



Cyprus bird trapping surveillance project:

Autumn 2011

Covering the latest findings of BirdLife Cyprus' continuing monitoring programme of illegal bird trapping in Cyprus

Date: December 2011

Author: Tassos Shialis

Reviewers: Martin Hellicar & Clairie Papazoglou

Contents	Page
Greek Summary	2
English Summary	6
1. Introduction	9
2. Methodology of field survey	11
3. Results for autumn 2011 period	12
Appendix 1 - Detailed methodology of the trapping surveillance programme	22
Appendix 2 – Estimation of bird death toll	25

Περίληψη

Παρόλο που η ομάδα πεδίου του Πτηνολογικού κατέγραψε 22% συνολική μείωση στη χρήση διχτύων το φθινόπωρο 2011 στην περιοχή μελέτης¹, η μείωση αυτή είναι απίθανο να είναι στατιστικά σημαντική και έτσι τα επίπεδα παγίδευσης πτηνών παρέμειναν σε επίπεδα ρεκόρ για 2^η συνεχόμενη χρονιά. Αυτό αποτελεί μια μεγάλη απογοήτευση μετά από όλες τις υποσχέσεις των αρμοδίων αρχών για μηδενική ανοχή, ουσιαστική πάταξη και δράση κατά τη διάρκεια του συνεδρίου της Συνθήκης της Βέρνης με θέμα την παράνομη θανάτωση πτηνών (Ιούλιος 2011, Λάρνακα, Κύπρος). Αξίζει να αναγνωριστεί η προσπάθεια των αρμοδίων αρχών πάταξης της Κυπριακής Δημοκρατίας, του Ταμείου Θήρας και του Κλιμακίου Πάταξης Λαθροθηρίας, αφού η αυξημένη προσπάθεια πάταξης συντέλεσε στη μείωση στη χρήση διχτύων κατά 41% σε περιοχές της Δημοκρατίας το φθινόπωρο 2011.

Σε περιοχές των Βρετανικών Βάσεων (Βάσεις) τα επίπεδα παγίδευσης με τη χρήση διχτύων που καταγράφηκαν ήταν ιδιαίτερα ανησυχητικά αφού ήταν 10 φορές ψηλότερα από της Δημοκρατίας, με το Κάβο Πύλα να αποτελεί και πάλι μια ιδιαίτερα προβληματική περιοχή. Επισημαίνεται επίσης ότι τα επίπεδα παγίδευσης με ξόβεργα ήταν και πάλι αυξημένα σε περιοχές της Δημοκρατίας και ότι τα εστιατόρια που σερβίρουν *αμπελοπούλια* είναι ουσιαστικά όλα στη Δημοκρατία ². Επίσης το δείγμα του Πτηνολογικού (που επιλέχθηκε με το σύστημα της τυχαίας δειγματοληψίας) δεν καλύπτει τις περιοχές των μεγάλων, οργανωμένων παγιδευτών που χρησιμοποιούν δίχτυα στη Δημοκρατία και επίσης στη Δημοκρατία υπάρχουν περισσότερα περιφραγμένα (και επομένως πιο δύσκολα να τα ελέγξει κάποιος) τεμάχια που πιθανόν να γίνεται παγίδευση πτηνών, παρά στις Βάσεις. Παρόλα αυτά οι προαναφερθέντες παράγοντες δεν μπορούν να θεωρηθούν ως αιτιολόγηση για τα 10 φορές ψηλότερα επίπεδα παγίδευσης που

Το συστηματικό, συνεχές πρόγραμμα παρακολούθησης του Πτηνολογικού κατέγραψε για το φθινόπωρο 2011 περισσότερα από 3 χιλιόμετρα (3 055 μέτρα) συνολικού μήκους

¹ Το πρόγραμμα παρακολούθησης του Πτηνολογικού καλύπτει δυο περιοχές: την γενική περιοχή του Αγίου Θεοδώρου/Μαρωνίου στην Επαρχία Λάρνακας και την περιοχή Βάσεων Δεκέλειας και Ελεύθερης Αμμοχώστου.

