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## Spring migration of Black-tailed Godwits in Iberia 2015

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# Spring migration of Black-tailed Godwits in Iberia 2015

## Mission Report Sado, Tejo and Extremadura

Funded by University of Groningen and Global Flyway Network



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Groningen, December 2015

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## Summary 2015

### Introduction and aims

In 2004 the University of Groningen has started a long-term demographic project on a partly colour-ringed breeding population of Black-tailed Godwits *Limosa limosa* in SW Friesland, The Netherlands (read more on [http://www.rug.nl/research/gelifes/ceg/\\_piersma/meadow-birds](http://www.rug.nl/research/gelifes/ceg/_piersma/meadow-birds)). Mainly from December onwards, Black-tailed Godwits leave their wintering areas in West-Africa to stopover areas in southern Iberia. Here they are confined to three main areas: Doñana NP and Extremadura in Spain and the rice fields surrounding the Tejo and Sado estuaries near Lisbon in Portugal. Resighting color marked birds during the stopover period is necessary for several reasons. Firstly, if a godwit disperses outside our study area, the chance that it will be resighted elsewhere in The Netherlands is small. Without the resightings in the stopover area, we would assume that this individual is dead and therefore underestimate annual survival. Secondly, with enough resightings in the Iberian Peninsula we can calculate seasonal survival. In other words, we can calculate in which period mortalities occur more often. Thirdly, by measuring the density of individuals with colour marks, we can monitor the population size of the western European part of the Black-tailed Godwit population. Below you will find a summary and detailed day-to-day trip report of our work in Portugal and Extremadura in 2015.

### Overview Sado and Tejo estuaries

In contrast to last years extreme rainfall, weather conditions were good this year with normal temperatures, some showers, nice sunny spells and the occasional foggy day. The hotspot was again the Giganta ricefields near Porto Alto. In early February we counted around 23.000 at the roost which was a bit less than last year. But by mid February numbers had already grown to more than 70.000 with many new arrivals which is quite comparable to last year. But we had the impression that the birds stayed shorter: by the 25<sup>th</sup> numbers had dropped to less than 15.000 which is less than half of the numbers we saw last year. This was confirmed by the arrival of big flocks in The Netherlands in the same period. We might however have underestimated the numbers present. The reason for this is the increasing use of steel cables to block the roads. The cables are put up by individual farmers and so far we have not succeeded in getting a key and permission to go behind them. The reason for these cables is that a lot of birders and tourists visit this (public) area nowadays and they sometimes block the narrow roads, frustrating the farmers that need to go to their parcels.

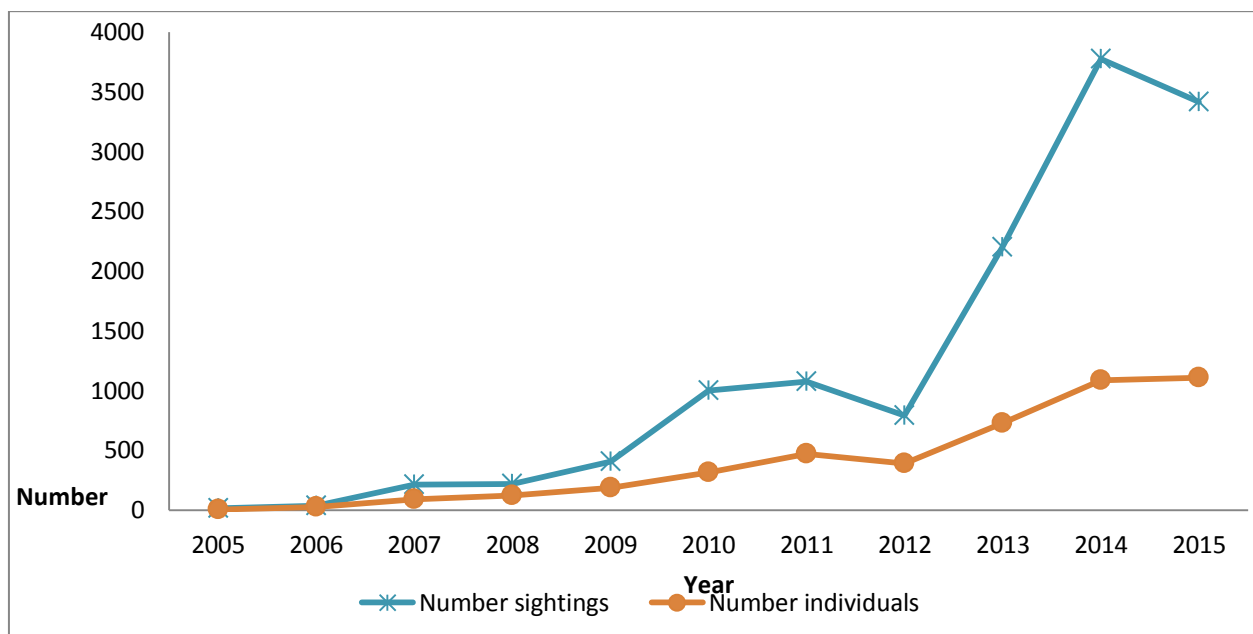
With a maximum of 150 birds in the Sado, this area continues the series of very low presence of godwits. This might have to do with the conditions of the rice parcels: dry and unploughed. This is a big contrast with the just in time ploughed parcels at Giganta with exactly the right water level in an open landscape without much disturbance: ideal from a godwit's point of view.

In total 2424 resightings were made of 800 individuals with a full colour ring combination of the RUG-program.

