



destruction or natural disasters. Aviculture encourages the conservation of birds; offers education about birds; and includes research about birds and bird behaviour. In the end the keeping of specific species; the collection of knowledge about these species; the conservation of these species; and the education about them, are all human behaviours. To what extend is nature conservation about nature? It is and will stay a human affair. It is up to us, aviculturists, to manage birds in our ex situ collections for both hobby, research and conservation purposes.

Policy and legislation for European Turtle Doves in Dutch aviculture

The European Turtle Dove occurs in Europe and is found on the Birds Directive list Annex II / part B (Fisher et al., 2018). It is therefore mandatory to ring this species with a closed leg ring. The ring size for this species is 6.0mm (Aviornis, 2019). This Turtle Dove is not on any of the three CITES appendices and is therefore not a CITES species. Since this Turtle Dove does fall under the EU Wildlife Trade Regulations Annex A, a European

Aviculture

The British 'Avicultural Society' was founded in 1894 with the aim to study both British and foreign birds in the wild and in captivity. In the very first edition of the Avicultural Magazine in November 1894 the board of the Avicultural Society states that there are a lot of people interested in birds and the keeping of birds. One of the main goals of the Avicultural Society, at the time, was to try and close the gap between the people interested in live birds and the scientific ornithologists: 'we believe that each can learn from the other. We want to add a little science to the bird enthusiast and want to gain interest in live birds by the cabinet-ornithologists'. The name the Avicultural Society suggested in 1894 to specify a person who is both interested in observing as well as the keeping and breeding of birds: is an aviculturist.

Aviculture is the practice of the keeping and studying of birds. Aviculture is aimed at birds in captivity, but also on the conservation of bird habitat and awareness campaigns for threatened birds. One of the main focus points of aviculture is maintaining a healthy captive population of a certain species that is threatened in the wild by habitat





certificate is required. This EU certificate is required as an exemption for keeping, offering, requesting, acquiring, exhibiting and transporting the individual bird.

European Turtle Doves may be kept in the collection where they were born without these EU certificates, provided they are ringed with a 6.0mm closed leg ring. If you want to trade or transport the birds to another collection, these EU certificates are mandatory. If your own progeny birds are kept and are to be bred with, then the EU certificates are also necessary, since the EU certificates of the parent birds must be scanned and sent in when applying for EU certificates.

The essence of the EU certificates for this turtle dove is that its origins can be traced to combat the trade in illegal birds. The EU certificates are a kind of passport that stays with the bird and is necessary for the legal transport of the individual.

In addition to the EU certificates, it is expected that a register is kept. This register consists of two parts, namely registering the entry and exit from the collection. Upon arrival, information such as date, species, ring number, possibly ring mark, date of birth, gender, and place of origin are noted with contact details.

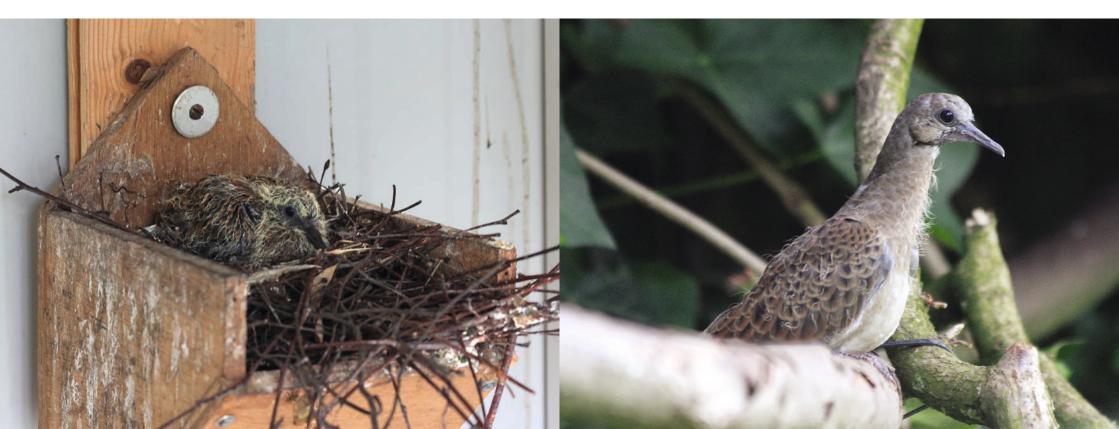
The register of departure indicates the date on which the individual left the collection and whether it died or was sold. In the case of the latter, a record is made of who

including contact details. In this way there is clear accounting for where and when birds enter and leave the collection.

I believe that it is a great advantage for aviculture that EU certificates are mandatory for this species and that records are kept of the individual birds in the collection in the above manner. In this way we handle these individual birds more seriously, especially since it costs us enthusiasts time and money to keep proper accounts and to request the papers via the official route if we want to move our offspring to another collection. If applying for EU certificates is too difficult, are too expensive or too much work, then the choice can always be made not to breed with this species, or to only place a male in the aviary. No extra effort is required to purchase these turtle doves with EU certificates. Only when offspring of this species are relocated, the additional EU certificate application procedures and costs are involved.

Number of European Turtle Doves in Dutch aviculture

Unfortunately, there is no complete overview of the numbers of these turtle doves that are kept in Dutch aviculture. In order to give an idea of this, Aviornis International Netherlands, the Dutch Association of Bird Lovers (NBvV), the European Culture Bird Association (BEC), the Parakeets Society and Small Animal Lovers Netherlands have been willing to help. These are the five official organizations in the Netherlands where rings





for these turtle doves can be ordered. In addition to the aforementioned organizations, the CITES office of the Netherlands Enterprise Agency (RVO) has also cooperated.

