PROYECTO EREMITA

Junta de Andalucía
Consejería de Agricultura,
Ganadería, Pesca y Desarrollo Sostenible

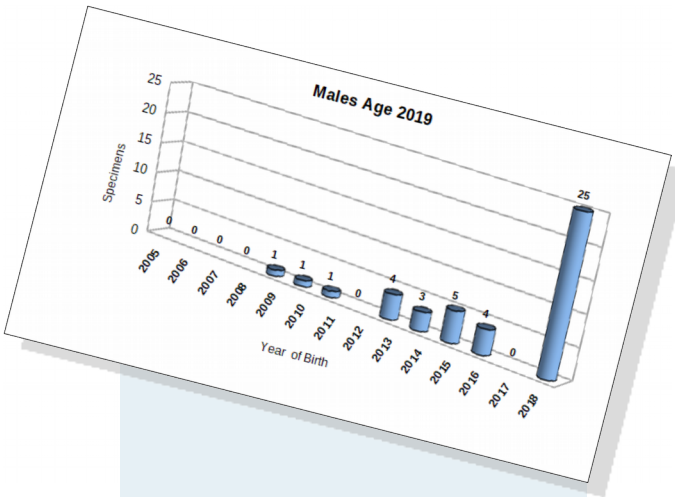
Ayuntamiento de Jerez

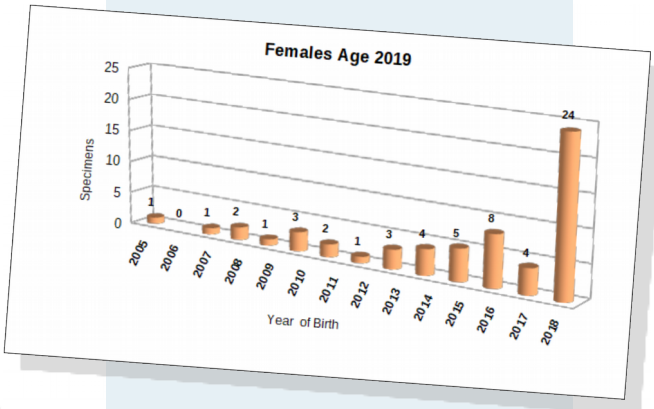
ZOOBOTÁNICO JEREZ

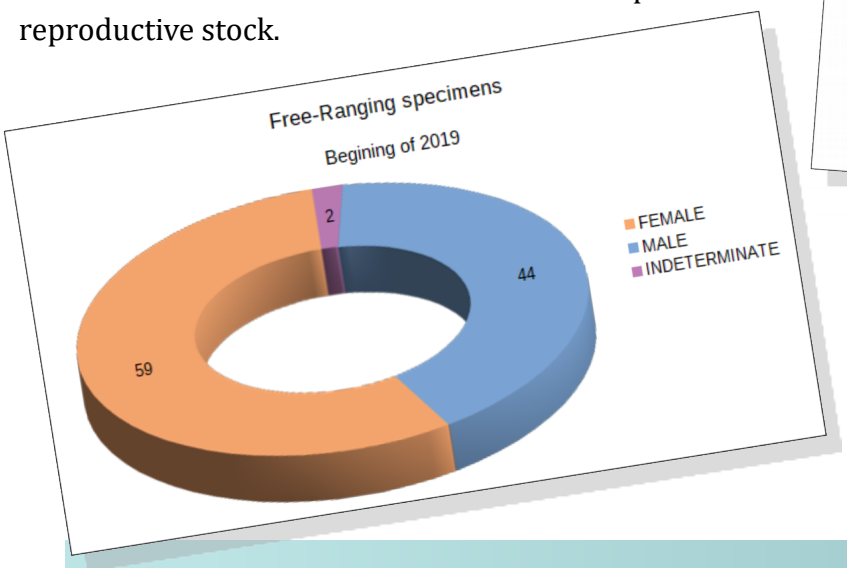
SUMMARY 2019

Starting situation

The campaign began with a total of 105 free-ranging specimens (44 males, 59 females and 2 indeterminate), which were distributed within areas similarly to previous years. Most of the group moved nearby the main breeding colony in Vejer, within a radius of about 15 km, in grassland areas for organic cattle, fighting bull farms and golf courses located between these locations. The use of these foraging areas depended on climatic conditions and prey availability. A second group use to be settled more stable on a golf course located 35 km from the breeding area (Novo Sancti Petri, Chiclana de la Frontera). This area was abandoned only by the breeders during the breeding season, returning once it was finished. The composition of the free-ranging population appears in the following figures; Keep in mind that those born in 2018 will not be part of the reproductive stock.