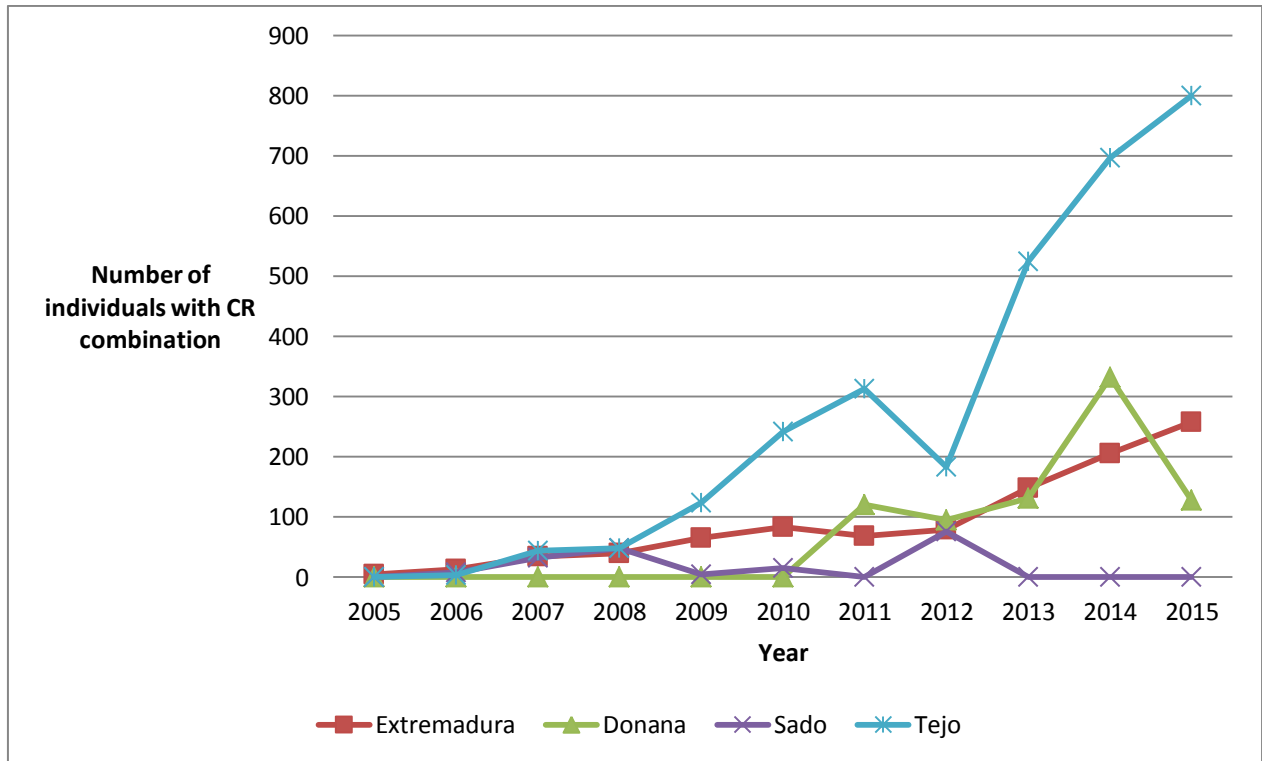
## Overview Extremadura

Like in the Sado, the circumstances for staging godwits were far from ideal in the Extremadura ricefields. Many fields were dry and unploughed and farmers already started to burn the stubble. They seem to do this especially in dry years as an alternative for ploughing in mid winter. Godwits use burned fields to look for rice but these seem to be readily depleted. The focal areas were this year south of Hernan Cortes and near Almoharin, one of the few places with favorable conditions. Roost counts revealed lower numbers than last year with a maximum of 6000 birds in late January (7000 birds in the third week of February in 2014). The roosts were again mainly in the area between Valdehornillos and Vivares but birds switched between sites. This year we continued our satellite tagging program. We had to spend many nights catching our 15 godwits that could be tagged. By mid February we switched to the Tejo area to catch another 15 birds there as well. We were not the only ones that made that switch: some of the birds that were deployed with a transmitter in Extremadura made the same move. This is another indication that Extremadura is losing staging godwits to Portugal in recent years. The regular 10-20.000 birds we encountered 10 years ago seem to have become something of the past. In total 841 resightings were made of 258 individually marked birds with a full colour ring combination from the RUG-program. This is much more than we annually saw before 2013 but this is due to a difference in observation effort.

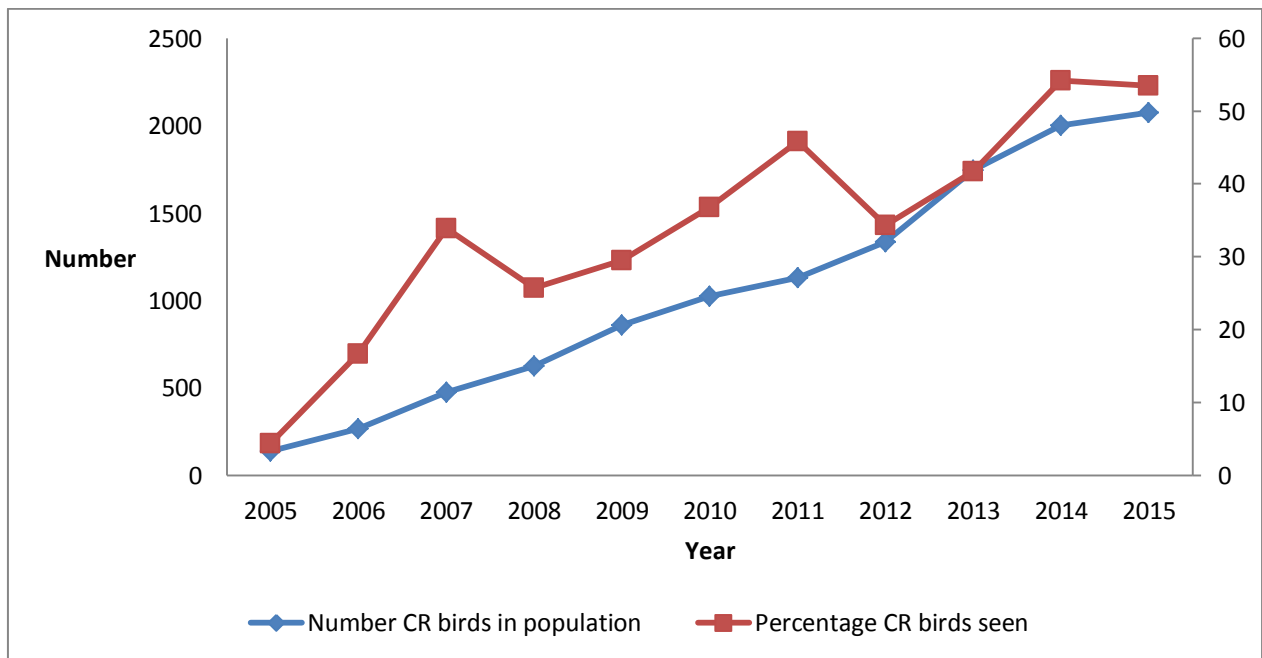
As you can see in the figures below, we were again very successful in resighting a major part of the colourringed population but after an increase year after year, we finally seem to be leveling off at a rate of 50% of all individuals seen, which is off course a tremendous achievement!



*Total number of sightings and observed individuals in Extremadura, Doñana, Sado and Tejo Estuary in January-February of each year (no code flags).*



Number of observed individuals in Extremadura, Doñana, Sado and Tejo Estuary in January-February of each year with a full colour ring combination (no code flags).



Estimated number of colour ringed birds that are still alive and the percentage observed in Extremadura, Doñana, Sado and Tejo Estuary all together in January-February of each year (no code flags).

## **Acknowledgements**

These colour ring reading trips would not be possible without the help of all co-authors that spent their free time scanning godwit legs: many thanks for that!

Thanks to Jose Masero (University of Extremadura) for organizing the apartment in Santa Amalia again!

Thanks to Rui Alves and Livia Ala of the Companhia das Lezirias that we could use the field station; it was very convenient and we hope to come back in 2016!

This mission was funded by the Global Flyway Network in cooperation with University of Groningen, The Netherlands.

Portugal Team 1: Gjerryt K. Hoekstra and Ysbrand K. Galama 2-9 February 2015

2 February: Traveling day!

2 feb 2015 - Traveling day.

at four a clock in the morning my companion Gjerryt and me Ysbrand left the finnish city of warkila.

We took a drive with gjerryts father, who has to be early in amsterdam because of his work.

Only at 11 we could enter our airplane towards Madrid.

We arrived there at 2 and the idea was, rent a car and go go to portugal quickly.

However we had to wait, the renting company's Siesta was until four. And it was about 5 before we could finally put the pedal to the metal.

