







UPDATE on illegal bird trapping activity in Cyprus

Covering the winter 2019-2020 findings of BirdLife Cyprus' continuing monitoring programme for illegal bird trapping in Cyprus.

Report put together by Markos Charalambides, Campaigns and Monitoring Officer, BirdLife Cyprus

Date: July 2020

Contents

Περ	ίληψη	3	
Sum	mary	5	
1.	Overview of bird trapping in Cyprus	6	
2.	BirdLife Cyprus surveillance programme	8	
3.	Results	. 10	
4.	Conclusions	. 13	
Bibli	ography	. 14	
Арр	endix 1	. 15	
Appendix 2			

Περίληψη

Η παρούσα αναφορά παρουσιάζει τα τελευταία ευρήματα του συνεχιζόμενου προγράμματος παρακολούθησης της παράνομης παγίδευσης πουλιών του Πτηνολογικού Συνδέσμου Κύπρου, για τη χειμερινή περίοδο 2019-20. Επισημαίνεται ότι η αναφορά αυτή έχει ως κύριο στόχο τους υπεύθυνους στα κέντρα λήψης αποφάσεων και τους πολιτικούς, με σκοπό την ενημέρωση, την ευαισθητοποίηση και την κινητοποίηση για πιο αποτελεσματική δράση για αντιμετώπιση αυτού του χρόνιου οικολογικού προβλήματος.

Σημειώνεται ότι τα τελευταία χρόνια για την χειμερινή περίοδο ο Πτηνολογικός δεν κάνει πλήρη έρευνα πεδίου όπως περιγράφεται στο πρωτόκολλο του προγράμματος παρακολούθησης της παράνομης παγίδευσης πουλιών. Εντούτοις, για να έχει μια εικόνα της κατάστασης της χειμερινής παγίδευσης διενεργεί έρευνα ελέγχου σημείων (spot checks) όπου ένα δείγμα σημείων παγίδευσης ελέγχονται για τυχόν παράνομη παγίδευση. Αυτή είναι η έβδομη συνεχόμενη χειμερινή έρευνα πεδίου όπου εφαρμόζεται αυτή η μέθοδος ελέγχου σημείων.

Συνολικά ελέγχθηκαν 180 τοποθεσίες-σημεία και από αυτά 7 σημεία καταγράφηκαν ως ενεργά για παράνομη παγίδευση πουλιών. Η ομάδα πεδίου κατέγραψε 15 ενεργές διαδρομές για δίχτυα (διαδρομές σε περιοχές με ακακίες ή άλλη βλάστηση π.χ. πορτοκαλεώνες, ελαιώνες, όπου βρέθηκαν δίχτυα ή ευρήματα ότι γίνεται παγίδευση), με συνολικό μήκος 302 μέτρα.

Παρόλο που δεν είναι δυνατόν να εξαχθούν στατιστικά βάσιμες τάσεις για τα χειμερινά επίπεδα παγίδευσης πουλιών, αφού δεν έγινε πλήρης έρευνα πεδίου όπως περιγράφεται στο πρωτόκολλο του προγράμματος παρακολούθησης του Πτηνολογικού, τα ευρήματα αυτής της χειμερινής περιόδου υποδεικνύουν ότι υπήρξε μια μείωση στην παγίδευση με δίχτυα. Αυτό αποτελεί μια θετική εξέλιξη σε σύγκριση με την αύξηση που παρατηρήθηκε το χειμώνα του 2018-19. Η χειμερινή παγίδευση, ωστόσο, εξαρτάται πολύ από τη μετανάστευση της τζίκλας στην Κύπρο καθώς και τις καιρικές συνθήκες. Τα αποτελέσματα της τηλεφωνικής έρευνας για την κυνηγετική κάρπωση που διεξάγει κάθε χρόνο η Υπηρεσία Θήρας και Πανίδας δείχνουν μείωση κατά 61% στον αριθμό των τζίκλων που σκοτώθηκαν νόμιμα το 2019-20 σε σύγκριση με το 2018-19. Αυτό δείχνει ότι υπήρχαν λιγότερα πουλιά στην Κύπρο, κάτι που θα μπορούσε να εξηγήσει, σε κάποιο βαθμό τουλάχιστον, τα μειωμένα επίπεδα παγίδευσης που καταγράφηκαν από την ομάδα μας αυτόν τον χειμώνα. Συνάμα υπήρχαν πολλές μέρες με κακοκαιρία που πολύ πιθανόν να απέτρεψαν τους παγιδευτές από αυτή την παράνομη δραστηριότητα.

