in Korea

- First finding the breeding site in 1990's
- Begin to monitor the breeding population from 2003
- attaching color bands from 2005
- starting Joint research for satellite tracking at 2009
- Beginning the rescue project from 2010

Wintering population increased from 351 to 2,725 (7~8 times)

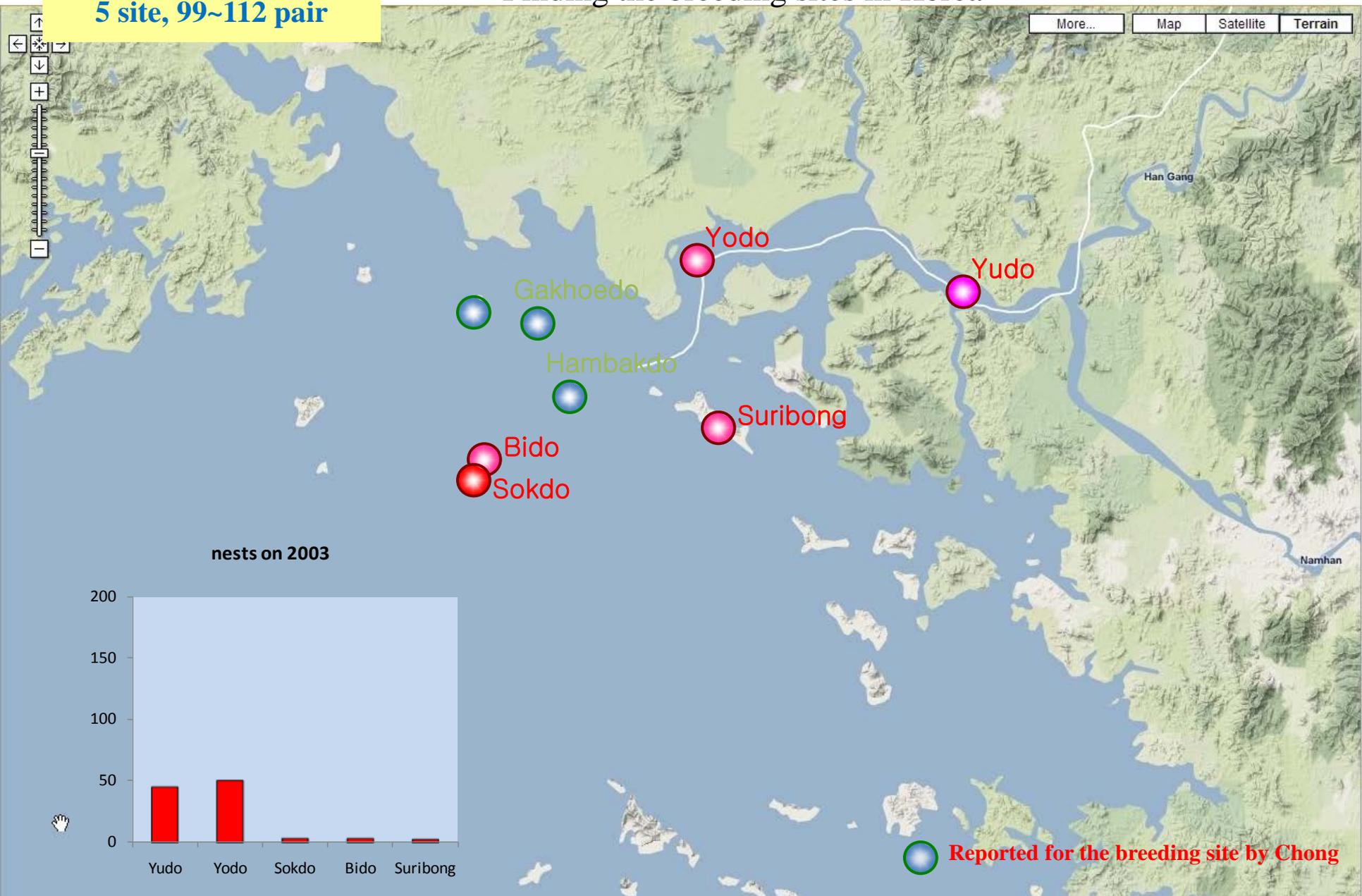


Data from International BFSpoonbill Census organized by HK BWS

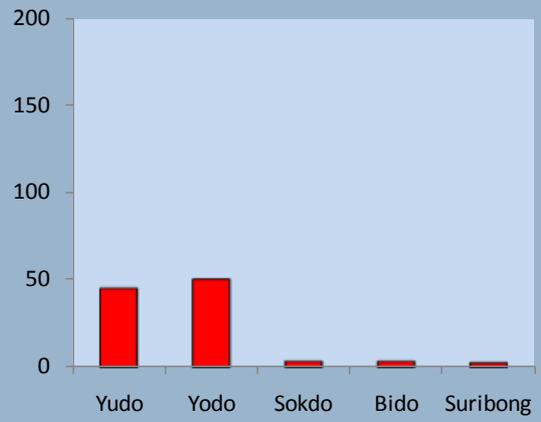
2003 year
5 site, 99~112 pair

Finding the breeding sites in Korea