We arrived late in Portugal, around ten o'clock, with some telephonical advise of Trave we found our remote place to stay, what shall we say, it wasn't the Hilton but we managed.



Gjerryt



Ysbrand

3 February: First sight of godwits

3 Feb - first sight of a godwit

We woke up with the "lets go check rings" feeling, it would last til 11 in the morning, that was when we saw our first godwit in gigant, it practically flew in our car. And we saw it landing in a flock.

By then we had checked most of gigant.

We found a group of 1000 birds on a ploughed field. And did some ring reading. The birds went of and so did we. We checked some Spoonbills and Ruffs and wrote some rings down. In the afternoon we wanted to check back in Giganta... but it happened that the

Farmer closed the entrance pad with a steel cable.  
In fact we'd barely could escape gigante. We had seen  
those cables and crossed a few, we have to watch out  
in the coming day's. This new system of showing  
property is going to make it challenging reading rings.  
we have to find other path or do walking a lot.  
(In the evening, we found a roost of 5000 birds (Godwits)  
also hard to approach because of steel wire and thousands  
of Ducks, easy at their wings by human approach.  
Well lets say we are going to try to read more  
than the seven rings of godwit we did today.



The Basecamp with the fieldcar



#### 4 February: Filmcrew fuss

4 Feb.

Today we went early to the gigantic rice fields to make an acquaintance with the Dutch film crew from the program "Early Birds". A whole delegation of ~~about~~ 8 people were waiting for us eager to see the world famous flocks of Godwits in Giga.

We started off with the film crew encircling some reeds because there were no Godwits around.

We explained our work and gave the film crew some background on the where's and why's.

We saw a "Raposa" (Fox) running next to the can which was a spectacular sight to behold!!

And then the magical moment was there "

We found a huge flock of approx 22000 Godwits

We were euphorical and ~~at~~ the film crew.

Could make some great shots with the camera's.

After this lucky spell we went straight down to business and started ring reading.

The reading was not easy because the water was knee high. but we managed to read about 60 combs.



Filming birds is not always an easy job

## 5 February: Let's make numbers

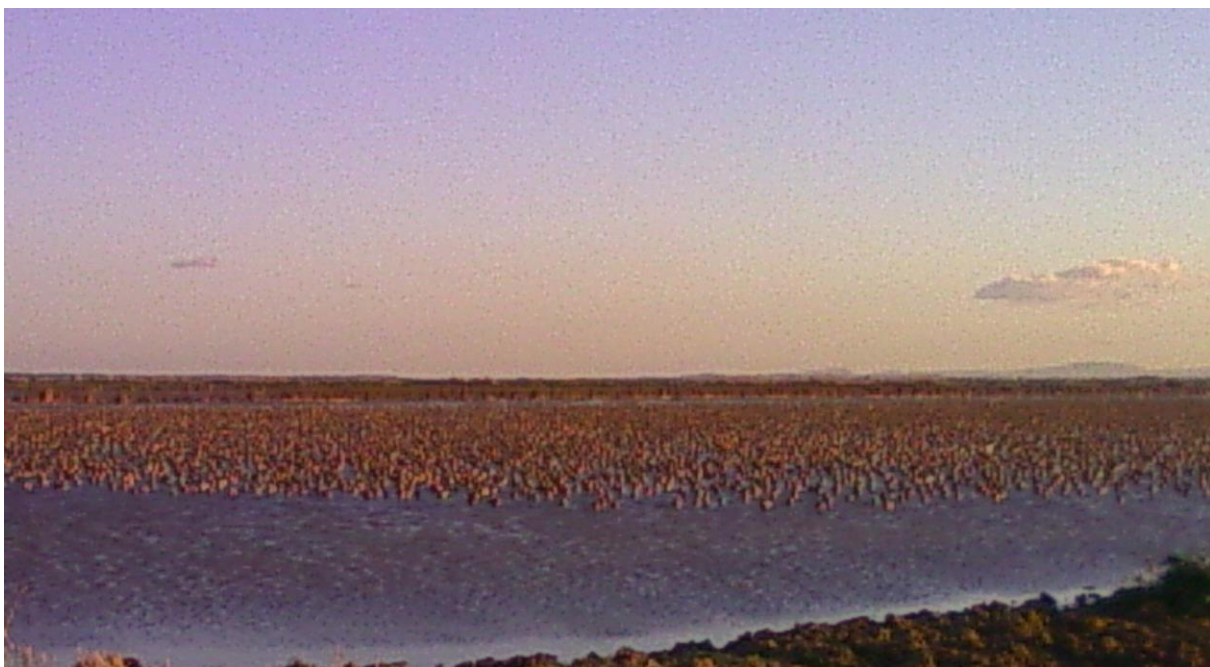
5 February

after the big group that we found yesterday of course we were impatient to go to the ricefields. The weather was good and the godwits present when we were back in Giganta, just on the spot where we left them the day before. But they were in the back of the field in a dense flock. So we tried and plucked some ring out of the group.

Gjerrigt came up with the idea of driving on the ditch side on the back of the meadow, it was a tiny road with high grasses and herbs, but hey we managed and came out perfectly with better sight and light, only the cold wind blowing in the car, straight on our faces. But in life you never can have it all.

It was a beneficial day with over 100 ring readings from "our scheme" and lots of other schemes, also some spoonbills again!

In the evening we roost counted 21.500 birds and feathered on 1500 birds.




Massive numbers of godwits on the ricefields in Giganta.

6 February: Rabbits, Ostrich's and Godwits

6 Februari

4 o'clock "knock knock" our 3 house mates for this week, Eliza, Melissa and Arca waked us up. We promised to join the Rabbit count. A project they are running in this area. You have to stand on a back of a truck and count rabbit on a certain track. It was not really warm, but it was great fun. We counted 3 Rabbits with 5 persons. it was not a good track a night before we saw almost hundred.

At 9 we where ready and on the move to check the South Sado side. Near Lambujal we found 88 godwits exactly they counted precisely, for the rest we found nothing godwits. <sup>godwits</sup> looking there. We saw lots of passeros, or Passerinhos we don't know how to say it. We mean passerines the Big yellow walktail, we found the nicest. Also there where "ostriches", ostrich? →  "Sluge bird!"  
Avestruz

In the rest of the Sado was nothing, so after lunch in our daily lunchroom/bakery (they know us there already!) We where back at the gigantea ricefield. Sara L. Pardal was joining us. She is a Portugese working on godwits, also she ringed in the netherlands.

It was raining and the group moved, to kilometer, but we saw them quite soon. we saw it ~~in~~ more birds as the day before, we did colouring reading and roost counting in the dry moments. We estimated/counted precisely as possible 32.000, and read 44 of our combs, an also some from other she mes. We closed the day in our bar, with Sara and the Rabbit-girls. it was a nice day. ~The End~

## 7 February: More legs, more combinations

7 Februari

In the morning we woke up and said farewell to our 3 housemates, after a week of Rabbit counting they had to leave to do some well earned resting and lab work. After a goodbye of tears we went straight to the ricefields of Giganta and went back for the big flock of yesterday. The weather was cold and in the morning the temp was sub zero. We found the flock and started reading.