Εκτιμάται, συντηρητικά, ότι το 2019 συνολικά γύρω στα 610 000 πουλιά μπορεί να θανατώθηκαν από την παράνομη παγίδευση σε ολόκληρη την Κύπρο, σε σύγκριση με τις 365 000 χιλιάδες πουλιά που εκτιμούμε ότι σκοτώθηκαν το 2018, με βάση τις καταγραφές του Πτηνολογικού για την άνοιξη, φθινόπωρο και χειμώνα. Παρά τη μείωση της παγίδευσης του χειμώνα, υπήρξε αξιοσημείωτη αύξηση της παγίδευσης κατά τη διάρκεια της φθινοπωρινής περιόδου του 2019. Αυτό οφείλεται κυρίως στην έλλειψη επιβολής του νόμου κατά των οργανωμένων μεγάλων παγιδευτών, ειδικά από τον Κλιμάκιο Πάταξης Λαθροθηρίας της Αστυνομίας Κύπρου (το οποίο δυστυχώς καταργήθηκε τον Νοέμβριο του 2019 μετά από απόφαση του Αρχηγείου Αστυνομίας Κύπρου). Ο Πτηνολογικός διαφώνησε

με το κλείσιμο του Κλιμακίου αφού θεωρεί ότι τώρα έχει δημιουργηθεί ένα κενό στην πάταξη κατά των μεγάλων, οργανωμένων παγιδευτών, ανησυχίες τις οποίες έχει μεταβιβάσει στην Αστυνομία Κύπρου.

Τα έξοδα αυτής της χειμερινής έρευνας καλύφθηκε από τους Devon Birds, από το NABU (BirdLife στη Γερμανία) και το RSPB (BirdLife στο Ηνωμένο Βασίλειο).

Summary

This report presents the latest findings of the on-going BirdLife Cyprus surveillance programme on illegal bird trapping, relating to the winter 2019-2020 season. It is highlighted that this report is mainly aimed at top decision makers and politicians, with the aim of informing, raising awareness and generating momentum for more effective action to tackle this chronic ecological problem.

It is worth noting that for the last seven winter seasons BirdLife has not undertaken a complete survey following its standard survey protocol. However, in order to have an insight into the winter trapping situation a spot check exercise was undertaken, whereby a sample of previously recorded trapping sites is checked for bird trapping activity.

Overall, 180 locations were checked and out of these, seven sites were found to be active with illegal bird trapping. The field team recorded 15 active net rides for mist netting (cleared "runs" in acacia plantations or other habitats e.g. orchards, olive trees, either holding nets or where there was clear evidence of preparation for the setting and/or use of nets), which summed up to a length of 302 metres.

Although it is not possible to draw conclusions about the long-term trends for winter trapping activity, since the standard monitoring protocol of BirdLife Cyprus is not followed for the winter, the findings from this season's survey suggested a decrease in winter mist-netting activity in Cyprus. This is a positive development compared to the increase noted in winter 2018-2019. Winter trapping however, is very dependent on migration of Song thrush to the island as well as the weather. The hunting bag statistics published by the Game and Fauna service showed a 61% reduction in the number of Song thrushes killed legally in 2019-2020 compared to 2018-2019. This suggests that there were in fact a lot less birds overwintering in Cyprus, which could explain, at least in part, the reduced levels of trapping our field team recorded this winter. At the same time, there were many days with bad weather that most likely prevented trappers from conducting this illegal activity.