More... Map Satellite Terrain



nests on 2003

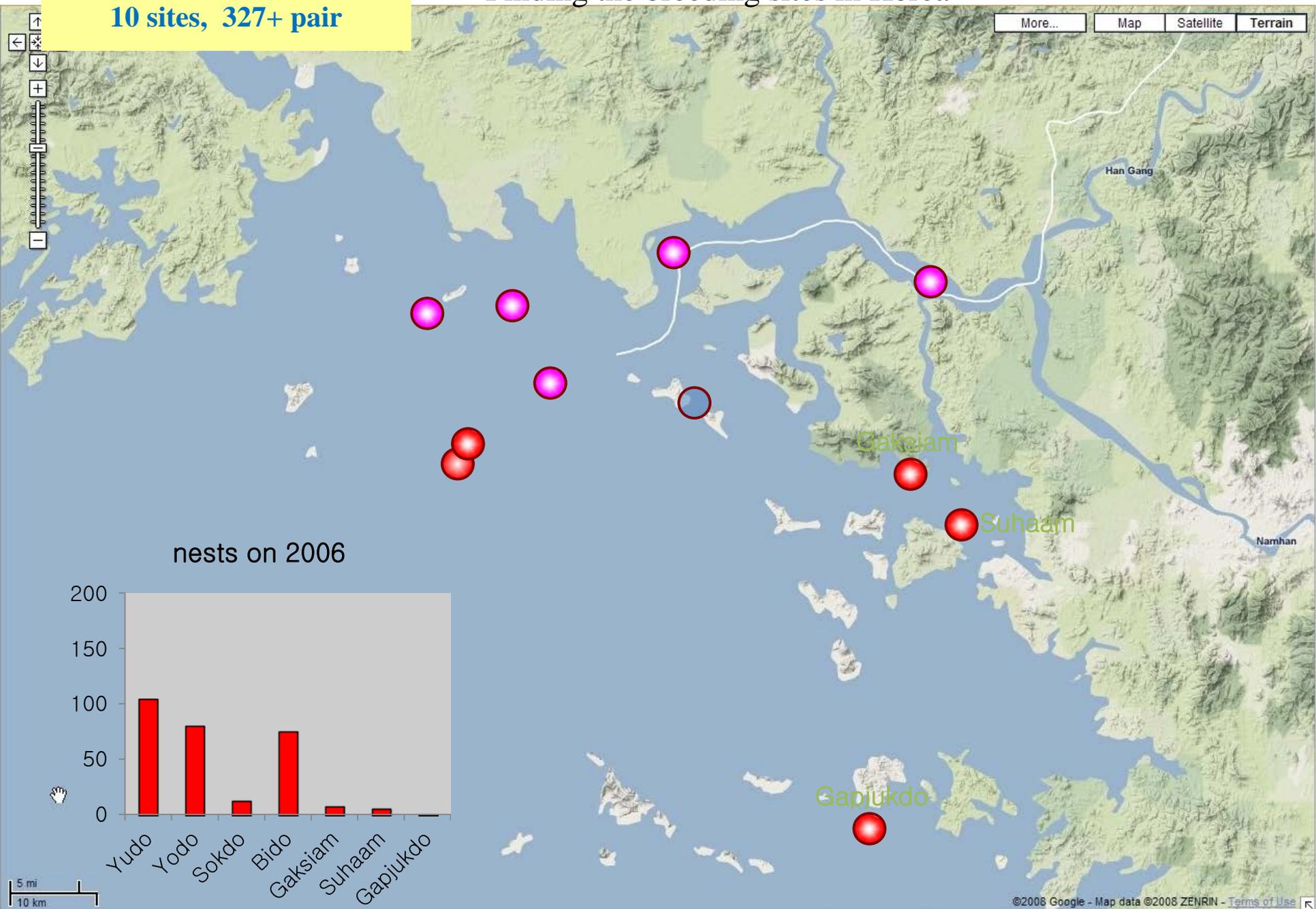


Reported for the breeding site by Chong

Finding the breeding sites in Korea

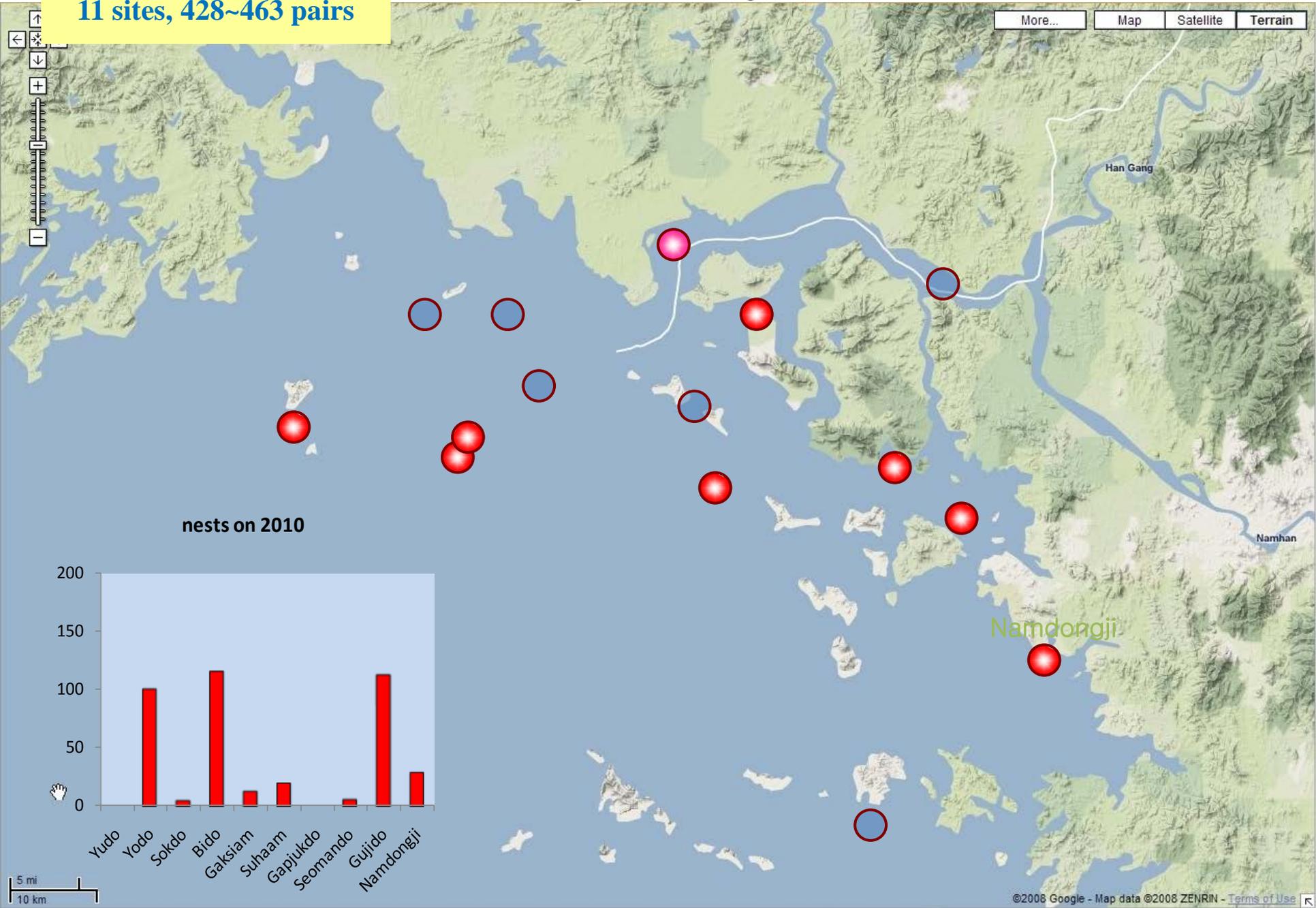
2006 year
10 sites, 327+ pair

More... Map Satellite Terrain



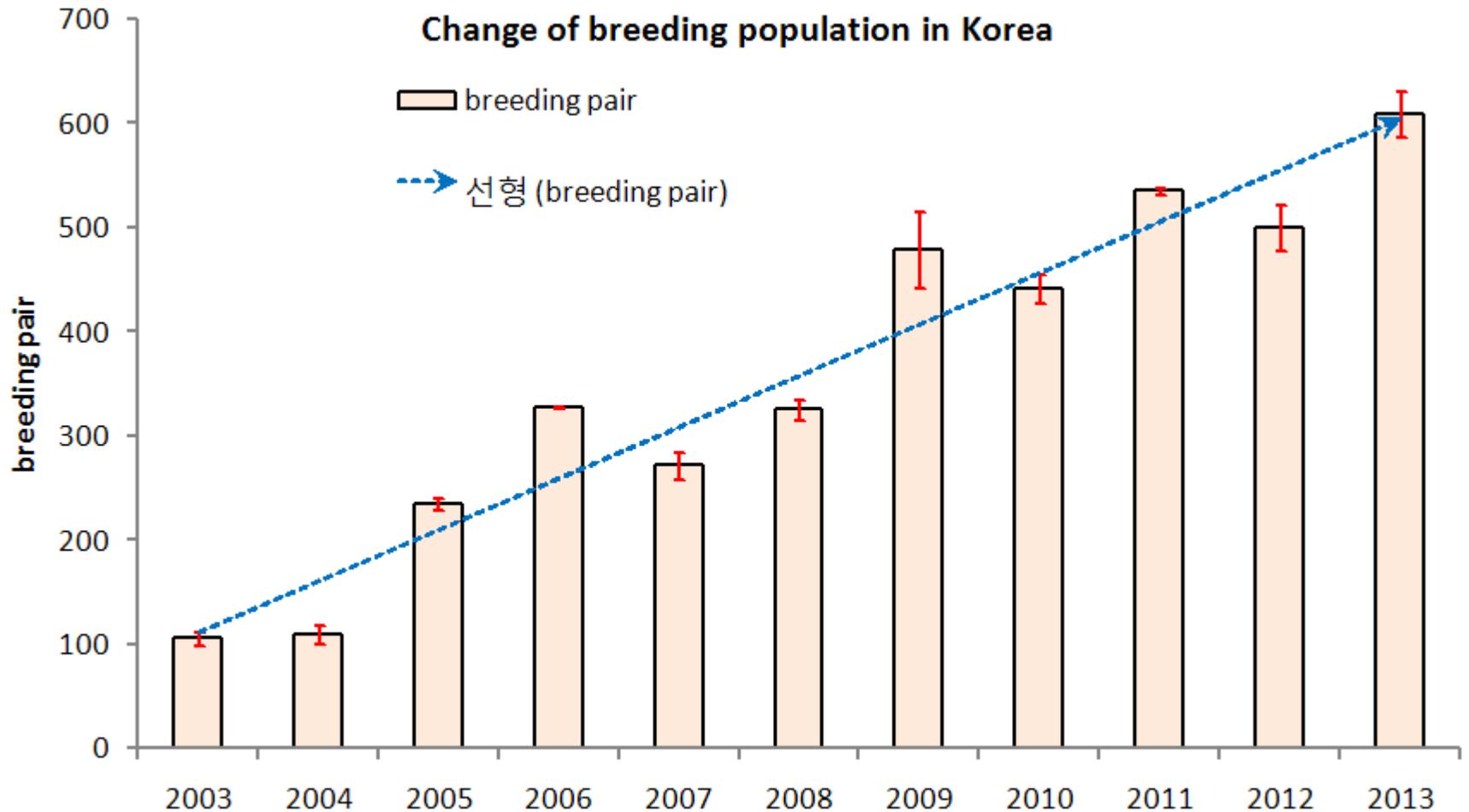
2010 year
11 sites, 428~463 pairs

Finding the breeding sites in Korea



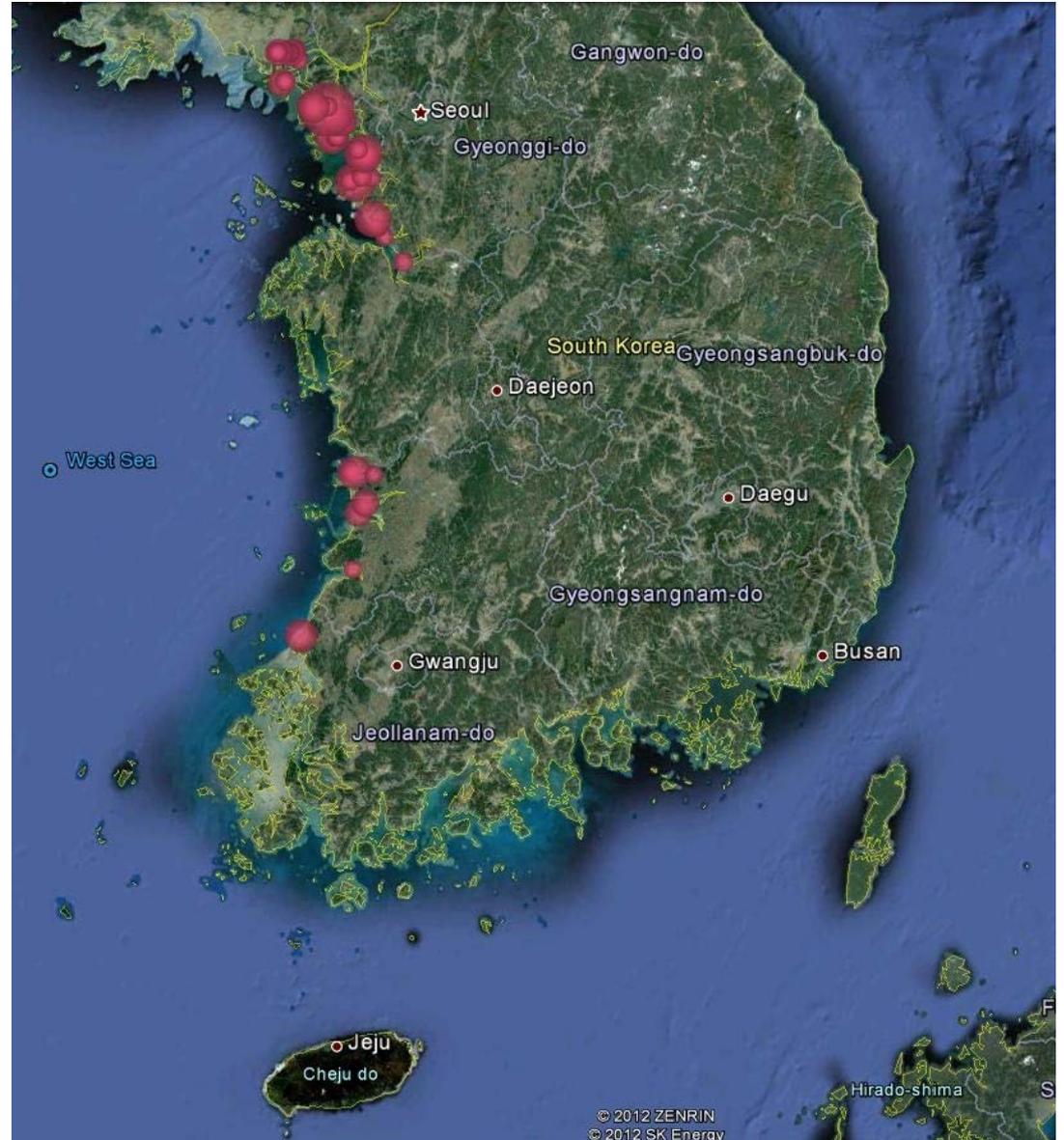
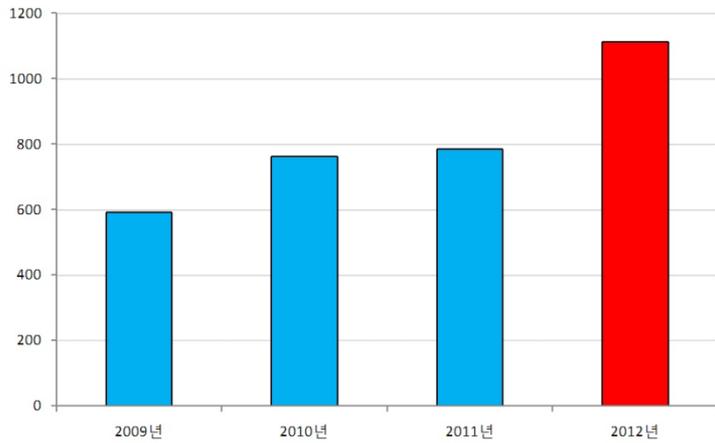
Breeding sites in Korea, 2003-2013 yrs.