Especially during the late afternoon and the evening we managed to read 109 different RUG Combo's. Today we also saw an Hopo, a *atena Natica* and a *Guhu Guha*. That was ~~so~~ so intriguing that we got stuck with the 4x4 in a puddle of mud. But with some ~~we~~ plants and reeds under the tires we freed ourselves. ~~On~~ We waited for the sun to set and went back to an empty field station searching our souls a bit because the female company was gone.

8 February: Sunny Sunday pays off good

8 February 2015

Sunday morning we went to check the flock of course not much else to do on the ricefields. So we watched a bit and read rings. At ~~the~~ Eleven the birds were sleeping and we went to check the fields near Benavente and the North Side of Samora-Correia and Porto-Alto. We saw an Otter and a lot of blue magpies in a thicket but no godwits, still it was a nice change of looking at birdlegs. After lunch "Some place", we went back to the godwits, and did a good reading hour, then Jose Alves, "a local godwit researcher" came by with some friends it was great fun. We did some estimations and separately we thought there should be at least 30,000 birds, it's hard. In the evening light it was great reading and we ended up a 147 rings. Not bad for a sunny Sunday!



Sunday in the ricefields.

9 February: Lest best

9 February

The last full day since tomorrow we already have to pick up the follow up from the airport. We did a good morning session on the group, it was cold, windy a bit but also the sun came there in the morning we read about 50 combos from our own scheme, then we went to town to eat, and we layd on hawior sow on the side of the ricefields taking a tan, and philoosofing about stuffs you know! The geelwit were chased out of resting modes by again a march hawior and the spread out over 5 tanks, good opportunity to read some rings. So we jumped in the whit monster truck and start reading, almost till sunset, the big light went out quick today but we did a masterscore! Read over 200 rings from our own scene and 60 over other scenes divided. So it was a super day for reading. And we saw again an other, still worth writing down.



Yeah thats the spirit! And it explains people what we are doing!

## Portugal Team 2: Haije Valkema, Egbert van der Velde and Sytse Terpstra 10-19 February 2015

### 10 February

**Weather:** 3°C – 8 °C, wind 3 bf, rainy.

**Location:** Giganta Ricefields, Porto Alto (s-w corner, 1 km south of church)

**Number of Godwits:** 40.000 (± 4000)

We arrived at Lisbon airport around 14h as planned where Gjerryt and Ysbrand already waited for us. The weather was worse than expected with 8°C and quite some rain so we first went to the field station to drop off our luggage followed by a good meal in Samora Correia. Afterwards we went to the Giganta Ricefields to check out 3 large flocks of godwits. Because of the bad light and rain we could only read a few ring combinations and decided to count the flocks individually to get a good estimate of the total amount of godwits present. Our counts didn't differ much from each other and we agreed at 40.000 (± 4000). Because it was Ysbrands 30<sup>th</sup> anniversary we had some birthday cake and a couple of beers together with two students from Lisbon University who also stayed at the field station.

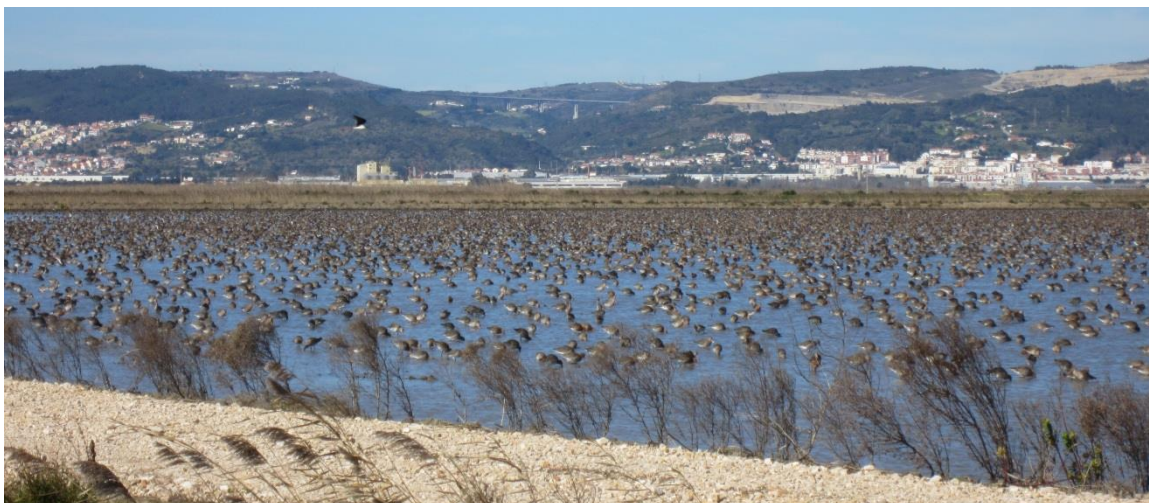
### 11 February

**Weather:** 3°C – 11 °C, wind 2 bf, sunny.

**Location:** Giganta Ricefields, Porto Alto (s-w corner, 1 km south of church)

**Number of Godwits:** 40.000 - 45.000

The weather was much better fortunately, but the godwits didn't forage much in the morning. Around 10h we left to drop off Ysbrand and Gjerryt at the airport and wished them a safe flight back. We decided to keep Ysbrands artwork on the back of our rental car alive with some small additions. At 14h we returned at the Giganta ricefields after a meal. Between 16:00-18:00 the godwits became active again and we were able to score a good amount of color combinations. The groups were divided over the same fields as yesterday with water levels off 1-10 cm, perfect for ring reading.



## 12 February

**Weather:** 3°C – 14 °C, wind 2 bf , sunny and a bit of rain around sunset.

**Location:** Giganta Ricefields, Porto Alto (s-w corner, 1 km south of church)

**Number of Godwits:** 40.000 - 45.000

Godwits foraged mostly between 11:30-13:30 and 16:00-18:00. Several hundred kept foraging on the corners of the large groups during the other moments of the day. Groups were divided in 5 pounds with water levels up to 10 cm. We took several ring samples and went for a good lunch in Samora Correia when the birds returned to rest. There was more bird of prey activity then yesterday so the flocks moved around a bit more. At the end of the afternoon we lost half of the amount of godwits after some disturbance.

## 13 February

**Weather:** 5°C – 15 °C, wind 1 bf, dense fog followed by sun.

**Location:** Giganta Ricefields, Porto Alto (s-w corner, 1 km south of church)

**Number of Godwits:** 40.000 - 45.000

We started the day with a very foggy morning. At the Giganta Ricefields we ran into José Alves and Afonso Rocha. They already contacted us yesterday evening asking to join them in their catching this weekend. The Godwits were still in the same fields as yesterday, but numbers were unclear because of the dense fog. We picked up Sytse Terpstra at the airport around 14:30h after doing some groceries because we couldn't read rings anyway. Around 16h we were back at the godwits and the fog had cleared up making it able to catch up for the loss of the morning. Because only two of us were able to read rings while in the car we decided it would be most efficient if Sytse did the driving and took notes. This appeared to work very well. In the evening we had dinner with Sara Pardal, José, Afonso and our colleagues Nathan, Mo, and Alice in Alcochete. Afterwards we had a couple of hours of sleep while the others put up the mist nets at the Giganta Ricefields.