It is estimated that in 2019 as a whole, over 600,000 birds could have been killed across the whole island, in comparison to 2018's estimate of 365,000 birds, based on BirdLife Cyprus field data gathered for spring, autumn and winter seasons. Despite the reduction in trapping in winter 2019-2020, there was a noticeable increase in trapping during the autumn 2019 season, mainly attributed to reduced enforcement against big organized trappers by the Cyprus Police Anti-Poaching squad. In a further blow to enforcement efforts, this squad was closed down in November 2019.

The costs for this winter's survey was covered by Devon Birds, by NABU (BirdLife in Germany), and the RSPB (BirdLife in UK).

1. Overview of bird trapping in Cyprus

Trapping with non-selective methods (mist nets and limesticks) and the trade of wild birds have been prohibited since 1974 under Cyprus legislation, when the law 'Protection and Development of Game and Wild Birds Law of 1974 (39/1974)' was introduced¹. Moreover, in 1988 Cyprus ratified the 1979 Bern Convention on the Conservation of European Wildlife and Natural Habitats, adopting a long list of birds as protected, including the Blackcap (*Sylvia atricapilla*), hence prohibiting the killing (hunting) and consumption of Blackcaps (Blackcaps are the main target species of illegal bird trapping in autumn in Cyprus). With Cyprus joining the EU in 2004, EU Birds Directive (2009/147/EC, formerly 79/409/EEC) was transposed into Cyprus Law N. 152(I)/2003, prohibiting anew the use of non-selective methods including mist nets, limesticks and calling devices, as well as the possession of trapping equipment, trapped birds and the trading and eating of trapped birds.

Historically, trapped birds – mostly Blackcaps - were a food supplement for what were mostly poor island inhabitants living off the land. The practice of bird trapping in Cyprus has been recorded in historical documents from the Middle Ages and even earlier times. However, trapping as practiced in Cyprus today bears no relation to historical 'tradition'.

Nowadays, bird trapping in Cyprus is widespread and extensive, contributing to the large scale killing of hundreds of thousands of migratory and wintering birds. Survey records show that 157 bird species have been found trapped in mist nets or on limesticks, of which 82 are listed as conservation priority species under the EU Birds Directive and/or by BirdLife International². This is a clear indication of the non-selective nature of these methods. This illegal activity has become a profitable business controlled to a large extent by the 'big' trappers who are often also involved in organised crime. The Cyprus Game & Fauna Service estimated this illegal business to be valued in the order of 15 million euros per year³.

Apart from the extensive use of non-selective methods for illegal bird trapping in Cyprus, organised trappers nowadays use illegal electronic calling devices that imitate the calls of migratory birds. These calling devices are normally operated at night, luring the birds into the trapping sites and hence increasing the illegal catch. A recent academic study undertaken in Cyprus has shown that the use of electronic calling devices (song playback) is highly effective in luring birds towards trapping sites (Sebastianelli M. *et al*, 2020). The findings of this study showed that playback not only increased the number of individuals of target species captured by 6 to 8 times, but also significantly increased bycatch. The study authors concluded that: 'Our findings thus show that in contrast to popular belief that tape lures are a selective trapping

¹ The specific articles of Law 39/1974 that prohibited the trapping and trade of wild birds include: Article 10 ('prohibition of hunting etc. of certain bird species', without including the blackcap either in the protected or the game species), Article 14 ('prohibition of offering game or wild birds in restaurants etc.') and Article 15 ('prohibition of the use of light projectors, traps, luring methods, limesticks and flushing of birds).

² BirdLife Cyprus 'List of birds recorded trapped in mist nets and on limesticks' found here.

³ Game and Fauna Service (17th March 2010), Position paper presented at the Committee of Environment of the Cyprus House of Parliament during a discussion to change the legislation on the protection and management of wild birds and game species

method, they also lead to increased captures of non-target species, which can include species of conservation concern'.

These calling devices can often be heard easily from hundreds of metres away from trapping sites at night, highlighting the extensive use of calling devices and their intensity within the trapping areas.