Total 15 sites, breeding pairs increased from 100 to 600 pairs



Distribution after breeding on Sep.

9월 저어새 관찰수 증가



Distribution of BFSpoonbills, Sep. 2012

The breeding problem of Black-faced Spoonbills

- no place to breed
 - difficult to find the suitable island for breeding
 - difficult to find the safe place
 - 6 sites abandoned by unknown reason
- Bad condition to breed
 - insufficient for nesting place
 - scarce of nest materials
 - human disturbance and predators

Case study to improve the breeding situation of BFSpoonbills at Namdongji

- Nest material supply
- Nest site improvement
- Removal of threatening factors (predator, flood control, human disturbance)
- Cooperative monitoring with local NGO.

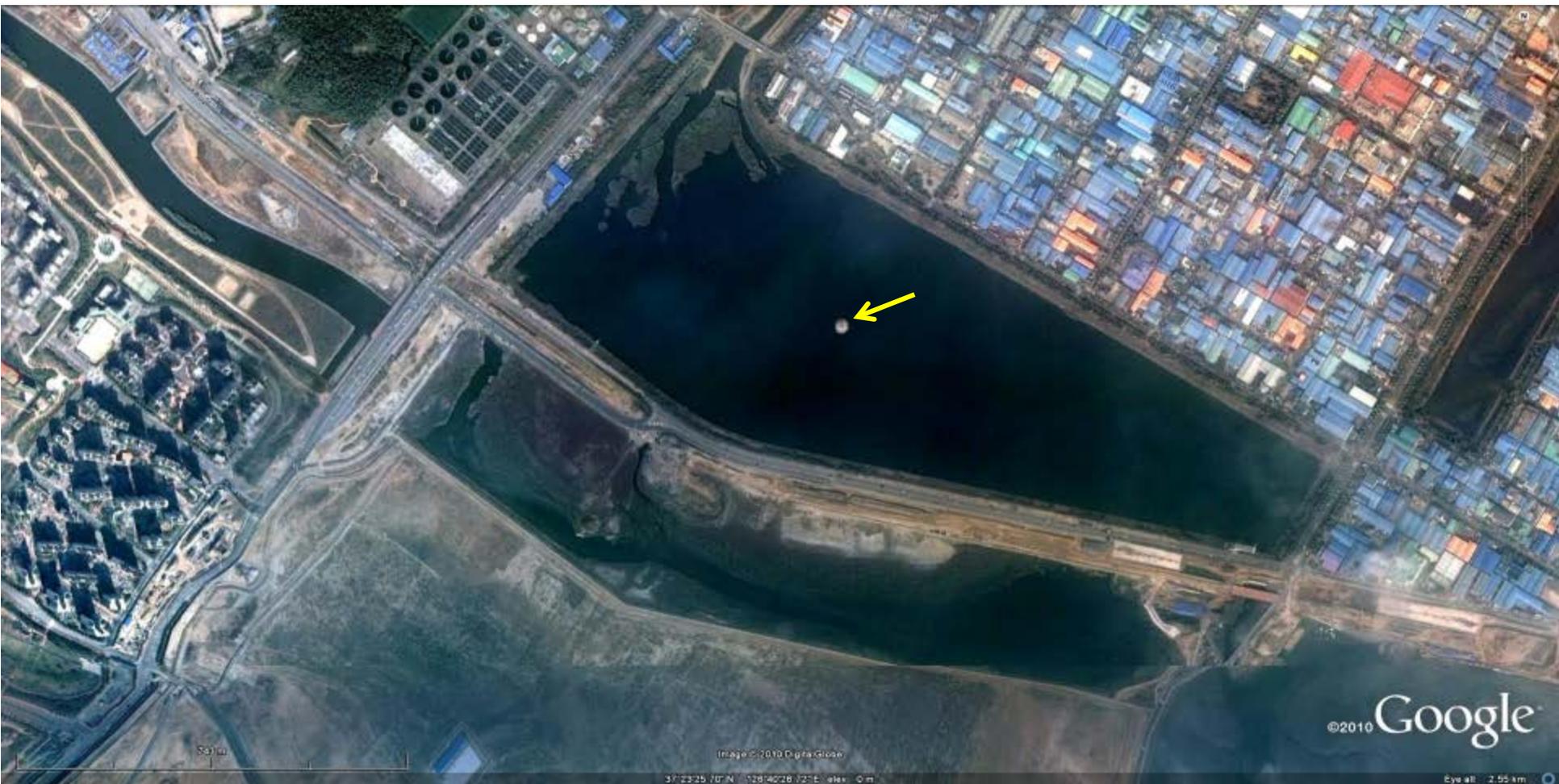


What did we do ?

The rescue project for Black-faced Spoonbills!



Namdong flood-control reservoir and artificial island in Incheon city
-this is the breeding area of Black-faced Spoonbills



Songdo was Intertidal flat, but reclaimed to the developing area



The tallest buildings are still being constructed in Songdo new city,
-this small islet is only safe place for spoonbills!



BFS started to breed in 2009, but not enough room for the nest, eggs easily fall down.



When chicks growing up, chicks frequently fell down



What did we do ?

- Rescue project
 - Giving the nest materials
 - Making the nest sites
 - Monitoring the breeding situation
 - Rescuing the injured BFS and releasing event



Give the nest materials (twig and dried stem)