² Οι επιδρομές που έγιναν σε εστιατόρια κατά την φθινοπωρινή περίοδο του 2011 - κατά τις οποίες βρέθηκαν αμπελοπούλια σε 15 εστιατόρια - αποτελούν μια καλή αρχή αλλά πρέπει να εντατικοποιηθούν, ιδιαίτερα με δεδομένο ότι κανένα από αυτά τα ευρήματα δεν ήταν στην επαρχία Αμμοχώστου.

ενεργών διαδρομών για δίχτυα, 39 δίχτυα και 440 ξόβεργα. Το δείγμα μας κάλυψε περίπου το 20% της περιοχής έρευνας, επομένως με την προεκβολή των καταγραφών μας υπολογίζεται ότι υπήρχαν 15 χιλιόμετρα ενεργών διαδρομών στην ευρύτερη περιοχή έρευνας κατά το φθινόπωρο του 2011.

Η χρήση διχτυών ήταν κατά 22% μειωμένη σε σύγκριση με το 2010, όμως αυτή η διαφορά δεν ήταν στατιστικά σημαντική και τα επίπεδα παγίδευσης παρέμειναν κατά πολύ υψηλότερα σε σύγκριση με το 2009 (86% αύξηση το 2011 συγκριτικά με το 2009). Τονίζεται ότι η χρήση διχτυών βρίσκεται σε μια αυξητική τάση από το 2007. Τα επίπεδα χρήσης διχτυών (μέσο μήκος ενεργών διαδρομών για δίχτυα ανά τετράγωνο που ερευνήθηκε) μειώθηκαν σε περιοχές της Δημοκρατίας (41%) και αυξήθηκαν σε περιοχές των Βάσεων (2%) και 'Κοινές' περιοχές (81%) σε σύγκριση με το φθινόπωρο 2010. Τα επίπεδα παγίδευσης με δίχτυα, ανά τετράγωνο που ερευνήθηκε, σε περιοχές των Βάσεων Δεκέλειας ήταν 10 φορές μεγαλύτερα από της Δημοκρατίας, ενώ η χρήση ξοβέργων ήταν κατά 12% αυξημένη το φθινόπωρο 2011 σε σύγκριση με του 2010, και όλα τα ξόβεργα καταγράφηκαν στην Δημοκρατία.

Με τα επίπεδα παγίδευσης που καταγράφηκαν υπολογίζεται ότι για αυτό το φθινόπωρο (2011) πάνω από <u>1,4 εκατομμύρια πτηνά</u> (1 447 308) παγιδεύτηκαν σε δίχτυα και ξόβεργα εντός της περιοχής έρευνας και πάνω από 1,9 εκατομμύρια πτηνά (1 929 744) σε όλη την Κύπρο, ένας καταστροφικός αριθμός θανατωμένων πουλιών. Υπολογίζεται ότι η κατάσχεση 582 διχτύων και 4 288 ξόβεργων από το Ταμείο Θήρας, το Κλιμάκιο Πάταξης Λαθροθηρίας της Αστυνομίας και την Αστυνομία των Βάσεων γλίτωσε από την παγίδευση περίπου 630 000 πουλιά κατά το Φθινόπωρο του 2011. Η ανταπόκριση από τις αρμόδιες αρχές θα μπορούσε να ήταν καλύτερη, αφού ο χρόνος ανταπόκρισης στις αναφορές του Πτηνολογικού δεν ήταν ο αναμενόμενος.

Με μόνη εξαίρεση τη μείωση στα επίπεδα παγίδευσης με δίχτυα στη Δημοκρατία, τα συνολικά συμπεράσματα αποκαλύπτουν μια αντιφατική εικόνα από την υποσχόμενη εφαρμογή 'μηδενικής ανοχής' που έδωσαν οι αρμόδιες αρχές στο συνέδριο για τη Συνθήκη της Βέρνης που έγινε τον περασμένο Ιούλιο. Τα τελευταία χρόνια καταγράφονται περισσότερες ενεργές διαδρομές (π.χ. δίχτυα παρόντα (στημένα), ενεργές ηχομιμητικές συσκευές, φτερά πουλιών στο έδαφος), που υποδεικνύει ότι οι παγιδευτές είναι πιο δραστήριοι, πιο προκλητικοί και δεν φοβούνται την πιθανή ποινική