This report presents the results for winter 2019-20 survey. It should be noted that during winter the illegal trappers target mainly wintering Song thrushes (*Turdus philomelos*), in contrast to spring and autumn seasons, when the main target species are Blackcaps (*Sylvia atricapilla*) and other migrant songbirds. Trapped birds are either served as expensive ambelopoulia 'delicacies' in local restaurants or are sold and used for home consumption.

2. BirdLife Cyprus surveillance programme

BirdLife Cyprus is a non-profit NGO working for the protection and conservation of birds, their habitats and wider biodiversity, and is the Partner of BirdLife International in Cyprus. With support from the RSPB (BirdLife in UK), BirdLife Cyprus has undertaken a systematic surveillance programme of illegal bird trapping in Cyprus since autumn 2002, providing a long record of trapping activity and giving the NGO a very good measure of expertise on the issue. The surveillance programme follows a 'Bird Trapping Monitoring Protocol' that was developed by BirdLife Cyprus and the RSPB, in consultation with the Cyprus Game & Fauna Service and the British Sovereign Base Area (SBA) police at the start of the programme. Figure 1 shows the main areas of bird trapping; monitoring is concentrated in the two areas (numbered 1 and 2) where extensive trapping takes place:

- 1. Kokkinochoria area (Eastern Larnaca/Famagusta area) this area also includes the Dhekelia Eastern Sovereign Base (ESBA) area), and
- 2. Ayios Theodoros and Maroni area (Western Larnaca).

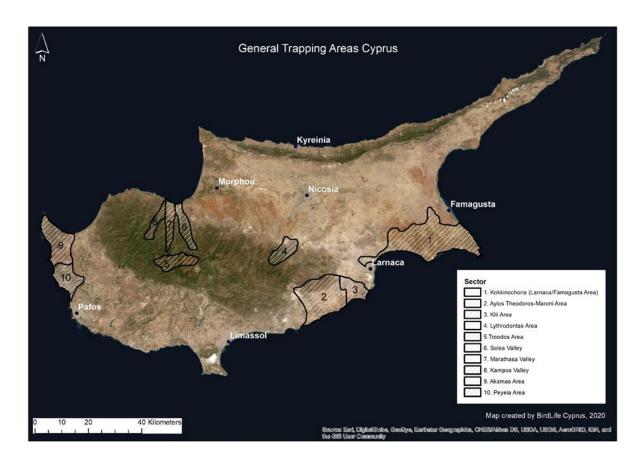


Figure 1. Map of Cyprus showing the main trapping areas

Although trapping is also an issue in other areas of Cyprus, the survey efforts focus on these two main areas due to resource limitations and because they hold the highest trapping activity.

It is worth noting that BirdLife Cyprus did not undertake a complete field survey for the winter 2019-20 season as described in its monitoring protocol⁴, but rather a spot check exercise. This is the seventh consecutive winter season that BirdLife Cyprus has used this simpler survey method, primarily due to limited resources. This method involves undertaking spot checks at trapping sites, randomly selected and stratified to ensure a representative coverage of areas under the SBA Administration and the Republic of Cyprus, in order to get an overall picture of winter trapping.

The project is undertaken in close co-operation with the Game & Fauna Service and the SBA Police. When trapping paraphernalia is found, the BirdLife Cyprus team contacts and reports them to the relevant enforcement authorities. It should be noted that the BirdLife Cyprus observers never confront suspected trappers and never remove trapping paraphernalia.

BirdLife Cyprus would like to express its particular thanks to Devon Birds, for their financial support during this winter trapping season. Birdlife Cyprus would also like to thank the RSPB (BirdLife in UK) for supporting the project financially since the beginning in 2002. Furthermore, BirdLife Cyprus would like to thank NABU (BirdLife in Germany) for their financial support since 2013 onwards. Finally, BirdLife Cyprus would like to thank the volunteer that helped in the monitoring survey and the gathering of the field data.

⁴ For more information regarding the surveillance programme of BirdLife Cyprus, read the latest autumn 2019 trapping report here.