## 14 February

**Weather:** 4°C – 10 °C, wind 5 bf, cloudy followed by rain.

**Location:** Giganta Ricefields, Porto Alto (s-w and n-e corner)

**Number of Godwits:** 50.000 - ?? .000



Around 3h we arrived at the Gigantas again and guided some acquaintances of Afonso and José to the catching spot where the others were already half asleep. Unfortunately only two godwits were caught of whom one was fit to be equipped with a transmitter. The reflection of the water in combination with the light disturbance from Lisbon and Villa Franca probably made the mist nets too visible. At dawn we went back to the field station for breakfast and coffee while the others removed the mist nets.



Afterwards Haije stayed at the field station to finish up the final report for his study. Sytse and Egbert went back to the Godwits around 11h. About 30.000 Godwits were roosting at the fields where the catching took place. We'd already seen quite some Mongooses around the rice fields this year, while we didn't see any at all last year, so we wondered if these large Marten like predators would form a threat to Godwits. This was proven not to be the case as shown in the picture above.

After several ring reading sessions we drove around the Gigantas in search for the missing 15.000. Eventually we found them and probably tens of thousands more on the opposite corner nearest to Porto Alto on some freshly plowed fields with hardly any water on. Because it was already getting dark we were unable to make an estimate on the numbers. The roads through these fields were closed down by steel cables with locks making it unable to drive towards the flocks.



This group could've been present for several days already without us noticing. We decided to try to get access on Monday when the rice company office opens again. At 16h we got back at the s-w hotspots and read rings until 18:10h when it started raining. The flock had become pretty active, just like the previous 3 days, so we were able to score quite well.

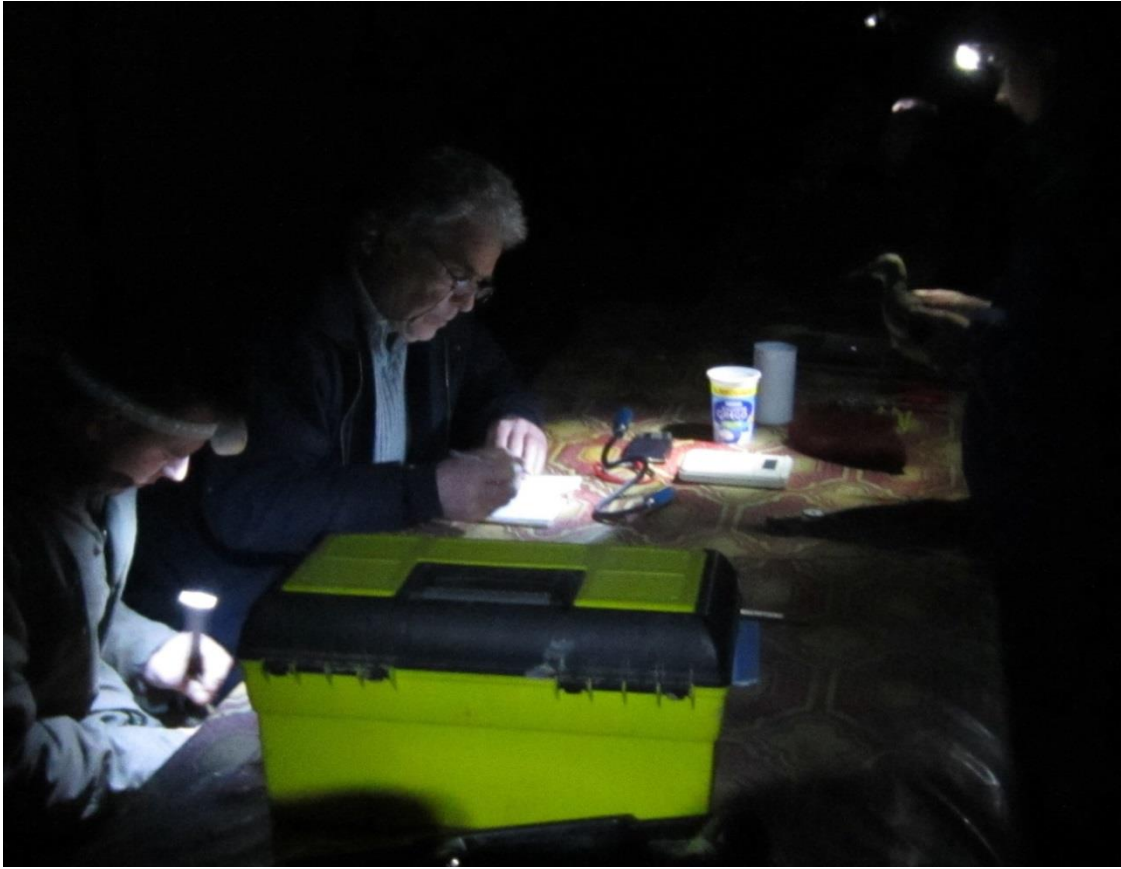
### **15 February**

**Weather:** 4°C – 15 °C, wind 4 bf , cloudy.

**Location:** Giganta Ricefields, Porto Alto (s-w and n-e corner)

**Number of Godwits:** 70.000 - ?? .000

The flock (35.000) in the south west corner of the Giganta Ricefields was still on the same spot and quite active all along daytime making it able to read rings continuously. There also seemed to be an influx of new groups (50-100 individuals) dropping in frequently from great height with high speed. We also had the idea we read quite some new color combinations. Around 15h we went to the n-e corner to check out the other group. There appeared to be at least 35.000 more godwits, making a total of at least 70.000 Godwits present (including Islandicas). We went for a meal in Samora Correia at the end of the afternoon. Afterwards we joined the transmitter team (same people as before) to help putting up the mist nets in the area of the new group and process the birds caught (Godwit, Ruff and Black-backed Gull) which started right after sunset. Around 3:30h in the morning we decided to go get some sleep so we would still be able to read rings in the afternoon. At that time enough "transmitter fit" Godwits were caught and our help wasn't needed anymore anyway.



## 16 February

**Weather:** 4°C – 15 °C, wind 4 bf , cloudy.

**Location:** Giganta Ricefields, Porto Alto (s-w and n-e corner)

**Number of Godwits:** 70.000 - ?? .000

We started the day slowly around 12:00h. Before going to the godwits we visited the rice company office to try and get a key for the steel cable locks on the Cara Largo roads, but an employee told us that only the private owner had it, so we contacted José who was willing to try to arrange access for us. Luckily the group (40.000) in the s-w corner was still present and appeared to be pretty active after a full night of disturbance. Ring density was very high in the foraging parts of the flocks and again we had the idea we had quite some “new” birds. Because everybody we told about the 70.000 Godwits on the Gigantas (also Feb. 2014) seemed to have the feeling we overestimated our counts we decided to make overview pictures of the flock which was divided over 3 filled up rice fields at a certain point. Unfortunately counting heads on these pictures appeared to be impossible as well because of the densities of the groups. Halfway the afternoon we noticed a huge flock in the n-w corner as well, but we couldn’t find it when we left the Gigantas at sunset.