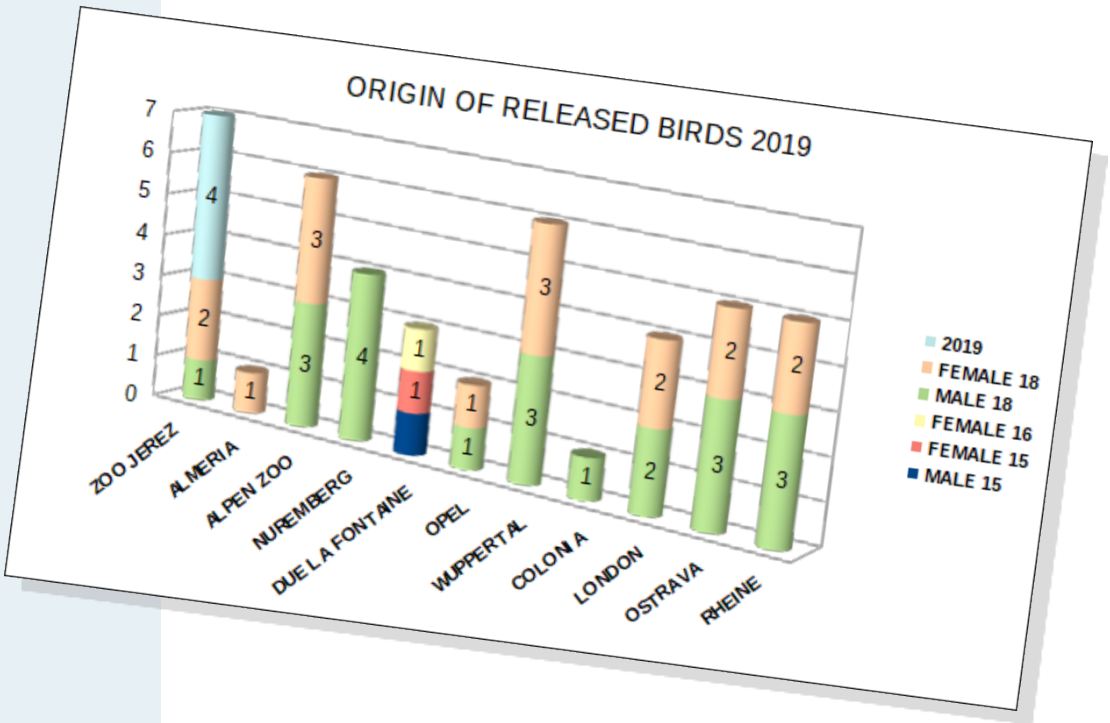






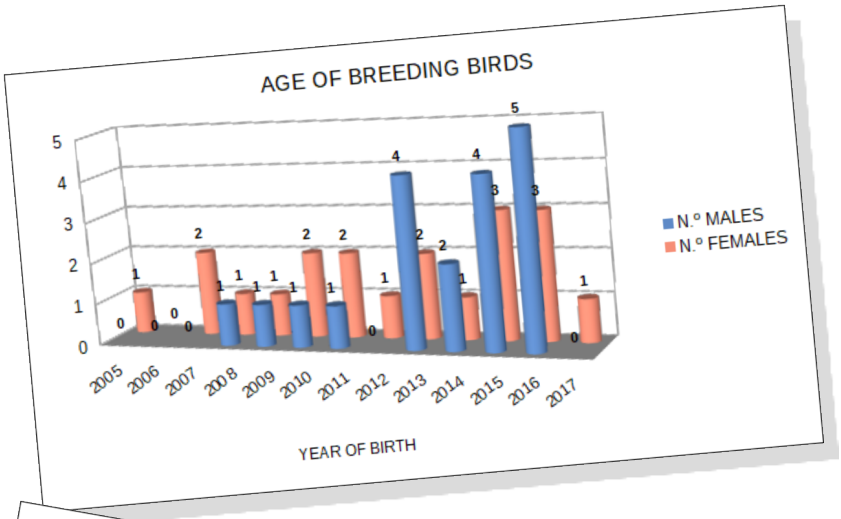
Release of new individuals

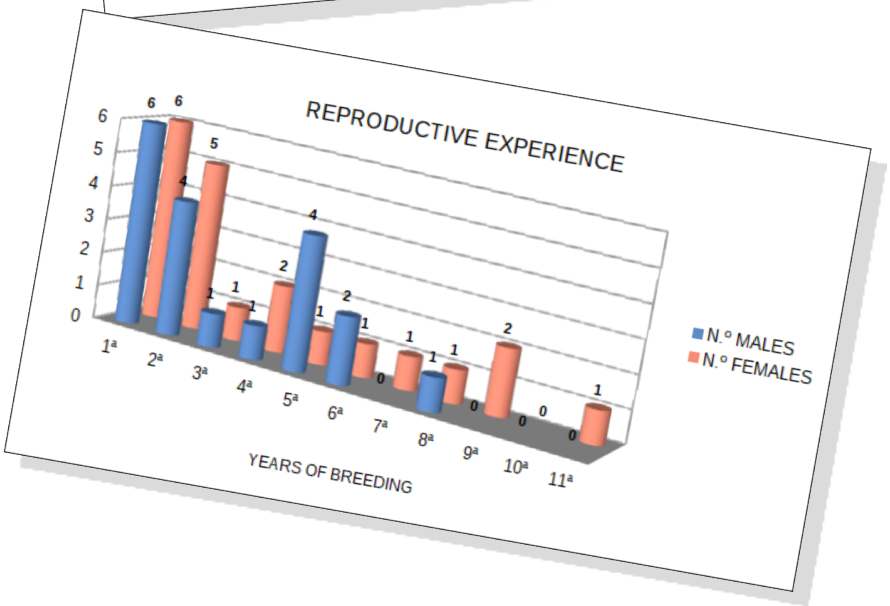
During the year 2019, a total of 45 juveniles (19 females, 22 males and 4 indeterminate from 2018) were incorporated into the free flying population. All the birds came from European zoos (EAZA): Doue, Tabernas-Oasys, Innsbruck, Nüremberg, Opel, Rheine, Ostrava, London, Cologne, Wuppertal and Jerez. The project really appreciate the efficient collaboration of the EEP coordinator (Dr. Christiane Böhm, Alpenzoo) as well as the EEP institutions that have kindly collaborated providing birds, covering the trasnsport cost and in some cases also GPS/GSM trasnmitters. They were subjected to an acclimatization period in the new facilities built in the fall of 2018 by the Project, at the "Finca Los Eremitas", in San Ambrosio (Vejer), owned by Pierre Gay who is a collaborator with the Project from the Due la Fontaine Zoo. The birds were received and quarantined at Zoobotanico Jerez at the end of 2018. The releases took place in April 2019, after two or three months of acclimatization. All the specimens released this year, as well as all those from previous years, carried PVC rings and metal ring for identification. Some specimens were fitted with GPS / GSM transmitters. The release was done gradually in three groups during a week, to cause attachment to the point of release by supplying food.



"The release was done gradually in three groups during a week, to cause loyalty to the point of release by providing food. The choice of the location of this new aviary for acclimatization and release has been made due to the support of the owner and specially because it is an area where they would coincide and incorporate with the free-ranging group"

Reproduction





As usual in the Eremita Project, the main breeding colony was established on the sandstone cliffs located in the Barca de Vejer, in the municipality of Vejer de la Frontera. In this campaign, as in the previous ones, they have used two areas of the cliff separated by 700 meters (Tajo La Barca and Tajo La Mora). The second reproductive colony is located inside the Torre de Castilnovo, in the municipality of Conil de la Frontera. This tower is 21 meters high and is located only 100m from the seashore and it is built with ostionera stone (sedimentary rock formed by the remains of seashells). The distance from this tower to the Vejer colony is 11 km to W.