3. Results

- Field survey: the winter 2019-20 spot check survey of trapping sites was carried out from mid-January till the end of January 2020, with 12 days of field work in total. As already stated, BirdLife Cyprus did not undertake a complete survey following the standard survey protocol for this season, in order to utilise limited resources on awareness raising and other campaigning activities as well. However, in order to have an insight into the winter trapping situation a spot check exercise was undertaken, checking about 25% of the trapping sites where mist netting activity had been detected in the past⁵, as well as some sites which Committee Against Bird Slaughter (CABS) had found activity the previous winter season. The sites were randomly selected for this exercise in order to cover both the Republic of Cyprus (covering both Ayios Theodoros & Maroni and East Larnaca & Famagusta areas) and the Dhekelia Sovereign Base Area SBA. All trapping locations were reported to the relevant enforcement authorities, either the SBA Police Anti-poaching unit or the Cyprus Game & Fauna Service, depending on the location of the finds.
- Summary of field findings: In total, 180 locations were checked, 102 within the Republic of Cyprus and 78 within the Dhekelia Sovereign Base Area (SBA) seven active mist netting sites were detected. The field team recorded 15 active net rides for mist netting (cleared "runs" in acacia plantations or other habitats e.g. orchards, olive trees, either holding nets or where there was clear evidence of preparation for the setting and/or use of nets), which summed up to a length of 302 metres (one of these rides was classified as an Active Unset Net ride⁶, eleven rides were classified as Active No Net rides⁷ and three rides were classified as Prepared⁸).
- Winter trapping activity: While it is not possible to use the field data to draw any statistically reliable long term trends for winter trapping activity (since the standard monitoring protocol has not been carried out for the last seven winter seasons i.e. since 2013) the field data suggest lower winter trapping activity compared to the previous winter with around half the total of active sites and meters of netrides detected this season.

•

⁵ It is worth noting that sites where limesticks were detected for bird trapping in the past were excluded from the winter spot check exercise. This was done in order to select a sample of likely active trapping locations, since trapping with limesticks is mainly done during spring and autumn periods.

⁶ Active Unset Net: A net ride that has a set mistnet which has been furled a.k.a lowered.

⁷ Active No Net: A net ride that from the evidence found e.g. bird feathers, blood stains, thrown pebbles, indicates that illegal activity was taking place the previous night / morning but no net is present in situ.

⁸ Prepared: A net ride that is clearly ready to be used but there is no evidence e.g. bird feathers, blood stains, thrown pebbles, to suggest illegal activity was taking place the previous night / morning.

• Table 1 summarizes the field data for the winter surveys that BirdLife Cyprus has undertaken since 2007, when winter monitoring begun. Compared to the winter 2018-19 season, it is evident that winter trapping has decreased.

Table 1. Summary of winter field data of mist netting activity

	2007-	2008-	2009-	2010-	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-	2019-
	08	09	10	11	12	13	14	15	16	17	18	19	20
Total													
squares	44	44	81	53	39	38	87 ¹	90 ¹	73 ¹	108 ¹	100 ¹	126 ¹	180 ¹
surveyed													
Total active	407	904	2020	026	616	204	1067	1415	627	765	183	617	302
net rides (m)	497	804	3830	936	616	384	1067	1415	027	703	103	017	302
Mist nets in	22	2	21	11	24	1.4	53	48	15	15	0	Е	1
situ (no)	22	3	31	11	34	14	55	40	15	15	0	5	1

Note 1: This is the number of locations checked (and not number of squares surveyed).

We note here that the Committee against Bird Slaughter (CABS) findings for the winter 2019-20 season also suggest a decrease in trapping levels compared to the previous year⁹. It should be noted that CABS use a different survey method to Birdlife Cyprus, hence findings are not directly comparable, but rather complementary to each other.

• Trapping under different jurisdictions for winter 2019-2020:

- For Republic areas, seven active net rides for mist netting were detected after checking 102 locations, summing up to a length of 141 meters
- For the SBA areas, eight active net rides for mist netting were detected after checking 78 locations, summing up to a length of 161 meters¹⁰.