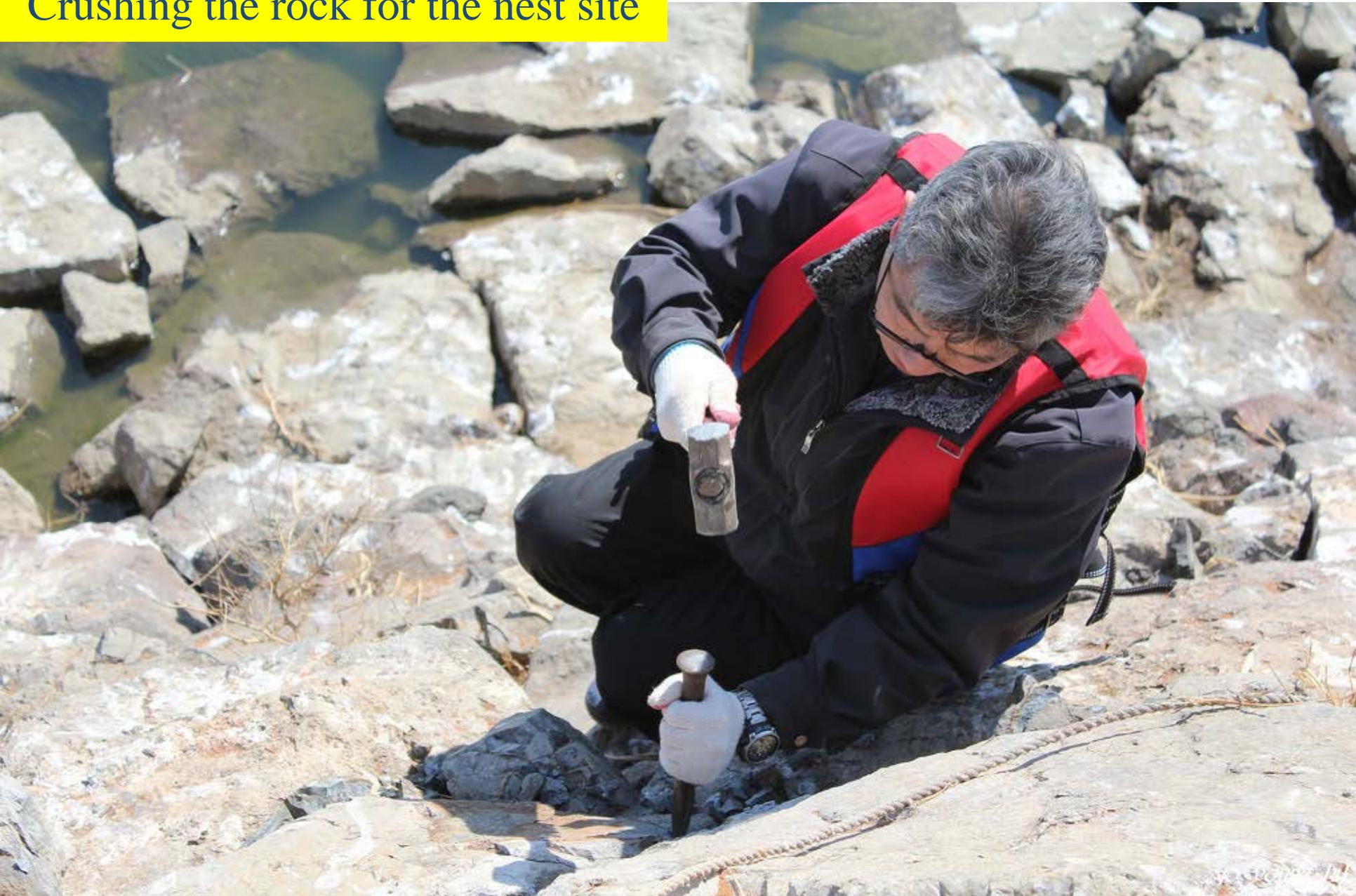
Cutting the dead trees fell down



Making the space for the nest site



Crushing the rock for the nest site



Flattening by soils



Putting on the twigs near the nest site



putting the broken trees to line the each nest





Lunch time



After that....



jo young kil

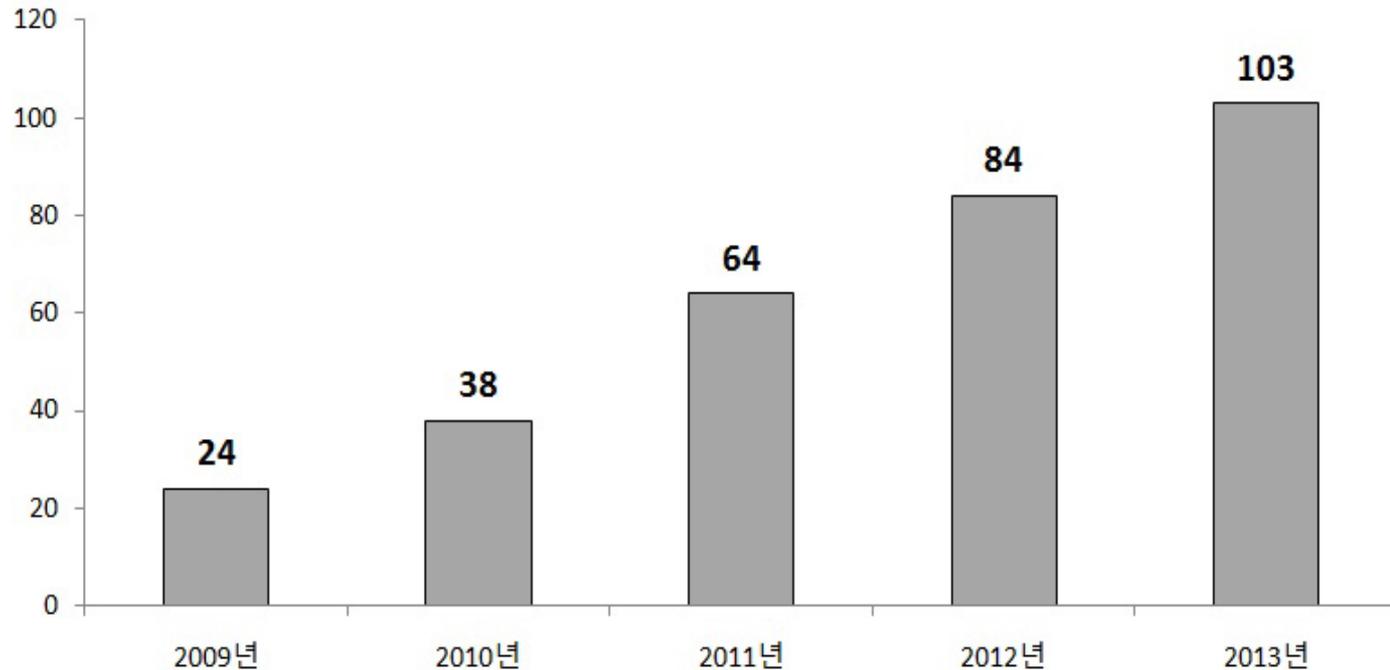
So many chicks grown up



The result

Only 6 chicks fledged in 2009,
53 chicks fledged in 2010,
100+ chicks fledged from 2011.
103 nests built on 2013

번식 시도
동지수



Next to Gaksiam



2009. 10. 4

Gaksiam

So small, but so many birds!



No place to roost at high tide!



09. 10. 18

Bringing the stones and twigs



Moving up many stones





Mar. 19. 2011
jo young kil



Mar. 19. 2011

Y. Yonki 1st



Mar. 19, 2011
K. Yamaki Isl.