Up to a total of 21 couples participated in the reproductive attempts, (one of those pairs was made up of two females), of which 16 did lay and raised chickens. The number of fledglings that have flown in this season has been 31. During the bird banding campaign the chicks were ringed (plastic and metal rings) and biological samples were taken for genetic and veterinary issues.

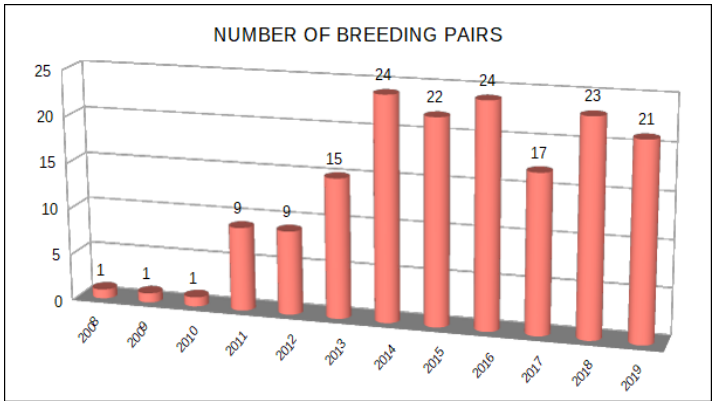
Reproductive Attempts

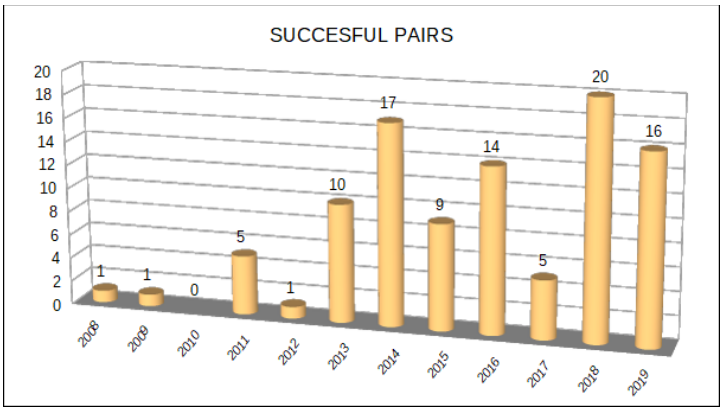
Tajo La Barca de Vejer			
Nest	Male	Female	Chicks
1	V7H	K59	3
2	X2C	U6X	2
3	NO	K61	3
6	848	K3N	3
7	P9W	X2N	1
11	TXR	K27	3
12	K66	K0R	1
14	TWJ	V77	2

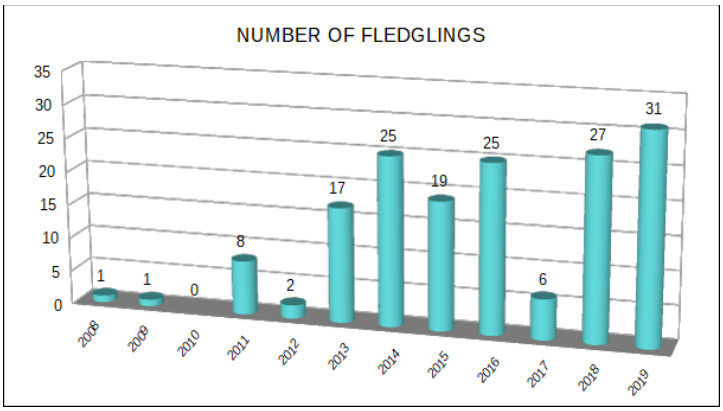
Tajo La Mora Vejer			
Nest	Male	Female	Chicks
1	K1V	K8H	3