**17 February**

**Weather:** 4°C – 15 °C, wind 2 bf , sunny.

**Location:** All but Giganta Ricefields

**Number of Godwits:** 150 (Islandica) at Zambujal

Today we went to the Salinas de Samouco to witness the release of the transmitter godwits caught on the Gigantas. We checked out the salt pans first for color banded (Islandic) godwits but only saw small groups (10-30) without any ringed individuals. Afterwards we checked out the process of putting the transmitters on several birds, but we left before they were released because otherwise we would lose a lot of precious time and we planned to check out the Sado area as well today.



At Zambujal we found a flock of exactly 150 godwits in which we found 1 ringed Islandica which took a lot of effort to read because the sun was on the opposite site.



We checked out several other areas further south along the Sado (estuary) as well, but pretty much all areas were dried up and unplowed, just like last year. Therefore we didn't find any other Godwits on our way to the ferry from Tróia back to Setúbal. We concluded that it had been a beautiful, but again useless trip and shouldn't waste precious ring reading time on exploring the Sado area anymore when Godwit numbers on the Giganta Ricefields remain as high in the future. Maybe the newly transmitted Godwits can give us information about which areas we should check out next year(s) instead of checking everywhere.

### **18 February**

**Weather:** 4°C – 14 °C, wind 2 bf , sunny.

**Location:** Giganta Ricefields, Porto Alto (s-w and n-e corner)

**Number of Godwits:** 45.000 - ?? .000

Back at the Gigantas our flock was still on the same spot in the s-w corner, but because the water was being drained while we were reading rings the Godwits gradually left during the afternoon. We found them and several thousands more 1 km north on some fields with 10-25 cm water, making it pretty hard to see the rings. There was one Godwit standing solely about 25 m from the flock which appeared to carry a new transmitter. The bird (L1RLRL) looked a bit uncomfortable, not yet used to its new bag pack. We contacted José to hear if he had been able to arrange a key for the steel cable locks, but he told us the farmer(s) were not very fond of trespassers and it could become problematic to get access at all.



At sunset the flocks swarmed out. We searched the area in the n-e corner for the other large flocks, but could only see several small groups (50-500) foraging inside the area blocked off by the steel cables. A little to the west of the last catching session we found a big flock (3-4 thousand) on an unplowed wet field.

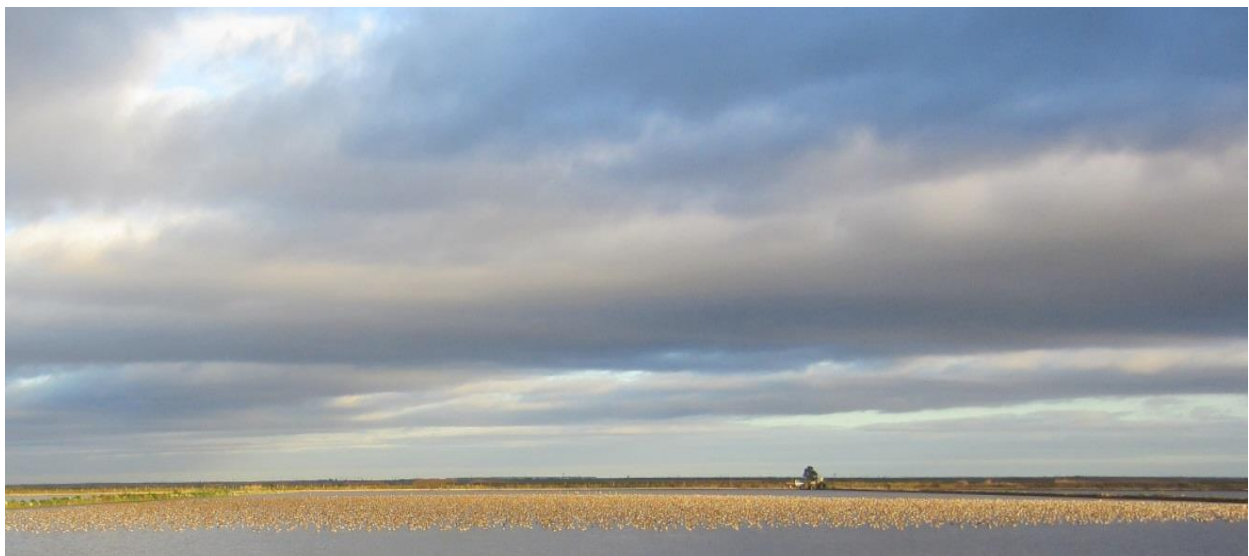
### **19 February**

**Weather:** 4°C – 15 °C, wind 2 bf, sunny.

**Location:** Giganta Ricefields, Porto Alto (s-w and n-e corner)

**Number of Godwits:** 45.000 - ?? .000

After packing our bags, we met nature photographer Jan van der Kam at the gate to the Giganta Ricefields. We showed him the area and guided him to the largest flock we could find ( $\pm 30.000$ ) in the s-w corner near the church.



The Godwits there were mainly resting so we left Jan to do his thing and decided to check out a smaller foraging group ( $\pm 1500$ ) we already noticed on our way to the roost, next to the drained fields the Godwits left from yesterday. Because the group was very actively foraging and the water level was below 10 cm we were able to write down a nice amount of color ringed individuals and make a good sample. After an hour of ring reading we left the Gigantas to catch our flight back to the Netherlands. Haije stayed at the airport to wait for the arrival of Dirk Tanger who's going to assist him in the next ten days.

## Portugal Team 3: Haije Valkema and Dirk Tanger 19-27 February 2015

### 19 February

At 08:30 we met Jan van der Kam (a Dutch nature photographer) at the Giganta rice fields. He drove from Badajoz to make pictures of big godwit flocks. After we showed him the biggest flocks we continue with reading rings. At 10.30 we left to the airport where Sytse and Egbert need to fly back home. Dirk arrived at 14.30 at the airport Lisbon. We (Dirk and Haije) drove immediately to the Giganta Rice fields where we read color rings until sunset. Nice groups of godwits were present and in the end we read a lot of rings. At 20.00 we met the English and Portuguese (Pete Potts and his team / José and his team) for a good meal in Alcochete.



Overview of rice fields in the Tejo delta (Giganta rice fields). Wet and ploughed fields, suitable for godwits to forage.

## 20 February

We started in the morning to read rings at the same location as yesterday (Giganta Ricefields). In the afternoon we drove around to locate and count godwits. We counted at least 35.000 godwits but we had the impression that we missed some groups. Due to the steel cables that block the roads partly in this area, it was hard to cover the whole area. A bonus was a group of 150 Spoonbills where we read 13 combinations. In the end of the afternoon we checked ricefields near Porto Alto, Samora Coreia and Benevente. Unfortunately we saw no godwits here. Our last chance was at the Ze do Pinho gate (in the opposite of Giganta Rice Fields). We discover here a flock of 5800 godwits and read ring combinations until sunset. Afterwards we drove to Palmela to meet the group of 'King of the meadows'. Theunis Piersma and Sytze Pruiksmas had a performance here.