Dividing the nest site

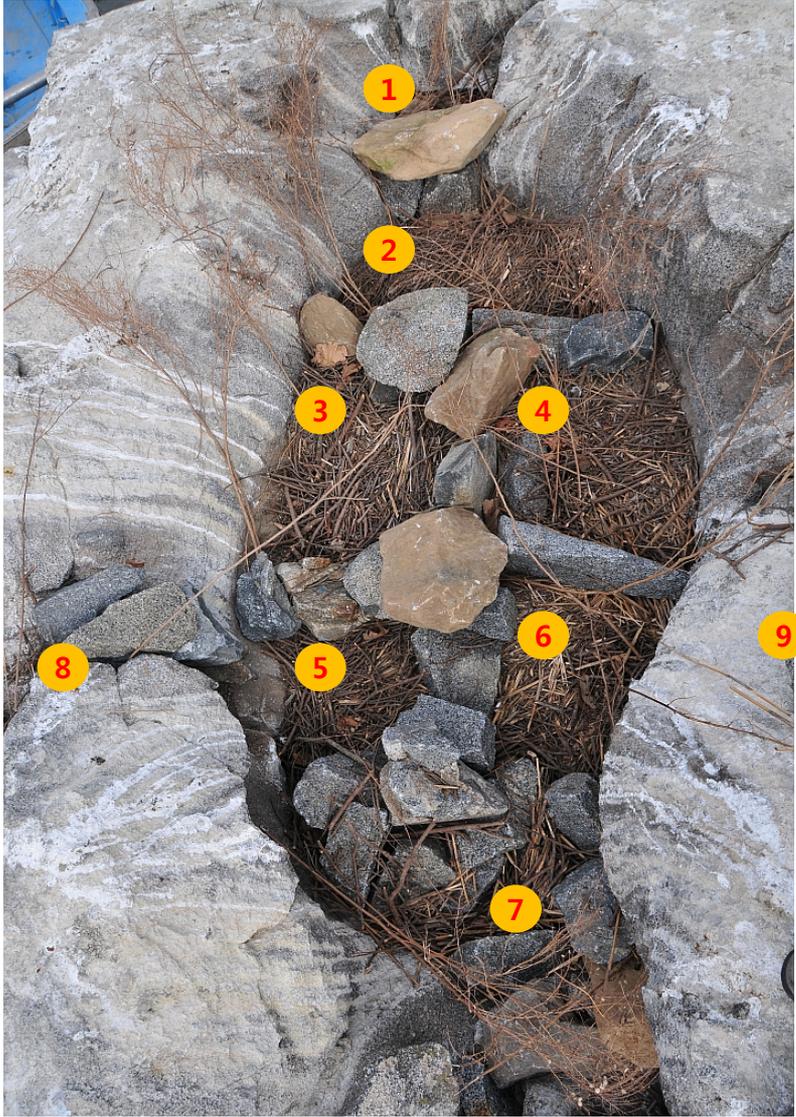


Mar. 19. 2011

Making the border by stones

The site in 2010, all failed on breeding because no borders between nests

9 nest sites made



Making nest sites



Comparing 2010 to 2011



2010. 4. 14



2011. 4. 20



Apr. 20. 2011

Many chicks grown up

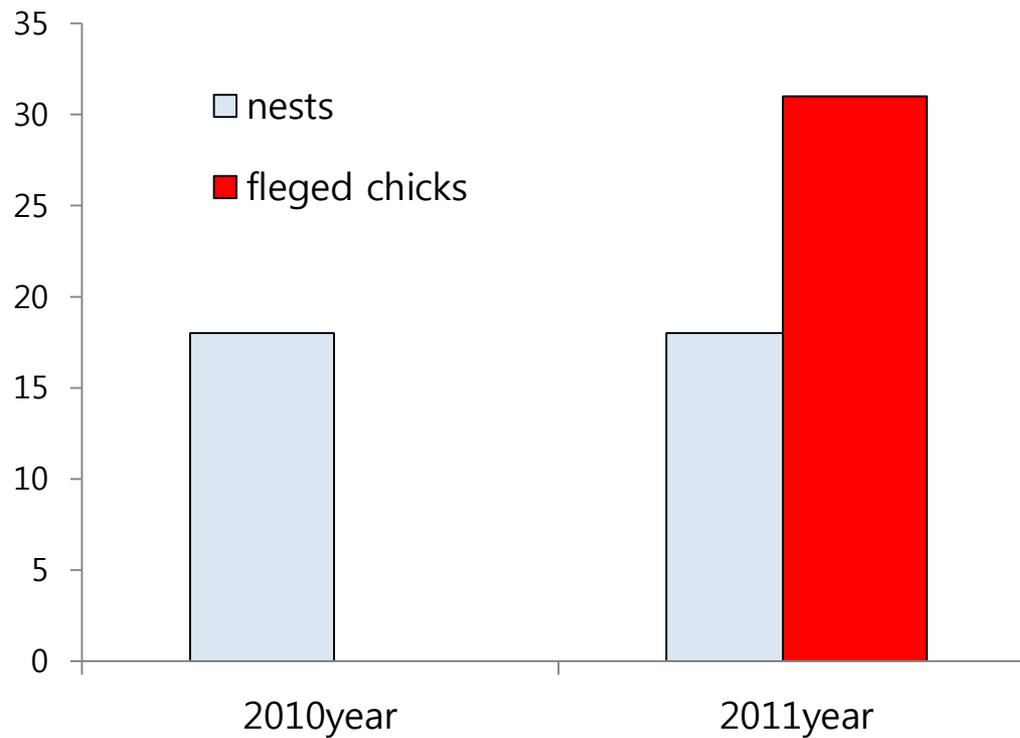


June 11, 2011

Gaksiam

All 18 nests failed in 2010, no chicks fledged

31 chicks fledged in 2011



Suhaam

- Too small, too many. So few nest materials
- Started the rescue project from 2011



The habitat problem of Black-faced Spoonbills

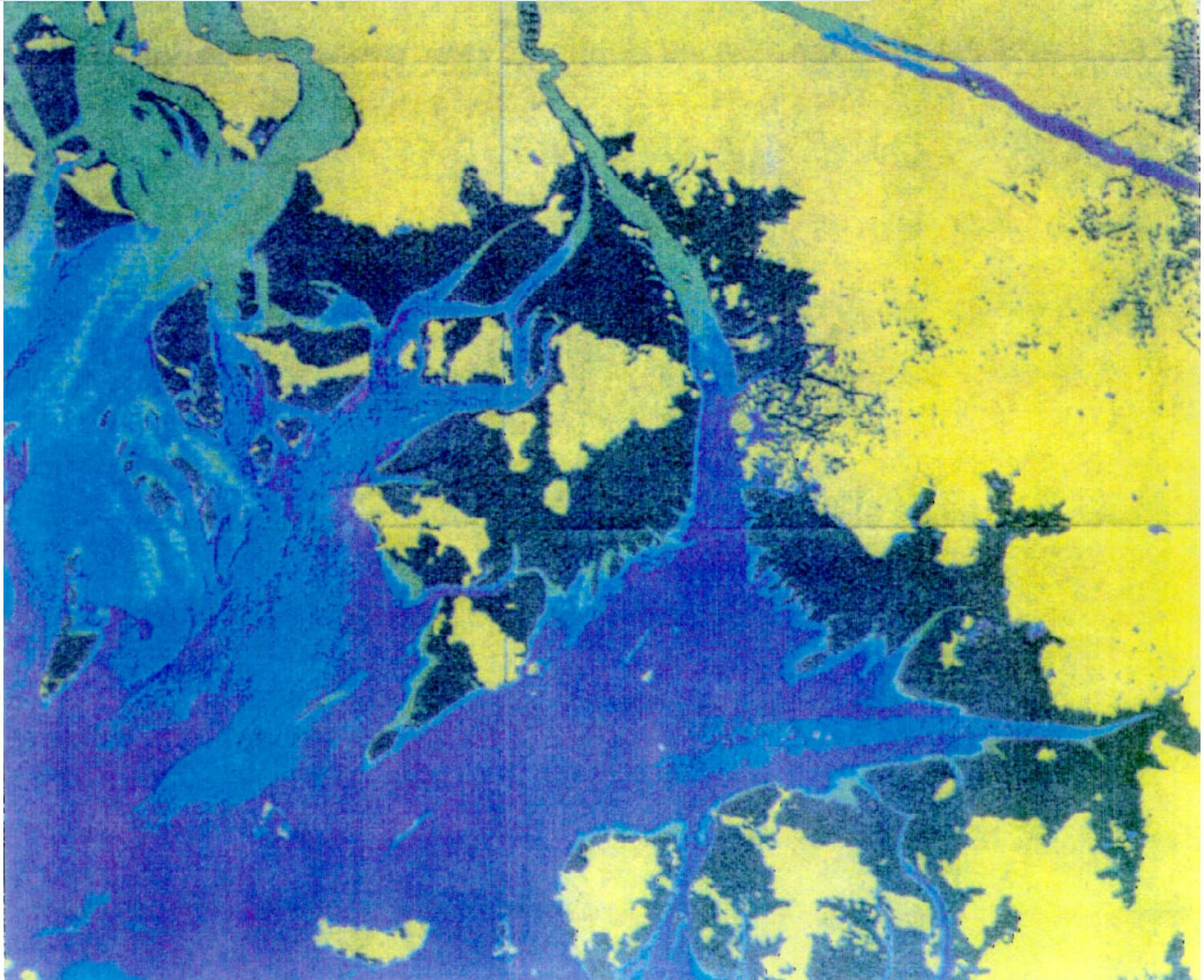
- **Decreasing of feeding place**
 - continuous reclamation of intertidal mudflat
 - decreasing of coastal wetland
 - reducing of the rice-paddies and urbanization
 - digging, collecting the sand, become deep water
- **Difficult to find the roosting site**
 - decreasing of the suitable roosting site
 - new dyke or bank along the coast
 - development and urbanization along the coast
 - human disturbance by fishing and recreation activity

Songdo New city

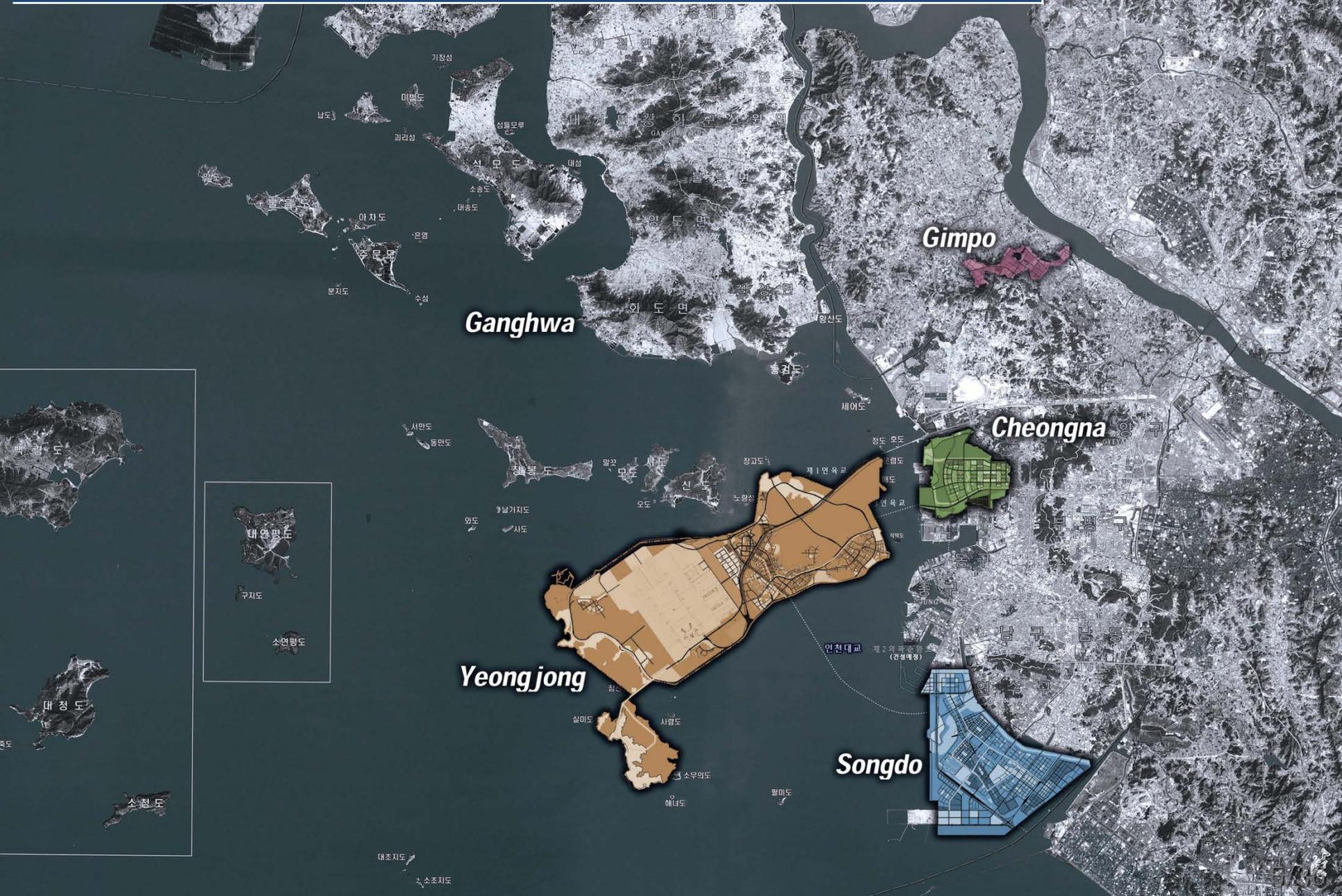


항금어장이었던 송도갯벌을 송두리째 없애버리고 들어서고 있는 송도신도시

Intertidal mudflat in 1970's, Incheon



Development on the intertidal mudflat, Incheon



What did we do?