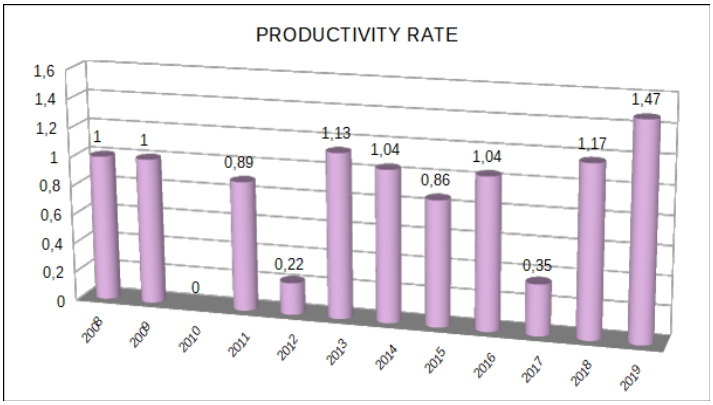
Torre Castilnovo Conil			
Nest	Male	Female	Chicks
1a	K6W ?	K3J	2
1b	K8R	K8C	2
2	K6W	K8U	2
3	K6J	¿?	1
4a	¿?	¿?	2
4b	WA1	K2X	1
4c	K2W	K68	2
4e	¿?	K30	2

Breeding Conclusions







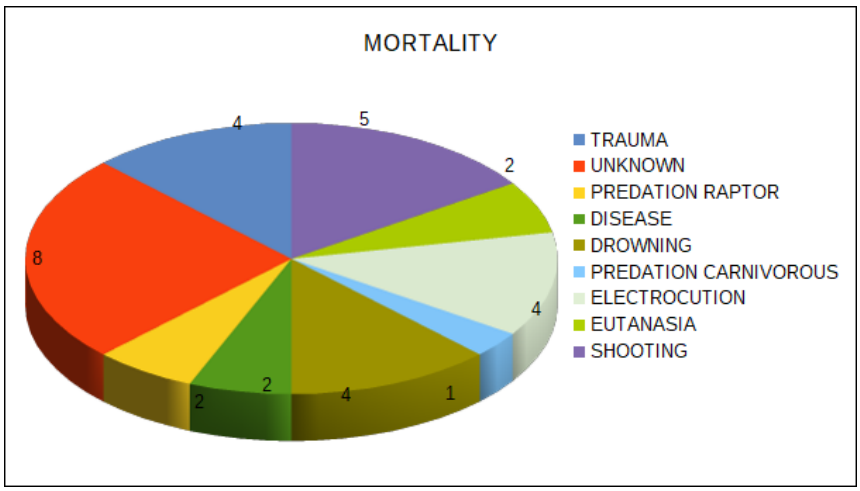


In spite that the number of breeding pairs has not been the highest since the beginning of the project, the rest of the indicators reveal that during the spring of 2019 the best breeding season to date has taken place, with the largest number of fledglings flown and the highest productivity rate, indicating that the Northern Bald Ibis wild population is developing and adapting adequately to its distribution area in southern Spain. The mortality data that appears later, provide not so promising indicators for the general population.