## 21 February

At Ze Do Pinho we start to read colourrings in a group of 5000 godwits. After an hour they flew away in the direction of Samora Coreia. We could not locate where they land in and we decided to continue at the Giganta Ricefields. Here we were able to find a group of 9000 godwits that forage great. Under good circumstances we could observe lots of combinations. At 13.15 we left for lunch to Porto Alto. We met the 'King of the Meadow' group in restaurant 'A Torre'. The rest of the afternoon we spend with them in the field and showed Godwits. At the end of the afternoon we saw most of the godwits in Giganta together and counted 40.000 godwits. The crew from Omrop Fryslân also joined us in the field and they could make fantastic video material for a documentary.



Omrop Fryslân filmed spectacular groups of godwits in the rice fields of the Tejo delta.



## 22 February

After breakfast we start again at the rice fields of Ze Do Pinho. The numbers dropped down here to 2000 and again after a while they flew up and disappeared. So again we moved to the Giganta Ricefields where we conclude that the numbers of godwits dropped. We could find only around 10.000 godwits at the old locations. The last days we saw a couple of transmitter birds that were preening a lot on their back and wings. They behaved as different in comparison with other birds and separate them from the group. We read rings until sunset in the Giganta.

## 23 February

7 o'clock we start to visit the 'Pancas Roost' to count the number of godwits. We were lucky that we could drive by car to the salt pans near the salt marsh. We saw at least a couple of hundred birds leaving this area. Because it was high tide they slept by sunrise on the salt marsh. A nice observation was an Imperial Eagle that passed by. We drove again to Ze do Pinho where we found 1000 godwits on a ploughed field. We read colour rings there and left an hour later to Giganta rice fields. Here we read color rings the rest of the day. The most godwits were behind the 'steel cables' where they foraged in small flocks on quite dry ploughed fields. In total we counted at least 5000 godwits there.



## 24 February

We start the day in the Giganta rice fields. We read color rings at the same spot as the 23-02 (behind the steel cables). In the afternoon we met Afonso Rocha and José Masero and went with them to the rice fields next to Samora Coreia. We had the impression that big flocks could be around there since we lost big numbers in the Giganta ricefields. We found only dry fields without godwits. We went back to the

Giganta rice fields and counted by sunset 7600 godwits. We think big numbers left Portugal. Numbers of godwits seen in Holland increase rapidly the last days (waarneming.nl).

### **25 February**

In the early morning 1000 godwits were present in Ze do Pinho. Afterwards we counted 10.000 birds at the Giganta ricefields on their roost. At the entrance of the Giganta gate a farmer start to plough his fields and after a while the first godwits came to forage there. In the afternoon the numbers kept increasing up to 6000 birds. We read a lot of rings and call it the day.

### **26 February**

We start to count the roosting place in the Giganta in the early morning, in total 12.600 birds were there. At 10.00 half of the group flew away to forage (probably on the same fields as yesterday; in the front of the Giganta gate). We drove to the same place where we read colour rings. After this we went to the first rice tanks behind the steel cables. Godwits forage here now for atleast a week in very low densities. They look like they forage on their own, wide spread. The fields are quite dry, but some wet places left. In total 3000 birds forage here, almost only males (Ratio male – female was almost 100-0).

### **27 February**

Day of traveling, we drove to Madrid and bring the car back. During this trip we passed by Hernan Cortes and saw 900 godwits foraging but we could not stop. After a good flight we landed in Amsterdam.



## **Extremadura Team 4: Nathan Senner, Mo Verhoeven, Jelle Loonstra, Alice McBride**

### **27 January – 20 February**

#### **27 January**

We arrived in Madrid in the afternoon, picked up our rental car, and headed to Santa Amalia. After some delay - involving a heavily smoking engine, a tow truck, a taxi, and a new rental car – we arrived in Santa Amalia and were met by José Masero.

#### **28 January**

This morning we found 1200 godwits – and resighted 35 color combinations - in the area south of Hernán Cortes. In the afternoon, we saw 2700 birds in Almoharín, and resighted 52 combinations. In the late afternoon, we looked for the roost – we saw roughly 5000 birds flying in to the roost sites, which were between Valdehornillos and Vivares, south of road that runs between the two towns.

#### **29 January**

Today we looked for godwits in Yelbes, but found only 12 godwits (one of which was color-banded). We then found 3500 birds south Hernán Cortes, and resighted 88. In the evening, we made our first catching attempt. We were joined by José, Manolo, and Lei-Ming, and caught 12 godwits and at least that many ruff. Partway through the evening we were joined by Melgert, who arrived to take photos for Vroege Vogels TV. José took the four female godwits back to the aviaries in Badajoz.

#### **30 January**

Today we drove to Badajoz to outfit satellite transmitters on our newly caught females. Two birds handled it well. The third bird did not, so we removed the transmitter. We did not attempt to attach a transmitter to the fourth bird, because she had myopathy.

#### **31 January**

South of Hernán Cortes, we found 5400 godwits and resighted 136 combos. In the early afternoon, José and Lei-Ming arrived with three godwits – the two with transmitters, and the one whose transmitter we had removed. We released the new transmitter godwits “Herguijuela” and “Vivares,” and tried once more to attach a transmitter to the third bird. Once again, she did not handle it well, so we removed it

for good and José took her back to recuperate in the aviaries in Badajoz. In the afternoon we went to our look-out point to find the roost. This time, it was north of the road between Valdehornillos and Vivares, and included about 6000 birds.

### **1 February**

This morning we found 840 birds south of Hernán Cortes, and resighted 53. In the afternoon, we took a couple of hours off and went to the dam at Alange to stretch our legs in the sun and see some birds other than godwits. In the afternoon we met José for our second catching attempt – it was largely unsuccessful, however, and we caught only one godwit. We also caught three dunlin, which José took back to Badajoz. We closed the nets relatively early due to the brightness of the moon and excessive wind. At that point, we contacted the Vroege Vogels TV crew to let them know they could slow down in their trip from the Lisbon airport, since there would not be anything for them to film tonight.

### **2 February**

We spent most of the morning with the TV crew, resighting a little but mostly showing them some of the sites with birds. We then parted ways for several hours in the middle of the day. In total, we found 2600 birds today – resighting 92 – south of Hernán Cortes. In the afternoon we met up again with the TV crew. They continued to hope that we might be able to catch tonight, but we informed them again that it was much too windy and well-lit. Instead, we staged what we could of a catch – everyone donned waders, and Menno helped us to set up a net. Fortunately nobody dropped any expensive camera equipment in the mud of the rice field. Later on, after dark, we all trooped out in the moonlight to pretend to extract birds from the net. We capped the day off by having dinner together at a small restaurant on the main square of Santa Amalia.

### **3 February**

The TV crew took some more footage in the morning, of data entry and driving along the roads of the rice fields. Then we parted ways – we headed out to do some resightings, taking Rob Buiters along with us. There was a small flock south of Hernán Cortes, and we resighted 1 bird. We then spent several hours in Almoharín, where we resighted 81 birds among a group of 3500. In the waning hours of the afternoon we returned to the Hernan Cortes area and helped to ferry the TV crew to some areas that they could not access with their vehicle.