Joint research project for Black-faced Spoonbills!

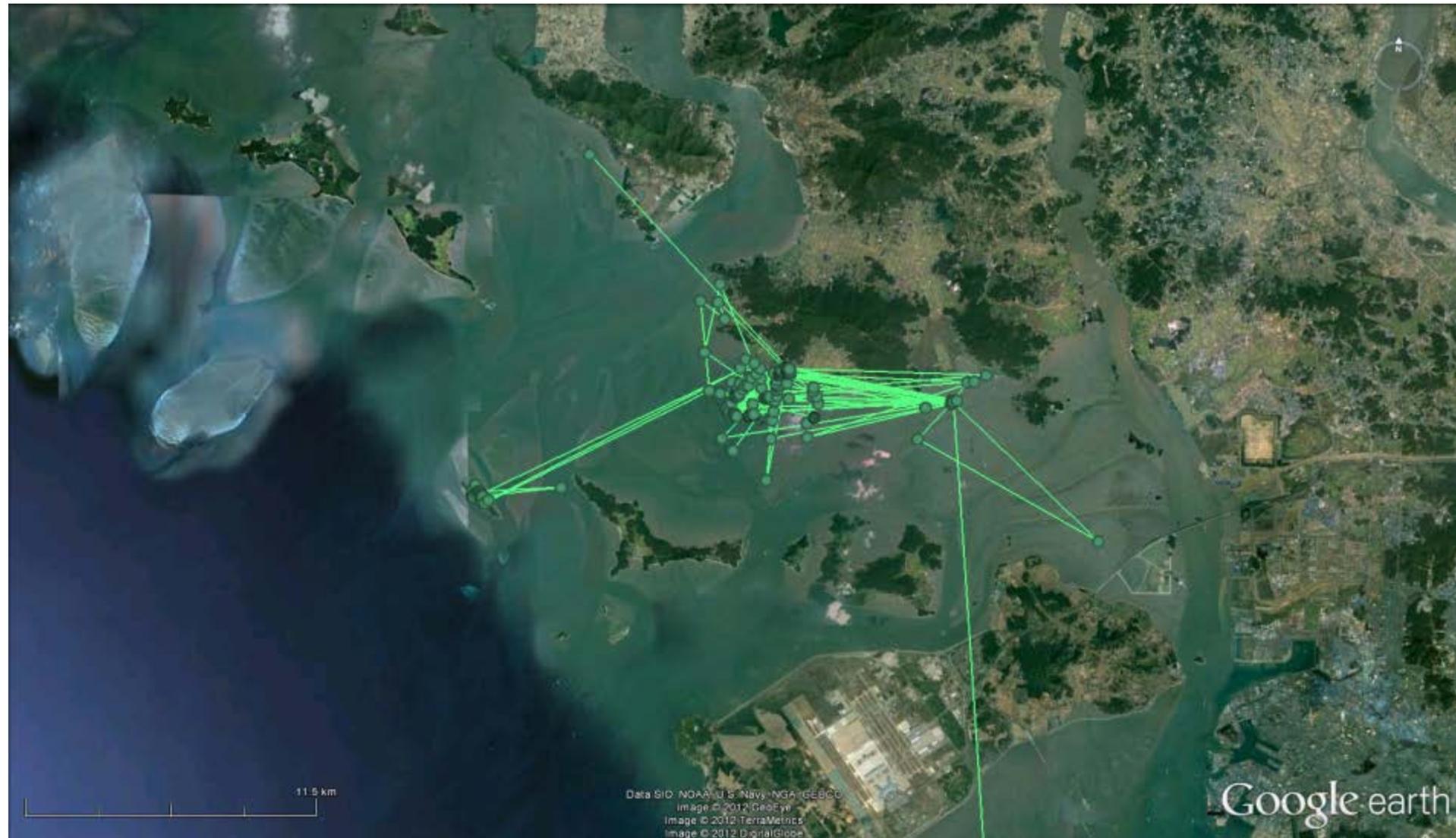


Photo after banding work at June, 2011

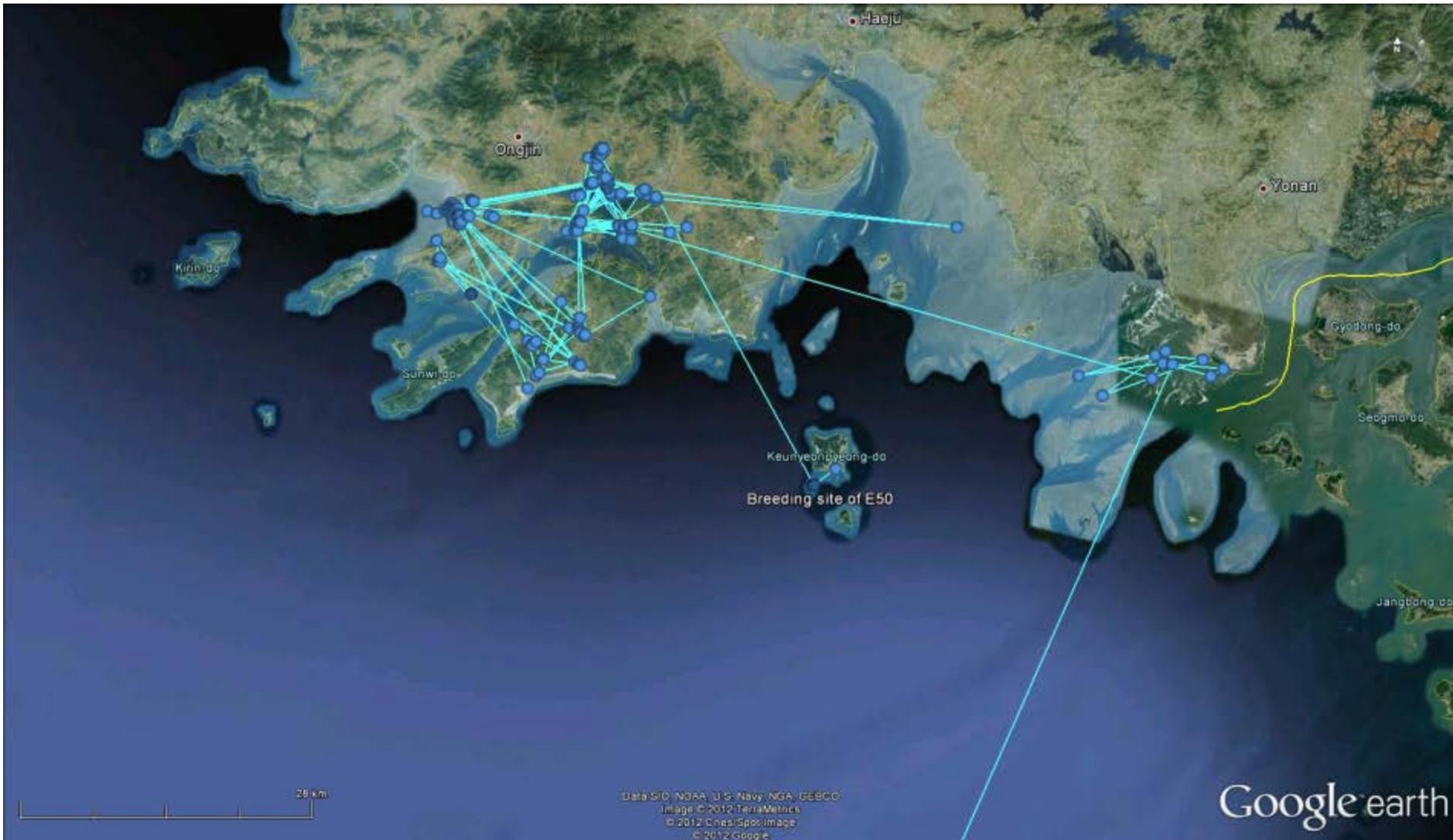
Feeding site on E44 after fledged



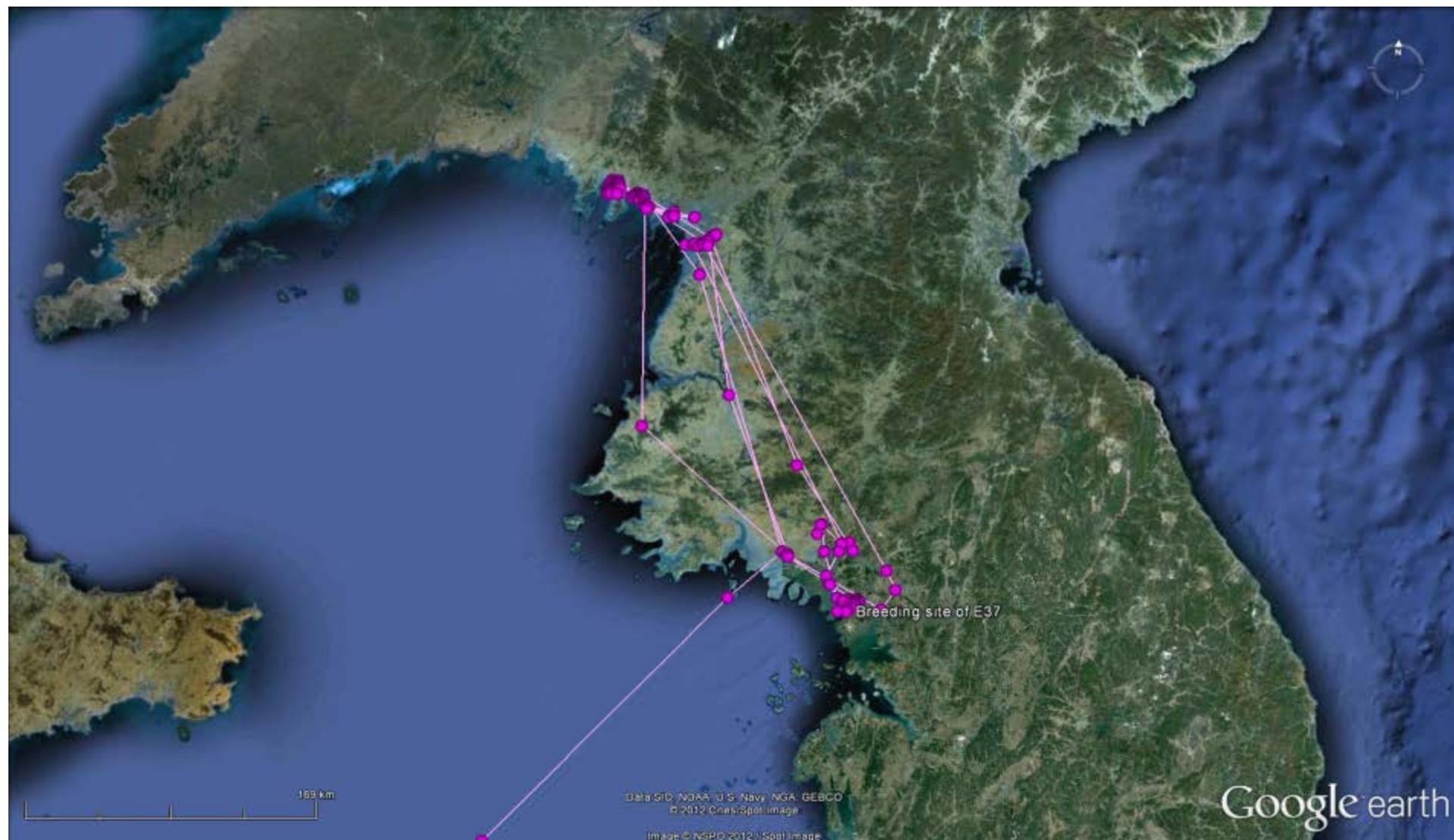
Feeding site on E48 after fledged