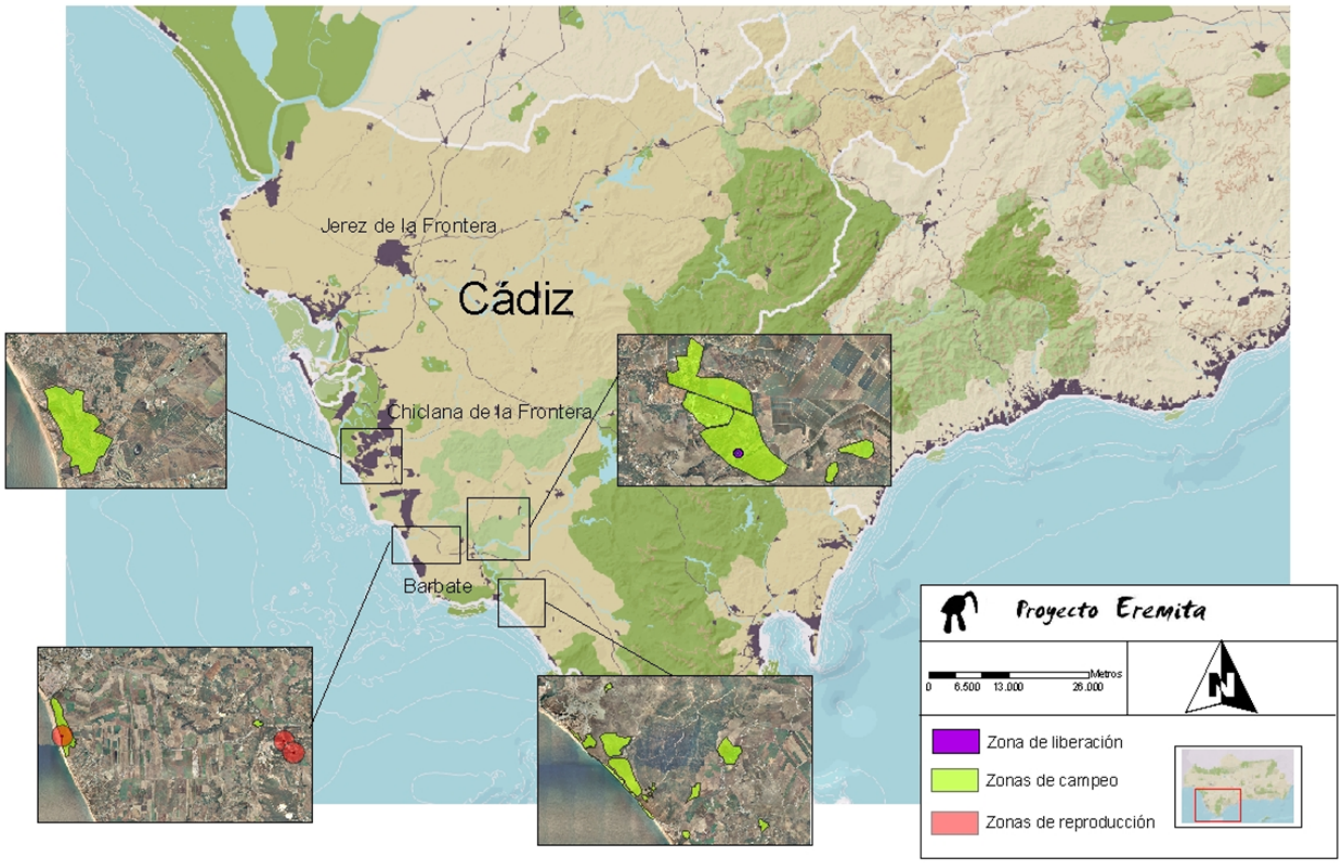
Mortality

The high mortality rate that occurred, has been mainly caused by electrocution and drowning, although this year a shooting incident produced an increase in deaths. This anomalous episode, was detected in another province in Montemolín (Badajoz), where the same person shotted three birds of the year while they were in dispersive movements. The resulting mortality is very similar to that of previous years, which considerably compromises the recruitment of new youngsters at reproductive age, thus slowing down the population growth.

Throughout the year 2019 a total of 32 losses have been registered. 14 out of them are young birds born this year, and the rest, 16 from their second year and just 2 birds from other years, among which there is a single important breeder such as N01 (with 3 breeding seasons), and a non-reproductive adult. Deaths have been detected mainly because they were birds fitted with a transmitter, but we assume that the same case must have occurred with the non-fitted population. The large proportion of casualties produced during the first two years of life is relevant. Although they could be corrected to a large extent, the majority have an unavoidable character, give the inexperience of birds when facing the contingency of life in nature in the case of those wild born and their new life in freedom for those born in captivity.