• Enforcement:

BirdLife Cyprus reported the active trapping sites detected during the survey to the relevant competent authorities.

- o SBA Police anti-poaching unit feedback:
 - Covert surveillance took place at one location in an attempt to catch the trappers, however the operation was unsuccessful. The other location was placed under surveillance, with no results.
 - According to SBA Police enforcement statistics, in total, this agency confiscated 21 mist nets, 35 limesitcks, eight calling devices, and no arrests for illegal bird trapping for the months of December 2019 - February 2020¹¹.

⁹ Information obtained from CABS winter camp report available sent to us via email on 23/3/20

 $^{^{10}}$ Joint monitoring was carried out on four different occasions with the assistance of SBA police. On the 20/1/20 we checked 17 locations. On the 24/1/20 we checked 21 locations. On the 30/1/20 we checked 20 locations of which 2 were active with a combined 8 active netrides.

¹¹ Data provided to Birdlife Cyprus by SBA police via email on 9/7/20.

Game & Fauna Service:

One location where an Active Unset net was found was ambushed by GFS, however the trapper did not show up. When the site was later checked, no net was found. No feedback was provided for the other locations reported by Birdlife Cyprus.

Death estimate for the whole of 2019:

- During spring 2019, it was estimated that fewer than 1,000 birds could have been killed across the whole of Cyprus (BirdLife Cyprus, November 2019 report).
- O During autumn 2019, it was estimated that just under 600,000 birds could have been killed across the whole of Cyprus (BirdLife Cyprus, April 2020 report).
- The levels of winter 2019-2020 mist netting activity recorded by BirdLife Cyprus (see above) suggest that trapping decreased compared to last year. As the method for the winter survey is not the same as spring and autumn, it is not possible to establish a death estimate comparable to those of spring and autumn. It is however possible to estimate the number of birds killed in nets/net rides that were found active during our spot check survey. This is conservatively estimated to be just under 7,600 birds; it is highlighted though that this number would be significantly higher for the whole of Cyprus.
- Therefore, it is conservatively estimated that during the whole of 2019, about 610,000 birds could have been killed across Cyprus.

4. Conclusions

BirdLife Cyprus undertook a spot check exercise in January 2020 for a period of 12 days in total, checking 180 locations in total. These locations were randomly selected from the complete list of trapping sites where mist netting activity has been detected in the past under our full survey programme. Out of these 180 locations, 7 active mistnetting sites were recorded. The findings included 15 active net rides for mist netting which summed up to a length of 302 metres.

Despite the fact that statistically reliable trends cannot be drawn from the winter survey data, the field data indicate a decrease in mistnetting this winter compared with the 2018-2019 winter season.

The winter trapping season tends to fluctuate each year according to the number of Song thrushes, the target species for winter trapping, which come to Cyprus to overwinter. This winter the number of Song thrushes wintering in Cyprus was, the evidence suggests, much reduced. This is evident from our birdwatching records for January/February 2020 as well from the hunting bag statistics for the hunting season of 2019-2020 which the Game and Fauna service published in May 2020 (see here). This document shows that 62% fewer Song thrush were legally shot in 2019-2020 compared to 2018-2019, which suggests that there were fewer Song thrushes wintering in Cyprus this winter compared to last. According to the bag stats, during the 2018-2019 winter season, when we detected increased levels of trapping, more than 2.5 million Song thrushes were legally shot. In winter 2019-2020, where trapping was reduced, just under 1 million Song thrush were legally shot. Click here to see the bag stats from 2018-2019.

Apart from the migration patterns, the weather can also play a big part in trapping levels. Windy and rainy weather conditions are not ideal for trapping. This may have also played a part in the reduction of trapping during the winter 2019-2020 season, as there were many days of unsuitable weather.