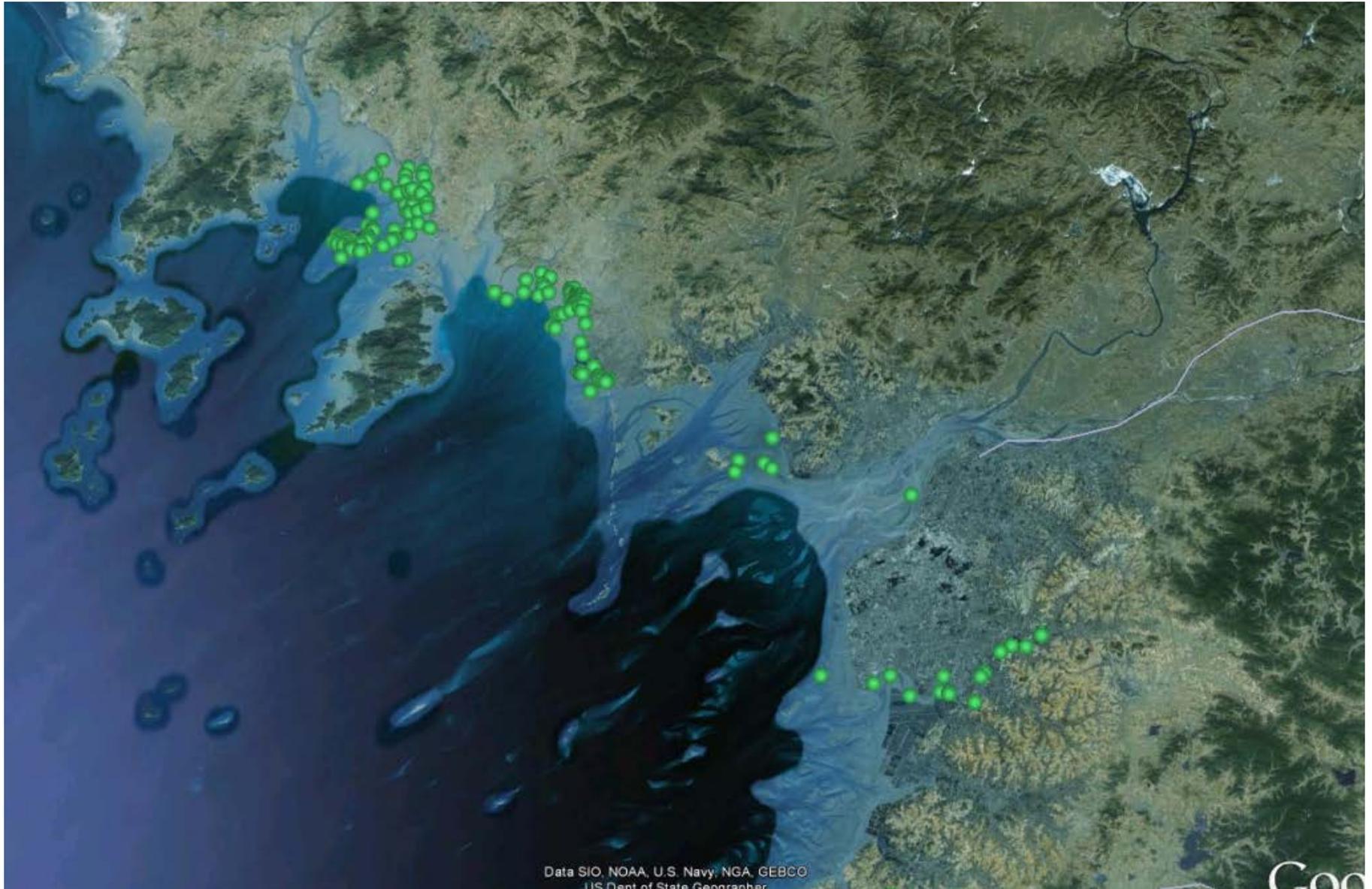
Feeding site on E50 after fledged



Feeding site on E37 after fledged



E37 solar GPS PTT – using coastal mudflat of North Korea



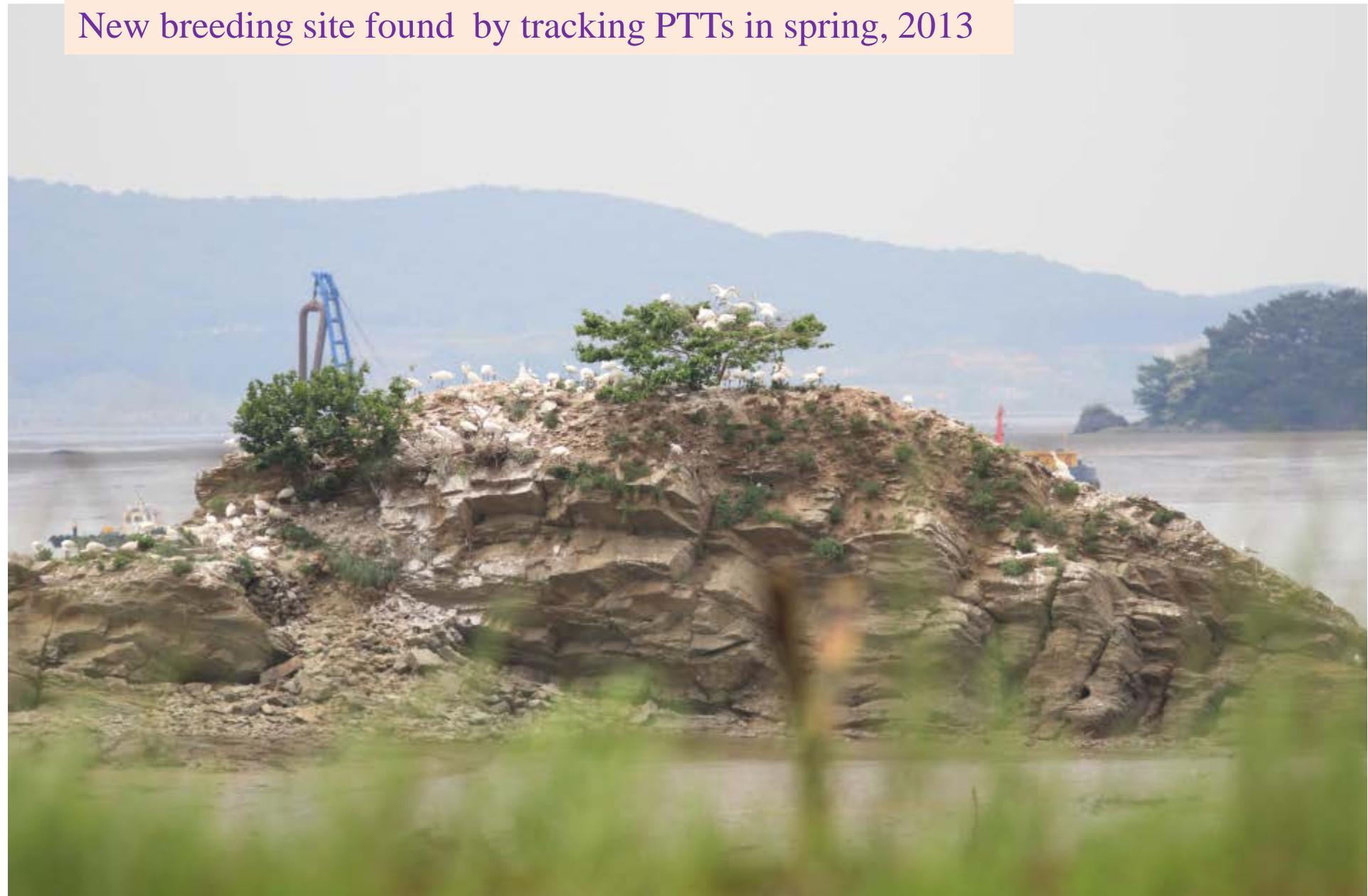
Discussion –China important for BFSpoonbills