PVC	Metal	Sexo	Fecha muerte	Lugar muerte	Causa	Nacimiento	lugar	liberación	Años reproductor
NO1	8023101	MALE	14/12/19	golf sancti petri	TRAUMA	16/04/14	TAJO LA BARCA 1		3
K8H	E 14126	MALE	26/12/19	golf montenmedio	UNKNONW	01/05/16	TAJO LA BARCA 1		0
KCL	E14603	FEMALE	26/12/19	golf montenmedio	UNKNONW	20/04/18	TORRE CASTILNOVO		0
KFN	E14330	MALE	13/08/19	Zahora-Caños	ELECTROCUTION	01/05/18	ZOO JEREZ	24/04/19	0
KFT	E14333	MALE	12/09/19	EL TORERO	PREDATION	01/05/18	ZOO ORIGEN	22/04/19	0
KHF	E14350	FEMALE	14/05/19	san ambrosio	TRAUMA	01/05/18	ZOO ORIGEN	22/04/19	0
KHH	E14351	MALE	22/05/19	san ambrosio	DISEASE	01/05/18	ZOO ORIGEN	22/04/19	0
KHL	E14353	MALE	21/07/19	Zahora-Caños	ELECTROCUTION	01/05/18	ZOO ORIGEN	22/04/19	0
KHR	E143507	FEMALE	05/05/19	san ambrosio	PREDATION	01/05/18	ZOO ORIGEN	25/04/19	0
KHT	E14358	MALE	18/05/19	Zoo Jerez	DISEASE	01/05/18	ZOO ORIGEN	22/04/19	0
KHU	E14359	MALE	12/05/19	san ambrosio	TRAUMA	01/05/18	ZOO ORIGEN	24/04/19	0
KJ2	E14365	MALE	26/12/19	san ambrosio	UNKNONW	01/05/18	ZOO ORIGEN	22/04/19	0
KJ3	E14366	MALE	16/07/19	san ambrosio	DROWNING	01/05/18	ZOO ORIGEN	22/04/19	0
KFF	E14625	MALE	16/09/19	Manzanete	PREDATION	07/05/18	TORRE CASTILNOVO		0
KFW	E14336	MALE	24/07/19	san ambrosio	DROWNING	01/06/18	ZOO ORIGEN	22/04/19	0
KH2	E14341	FEMALE	21/07/19	Zahora-Caños	ELECTROCUTION	01/06/18	ZOO ORIGEN	22/04/19	0
KH5	E14344	MALE	17/10/19	Zoo Jerez	EUTANASIA	01/06/18	ZOO ORIGEN	24/04/19	0
KH8	E14337	MALE	24/09/19	El Torero	UNKNONW	01/06/18	ZOO ORIGEN	23/04/19	0
KJ8	E14371	MALE	13/08/19	Caños-Zahora	ELECTROCUTION	10/04/19	TAJO LA BARCA 1		0
KJC	E14374	MALE	08/10/19	Zoo Jerez	EUTANASIA	10/04/19	TAJO LA BARCA 1		0
KJF	E14375	MALE	16/12/19	golf montenmedio	UNKNONW	10/04/19	TAJO LA BARCA 1		0
KJH	E14376	MALE	26/08/19	Manzanete	SHOOTING	10/04/19	TAJO LA BARCA 1		0
KJJ	E14377	FEMALE	16/08/19	Montemolín Badajoz	SHOOTING	10/04/19	TAJO LA BARCA 1		0
KJI	E14378	FEMALE	17/06/19	Parralejos	DROWNING	10/04/19	TAJO LA BARCA 1		0
KJN	E14380	FEMALE	17/08/19	Medina Sidonia	SHOOTING	10/04/19	TAJO LA BARCA 1		0
KJP	E14381	MALE	16/08/19	Montemolín Badajoz	SHOOTING	10/04/19	TAJO LA BARCA 1		0
KJR	E14382	FEMALE	25/12/19	golf montenmedio	UNKNONW	10/04/19	TAJO LA BARCA 1		0
KJT	E14383	MALE	01/06/19	tajos barca	UNKNONW	03/05/19	TAJO LA BARCA 1		0
KJU	E14384	MALE	01/06/19	sierra granada	TRAUMA	03/05/19	TAJO LA BARCA 1		0
KLX	E14396	FEMALE	16/08/19	Montemolín Badajoz	SHOOTING	03/05/19	TORRE CASTILNOVO		0
KM0	E14397	MALE	28/09/19	playa barrosa	DROWNING	03/05/19	TORRE CASTILNOVO		0
KM1	E14398	FEMALE	15/06/19	torre castilnovo	UNKNONW	03/05/19	TORRE CASTILNOVO		0



Conclusions

Despite 2019 has been an excellent reproductive season, subsequent mortality episodes have decimated a large part of the youth population, preventing the absolute growth of the population. The mortality accumulated previously seems to have reduced the older population quite a bit, which means that this year there is no growth in the reproductive community.
The releases of juveniles coming from EEP institutions are still needed for the next years in order to increase the number of males and new potential breeders. The location of the new release aviary in front of the foraging area has been a positive development of the project.
The range of the wild sedentary population in southern Spain continues to be that of previous years, with the usual dispersive movements of some of the birds of the year, who have made inroads into other parts of Spain several hundred kilometres from their usual range.