Based on the field data gathered by BirdLife Cyprus during spring 2019, autumn 2019 and the winter 2019-2020 seasons, it is conservatively estimated that about 610,000 birds could have been killed across the whole of Cyprus in 2019. This is an increase from the estimated number of birds killed during 2018, a disheartening result for us. There is still positive progress being made by the SBA police in the Dhekelia Sovereign Base Area. However, in the Cyprus Republic the closure of the Cyprus Police Anti-Poaching Unit in November 2019 has created a gap in terms of enforcement action against the large, organised trappers. This issue needs to be addressed by the Cyprus Government, in order to avoid a reversal of the positive progress that has been achieved in recent years.

Bibliography

- BirdLife Cyprus trapping reports from 2010 -2019 can be found here.
- BirdLife International (March 2016) 'Preliminary assessment of the scope and scale of illegal killing and taking of birds in the Mediterranean'. Report available here.
- Game and Fauna Service (17th March 2010). Position paper presented at the Committee of Environment of the Cyprus House of Parliament during a discussion to change the legislation on the protection and management of wild birds and game species.
- Game and Fauna Service, 2020. Κάρπωση Κυνηγετικής Περιόδου 2019 2020
 Αποτελέσματα Τηλεφωνικής Έρευνας. [PDF], p.22. Available here [Accessed 2 July 2020].
- Game and Fauna Service, 2019. Κάρπωση Κυνηγετικής Περιόδου 2019 2020
 Αποτελέσματα Τηλεφωνικής Έρευνας. [PDF], p.22. Available here [Accessed 2 July 2020].
- Magnin G. 1987. 'An account of illegal catching and shooting of birds in Cyprus during 1986'.
- Mukhin A, Chernetsov N, Kishkinev D. 2008. 'Acoustic information as a distant cue for habitat recognition by nocturnally migrating passerines during landfall'.
 Behavioural Ecology 19: 716-723.
- Schaub M, Schwilch R, Jenni L. 1999. 'Does tape-luring of migrating Eurasian reed warblers increase number of recruits or capture probability?' The Auk 116(4): 1047-1053.
- Sebastianelli, M., Moysi, M., Savva, G. and Kirschel, A. 2020. Tape Lures Swell
 Bycatch On A Mediterranean Island Harbouring Illegal Bird Trapping. p.2. Article
 available here.

Appendix 1

The following key assumptions are applied for the estimation of the birds killed:

- 12 metres is the assumed average length for a mist net.
- 20 birds are caught per 12-m net per day (Magnin, 1986).
- 0.5 birds are caught per limestick per day.
- 40 days is the duration of the trapping period for winter seasons.
- 50% scaling down factor applied for spring and winter seasons to account for a lower number of migrating birds passing via Cyprus compared to the autumn
- Net ride categories 'ANN' (Active No Nets), 'ASN' (Active Set Nets) and 'AUN' (Active Unset Nets) nets are assumed that they are active every day during the trapping season (read Appendix 1 for details on net ride classification).
 - Note: Net ride category 'P' (Prepared) is not taken into account for the estimation of numbers of birds killed anymore, following the recommendation of BTO science experts (BTO report, July 2015) to revise slightly the equation.

Using the above assumptions the bird death toll is estimated as follows for winter:

```
For nets = [(Total length of ANN+AUN+ASN rides)] / (average length of a net) x (20 birds per net per day) x (length of trapping season in days) x (50% scaling down factor) = 227/12x20x40 = 15,133 \times 50\% = 7,567
```

For limesticks = (Total number of limesticks found) x (0.5 birds per limestick per day) x (length of trapping season in days) x (50% scaling factor) $= 0 \times 0.5 \times 40 = 0 \times 50\%$

```
= 0 \times 0.5 \times 40 = 0 \times 50\%
```

= 0

Estimated number of birds killed in both nets/netrides and on limesticks found during our survey = 7,567

Appendix 2

Survey data for winter 2019-20 Evidence of illegal bird trapping activity from the spot check exercise

This is Sensitive information. If you want this information, please contact us directly.

Note 1: P – Prepared; ANN – Active No Net; AUN – Active Unset Net; ASN – Active Set Net

Note 2: 34 of the 180 locations checked this season were taken from CABS database and have not been included in the list above