#### **4 February**

Finally free of the TV crew, we toured all of the main godwit sites. At Almoharín we encountered the same group as yesterday — around 3500 birds — and were able to find 73 different colour-ringed individuals. Hernan Cortes had fewer birds — only 310 — and we only found 14 colour-ringed birds amongst them.

#### **5 February**

A cold morning! There had been a freeze over and many rice fields were covered with a thin layer of ice. We again toured all of the known godwit sites. We started out in Vivares, which, for the first this year, had birds — 428 individuals of which 7 were colour-ringed. These birds were slipping and sliding on the ice and appeared not to be enjoying their lack of coordination in such conditions! After Vivares, we went on to Almoharin, where we found a slightly reduced flock from the past few days. We found about 1500 birds, which yielded 27 colour-ring combos, including 2 RUG code flags. From there we went on to the area south of Hernan Cortes, where we ran into a group of ~2000 birds, of which only 30 had colour combos.

#### **6 February**

We spent the day in Badajoz meeting with Jose Alves and Jose Masero and planning out our trip to Portugal. (That is, if we ever catch all the birds that we need in Spain!) We also observed Jose and Jose's captive godwit flock, which they have been using to explore the effects of a rice-heavy diet on migratory preparations.

#### **7 February**

Today we concentrated our efforts on the area between Hernan Cortes and Medellín. We first found a group of ~3000 birds southwest of Hernan Cortes and were able to spend an hour and half ring reading (45 combos) before they took off and flew southwest. We followed them and found them making use of a new area between Santa Amalia and Medellín. Here we were able to resight for another hour and a half accumulate 92 more combos. Then the birds moved slightly north, toward Santa Amalia, where we found we found them again and garnered another 22 combos.

#### **8 February**

Today we took off and headed up northwest of Cáceres to help Pipe try to capture and attach satellite transmitters to Egyptian Vultures. We had no luck, but it was a pleasant day anyway.

## **9 February**

Today we just concentrated on the area around Hernan Cortes and our efforts paid off. We found nearly all of the godwits presumed to be in the area in one (more or less) large flock of 4800 birds. In total we were able to read 101 combos. In general, this year is very dry and so many of the birds are concentrated into the small area immediately surrounding Hernan Cortes, especially to the southeast of the village. Basically none of the areas to the north of town, or the ones near Valdehornillos or Yelbes, that held birds last year have water this year. Many of the rice fields that would normally be flooded are instead on fire this year. And, although we have not seen godwits feeding in these fields as has been observed in the past, it is not hard to imagine that happening before too long.

## **10 February**

We did not spend much time resighting today as we instead prepped for our catch in the evening. We did get out for a short while to the south of Hernan Cortes where we found a small group of ~290 birds containing 11 color-ring combos. Our preparation for the catch paid off, though, and we were able to capture 51 godwits, including 19 females. With that effort, we completed our catching mission in Spain for 2015 and got all of the females necessary for attachment of our 15 satellite transmitters!

## **11 February**

Today we were in Badajoz outfitting the females captured last night with satellite transmitters. It was a very up and down day, with many of the birds not taking well to the transmitters. In the end, we finally found 13 that were able to carry the transmitters, but it was a stressful day. We don't like putting the birds through this process. Hopefully once we move to 5g transmitters it will be different.

## **12 February**

Today we had designs on doing a big push of resightings before our move to Portugal on Friday. Unfortunately car troubles got in our way. After a successful stint just south of Santa Amalia (42 combos among ~3000 birds) first thing in the morning, our car found its way into the ditch, resulting in a ruined tire and a trip the mechanic's shop in Don Benito. Luckily, besides the tire, the damage was miserable, but the day was nonetheless wasted. The only upsides were that we learned the Spanish word for break guard — chapa — and that we released the rest of the satellite transmitter females. The release went better than expected and all of the birds appeared to be comfortable with the transmitters and to fly away easily. Hopefully they will continue to fly well over the next few years!

### **13 February**

We spent the morning and early afternoon resighting around Hernan Cortes, netting us 65 combos and observations of a number of new satellite transmitter birds. (They all looked good!) In the early afternoon we took off for Alcochete, Portugal where we met up with Jose Alves, Afonso Rocha, and Haije and Egbert for dinner before a long night of catching. The catch was not very successful — only two godwits, one of which was a female. It was really interesting to see the Giganta rice fields for the first time. I am beginning to understand why so many more birds have been using this area the past few years: so much more space (in terms of rice fields), so much less inter-annual variation in water levels, so many fewer disturbances. All in all, it's just a better place. Tonight our problem was that we set our nets up in rice fields where the water level was just a little too high. That really reflected the lights of Lisboa that were still very bright, even from across the Tagus. Thus our nets were very visible and we watched flock after flock fly near the nets, only to avoid them at the last moment. Lesson learned.

### **14 February**

Since the catch lasted until 8 in the morning and then we still had to drive all the way across Lisboa to stay with Sara Pardal, there wasn't much done other than sleep for a bit in the afternoon. 36+ hours without sleep was just a bit too much!

### **15 February**

We returned to Alcochete first thing in the morning to attach the satellite transmitter to the one female that we had captured on Friday night. We released Giganta and she flew well. However, as we learned on Tuesday, that success was short lived, as she was quickly eaten by a predator. Our first casualty so soon after deployment; another lesson learned, although I am not exactly sure what that lesson was.

In the evening we caught again. This time we had a lot of success. Over the course of nearly 10 hours of catching we caught 49 birds and another 19 transmitter-worthy females. It was another exhausting a long night—we finally wrapped everything up in the field at 07:00 and finished spinning down our blood samples by 12:00. We seem to like staying awake for 30+ hour stretches! The difference between this catch and the last really was the amount of water in the fields in which we placed the nets. There was a bit of water in these fields, but not enough to reflect the city lights. Some good cloud cover and a lack of wind also helped. Hooray!

### **16 February**

Not finishing the blood processing until noon, we slept the afternoon away and then had dinner with Sara and Pedro. It was an early night.

### **17 February**

Today was a stressful day, as we attempted to attach the satellite transmitters to the females caught on Sunday night. Many of them did not seem to take the transmitters well and a few that we tried to release refused to fly. In the end, we would up successfully releasing 12 birds; 8 birds, however, had to be taken to Badajoz for further care. And, with the transmitter recovered from Giganta's corpse, that meant that three transmitters are still waiting to be deployed.

### **18 February**

After a long drive back to Santa Amalia, we got a bit of a late start this morning. But we were able to get in some resightings before had to head back to Badajoz to meet up with the Kening fan 'e Greide tour group. Luckily in our few free hours, we found a group of ~3000 birds near Hernan Cortes and read colour combos. Not a bad morning. We spent the afternoon and evening in Badajoz attending to the Portuguese godwits (looking better!) and talking with the Friesians.

### **19 February**

We spent much of the morning cleaning our house before heading out for some resightings in the late morning. Between the morning (79 combos) and afternoon (198) we saw a ton of combos and likely read the vast majority of combos present in Extremadura. Near dusk we met up with the Friesians again and watched the godwits return to the roost site as the sun set. It was a good last day.

### **20 February**

In the morning we cleaned the car and then drove back to Madrid. An uneventful day.