When ordering rings from the above five organizations, the number of breeding pairs of European Turtle Doves must be stated as it concerns a European bird species. Assuming that enthusiasts only order rings if they give these turtle doves the chance to produce offspring, we can assume that the figures below represent the **minimum number of breeding pairs of these turtle doves in aviculture in the Netherlands**. In addition to the number of breeding pairs communicated when ordering the rings, the number of enthusiasts who ordered rings for these turtle doves are also shown. These are the **minimum number of collections where these turtle doves are kept that are allowed to produce offspring themselves**. The figures from the CITES office of the RVO indicate how many individual turtle doves are listed with the EU certificates issued. In 2003, the CITES office gave enthusiasts with European Turtle Doves in the Netherlands the opportunity to register them and provide them with

an EU certificate. Hence the large number of turtle doves in 2003. It is not possible to determine specifically whether the number of EU certificates issued per year correlates with the number of raised birds that year. It is possible that for turtle doves born in 2018, EU certificates will not be applied for until 2019. The figures from the zoological information management software (ZIMS) show the number of individual European Turtle Doves that were kept in Dutch zoos in the relevant years. In two zoos, these turtle doves were part of the collection in two different periods, 2005-2007 in one zoo and from 2011-2018 in another. From 2019 two zoos simultaneously house European Turtle Doves in their collection, namely Aeres Barneveld and Gaia Zoo.

For the EU certificates, a digitized record has been kept of how many European Turtle Doves were known when the EU certificates were issued since 2003. The ring applications of the ring services of the five organizations have been digitized from 2010 onwards. Aviornis and the NBvV are the two most important associations for European Turtle Dove enthusiasts. From the other three organizations, fewer or only sporadic, rings are ordered for these turtle doves.

Conclusion Summary of European Turtle Doves

	Aviornis Int. NL		NBvV		BEC		Parkieten Societeit		Kleindier		Total Netherlands		EU certificats	ZIMS
	Enthusiasts	Pairs	Enthusiasts	Pairs	Enthusiasts	Pairs	Enthusiasts	Pairs	Enthusiasts	Pairs	Enthusiasts	Pairs	European Turtle Doves	European Turtle Doves
2003													419	
2004													197	
2005													173	4
2006													96	7
2007													124	3
2008													108	
2009													71	
2010	2	3	37	62	6	6			4	7	49	78	83	
2011	17	26	38	59	6	6			4	4	65	95	74	1
2012	9	14	32	45	7	7			2	2	50	68	50	3
2013	9	19	26	35	4	4			1	1	40	59	50	4
2014	17	25	26	35	6	6			3	3	52	69	92	7
2015	13	24	34	49	8	8			0	0	55	81	76	7
2016	8	17	34	44	7	7	2	3	4	8	55	79	89	7
2017	12	22	30	44	3	3	2	3	1	2	48	74	45	3
2018	6	15	23	33	4	4			2	5	35	57	27	7
2019	7	15	32	40	7	14	1	2	3	5	50	76	132	10

AVIORNIS



Based on the above data, we can conclude that in the last ten years, from 2010 to 2019, between 57 and 95 breeding pairs of European Turtle Doves are kept annually by 35 to 65 Dutch enthusiasts. The data clearly shows that there has been a decline in interest and progeny of European Turtle Doves between 2015 and 2018. However, the year 2019 paints a very different picture, with the same number of enthusiasts and breeding pairs as in 2017, 87 more EU certificates were issued compared to 2017. Is it an increase in interest in European Turtle Doves and the breeding of these turtle doves? Or have several enthusiasts applied for EU certificates in 2019 for young birds born in their collection in previous years? Unfortunately, we cannot answer those questions. This overview does, however, provide a clear picture of the (minimal) current situation of breeding pairs of European Turtle Doves and their enthusiasts in Dutch aviculture.

Acknowledgment

Pierreco Eyma, Honorary Chairman of Aviornis International Netherlands, I would like to thank in particular for his commitment and willingness to help me collect the above data. Without his enthusiasm and network, it would not have been possible to form a picture of the current population of European Turtle Doves in aviculture in the Netherlands.

I would like to thank Marius Sijtsma, from Aviornis International Nederland; Hans van der Stroom, from Nederlandse Bond van Vogelliefhebbers; Henry Hoogaars, from Belangenbehartiging Europese Cultuurvogel; Fred Rönitz, from Parkieten Sociëteit; and Erna Sanders, from Kleindier Liefhebbers Nederland; Bart van Honstede, Rijksdienst voor Ondernemend Nederland; and Jan Harteman for their willingness to cooperate in providing the above information. I can only express my appreciation to the people mentioned above and their willingness to share data in order to form an understanding of the current population of European Turtle Doves in Dutch aviculture.

Bibliography

- Aviornis International Nederland, 2019 https://www.aviornis.nl/over-aviornis/wat-is-aviornis/doelstelling/ Website consulted May 2019.
- Aviornis International, 2003. 30e jaargang nr. 171. Overdracht en registratie van de zomertortel.
- Aviornis (2019). Ringmaat Zomertortel. Website consulted April 2019. https://aviornis.nl/bootstrap/web/index.php?r=vogel%2Fpublicdetail&id=2321
- Fisher I, Ashpole J, Scallan D, Proud T and Carboneras C (compilers) (2018) International Single Species Action Plan for the conservation of the European Turtle-dove Streptopelia turtur (2018 to 2028). European Commission 2018
- Rijksdienst voor Ondernemend Nederland, 2017. Infoblad EU-certificaten versie 2017. Website consulted June 2019. https://www.rvo.nl/sites/default/files/.../Infoblad-EU-certificaten.pdf
- Avicultural Magazine, 1894. No. 1. The Avicultural Society. Website consulted July 2019 https://www.biodiversitylibrary.org/item/101530#page/9/mode/1up