Return of E44 at spring 2013



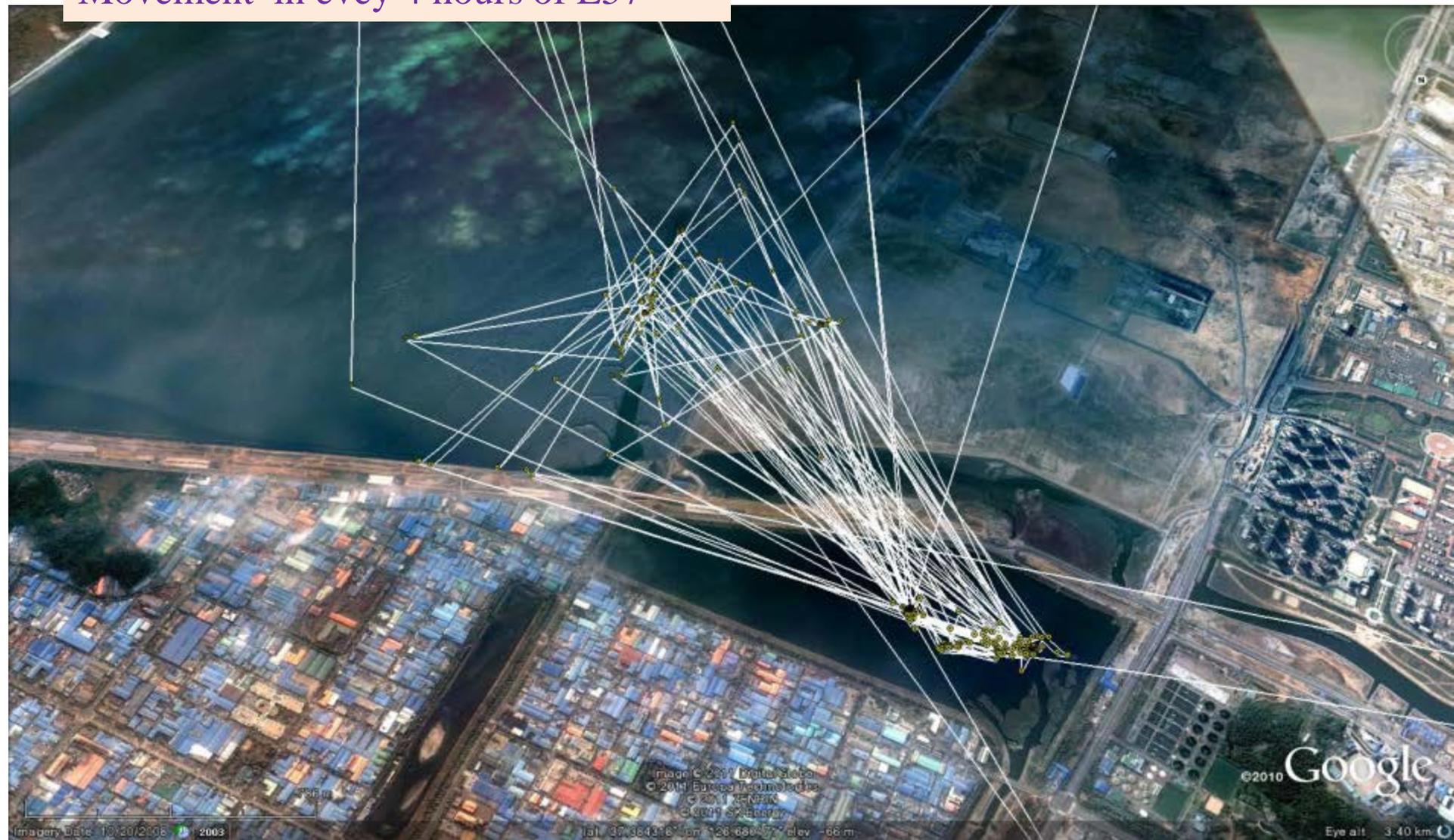
New breeding site found by tracking PTTs in spring, 2013



E57 from Namdongji attached with GSM transmitter



Movement in every 4 hours of E57



Feeding area of E57 enlarged to Sihwa reclaimed area



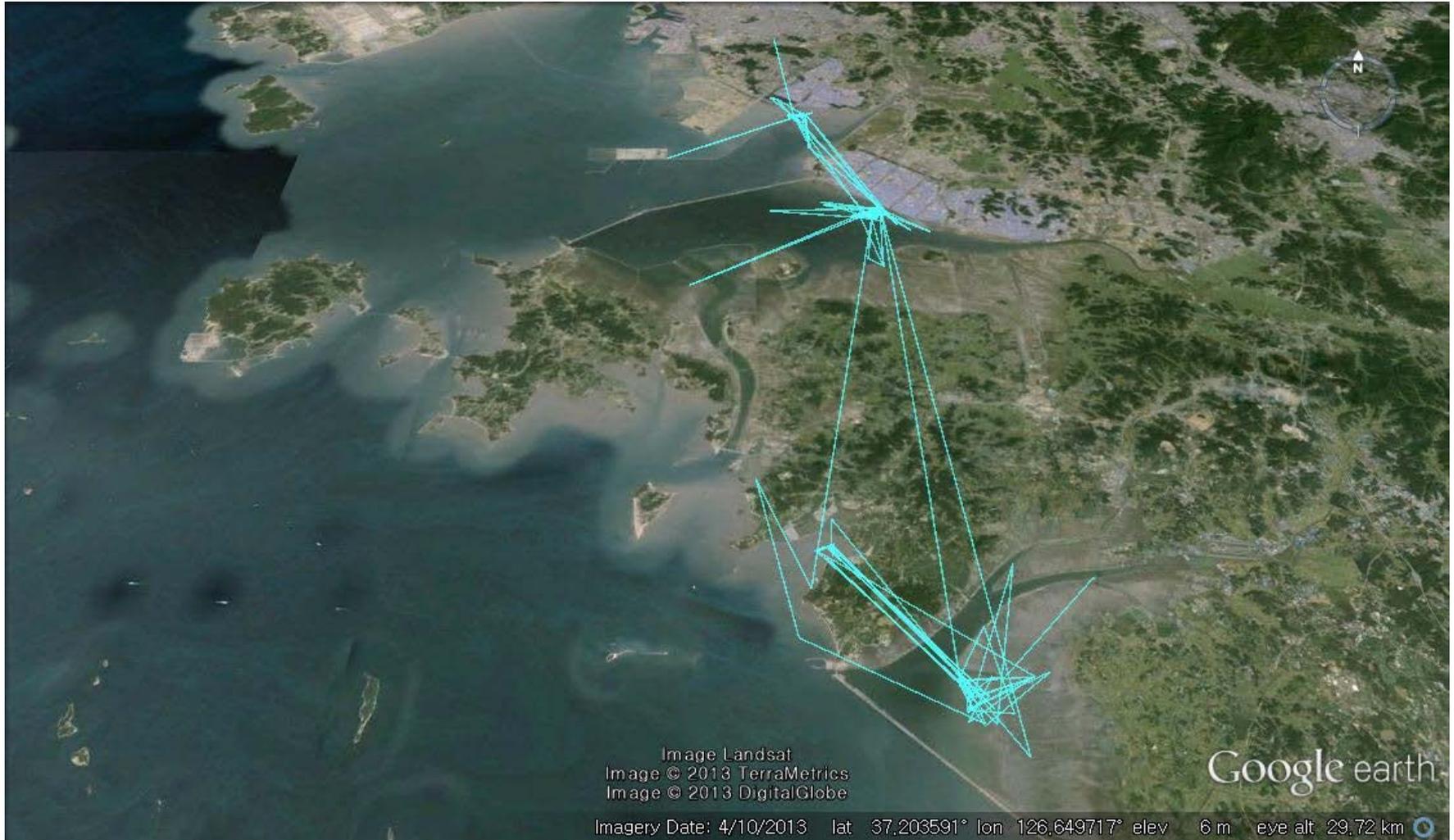
What did we do?

Taiwan also joined on the research, 2012-2013



Photo after banding work at June, 2013

Movement of S36 from Songdo to Sihwa & Hwa-ong Ho reclaimed area



What did we do?

Public awareness about BFSpoonbill!



Photo from Songdo at Sep., 2013

Rescur and Releasing of young E60 recovered from the broken leg



Rescue and Releasing, 2011





What did we do?

meeting together with BFSpoonbill lovers!



Photo from Incheon at Aug., 2010



Photo from Tainan at Apr., 2011



Photo from Fukuoka at Mar., 2010



Photo from Ganghwa after Japan-Korea meeting, at June., 2011



Photo from Gaksiam at June., 2011

Plan for next activity

What do we do in the future?

- Need for more safe breeding **islands**
 - 10,000 birds means 3,000 pairs (we need so many islands)
 - continuing for the rescue project and expanding
- continue for joint research and cooperative study
 - Funding & supporting from EAAFP, and Government
- Activity of CEPA, and meeting
 - Certainly needed for success to save BFSpoonbills
- Many Research needed from young generation
 - Breeding ecology & behaviour, migration, habitat use, feeding place etc.

Thank you very much for your listening !



Photo from Songdo at July, 2013