δίωξη. Σε μια περίπτωση μετρήθηκαν 25 δίχτυα σε μια περιοχή με ακακίες σε ένα τετράγωνο της Βρετανικής Βάσης Δεκέλειας, μια πρωτοφανή καταγραφή στη διάρκεια των 10 χρόνων του προγράμματος παρακολούθησης. Επιπρόσθετα υπήρξε περαιτέρω αύξηση στη χρήση ξοβέργων στη Δημοκρατία, δίνοντας συνέχεια στη δραματική αύξηση από το 2009. Ο Πτηνολογικός Σύνδεσμος Κύπρου πιστεύει ότι αυτή η αύξηση συνδέεται με την σχετική επιείκεια των αρμοδίων αρχών προς τους παγιδευτές με ξόβεργα, που δίνει το μήνυμα ότι είναι μια 'αποδεκτή' μέθοδος παγίδευσης. Η επιείκεια αυτή δεν είναι απαραίτητα (ή όχι πάντοτε) εξαιτίας της μη σωστής επιβολής του νόμου αλλά κυρίως λόγω της περιορισμένης δυναμικότητας των αρμοδίων αρχών προσται σε τοποθεσίες όπου γίνεται παγίδευση σε μεγαλύτερη κλίμακα με τη χρήση διχτύων.

Το Ηνωμένο Βασίλειο και η Κυπριακή Δημοκρατία συνεχίζουν να χάνουν την μάχη κατά της παράνομης αυτής δραστηριότητας, αφού η παγίδευση πτηνών παρέμεινε σε επίπεδα ρεκόρ για 2° συνεχόμενο φθινόπωρο, αποτελώντας οικολογική καταστροφή. Στις περιοχές των Βάσεων τα επίπεδα παγίδευσης με δίχτυα έχουν εκτοξευτεί στα ύψη, ενώ η Δημοκρατία πρέπει επειγόντως να αντιμετωπίσει την αύξηση στην χρήση ξοβέργων και τα εστιατόρια που πωλούν τα παράνομα παγιδευμένα πουλιά, τον κύριο δηλαδή οικονομικό μοχλό αυτής της δραστηριότητας. Παρόλες τις προσπάθειες των αρμοδίων αρχών είναι ξεκάθαρο ότι χρειάζεται μεγαλύτερη αποφασιστική δράση για να αντιστραφεί η κατάσταση.

Η Πτηνολογικός Σύνδεσμος Κύπρου καλεί την Κυπριακή Δημοκρατία και το Ηνωμένο Βασίλειο να υιοθετήσουν και να εφαρμόσουν την 'Διακήρυξη της Λάρνακας' και τις εισηγήσεις που συζητήθηκαν στο συνέδριο της Συνθήκης της Βέρνης, αφού συμπεριλαμβάνουν τα κύρια στοιχεία για να εξαλειφθεί αποτελεσματικά η παράνομη παγίδευση πτηνών στην Κύπρο. Στην πράξη, η Κυπριακή Δημοκρατία και το Ηνωμένο Βασίλειο χρειάζεται: α) να ενδυναμώσουν την πάταξη σε κάθε στάδιο των εγκληματικών ενεργειών κατά των πτηνών, στοχεύοντας τόσο τους 'μεγάλους' παγιδευτές όσο και την παγίδευση μικρής κλίμακας με την υιοθέτηση 'μηδενικής ανοχής', και τα εστιατόρια που σερβίρουν παγιδευμένα πτηνά, β) να αναγνωρίσουν τα εγκλήματα κατά των πτηνών ως ένα σημαντικό κίνδυνο για τις προσπάθειες προστασίας και της διατήρησης των πληθυσμών των πτηνών, και συνεπώς να επιβάλλονται αποτρεπτικές δικαστικές ποινές και να υπάρξει ένδειξη πραγματικής πολιτικής βούλησης, και γ) να δημιουργήσουν και να υποστηρίξουν επικοινωνιακή στρατηγική μεταξύ των εμπλεκομένων φορέων π.χ. την προώθηση εκστρατείας ενημέρωσης του κοινού με στόχο την αλλαγή της κοινής γνώμης.

Summary

Though a 22% reduction in overall mist net use was recorded by the BirdLife survey team in the survey area in autumn 2011, this drop is very unlikely to be statistically significant and so bird trapping levels have remained at record levels for the 2nd consecutive year. This is a major disappointment after all the promises from competent authorities for zero tolerance, effective enforcement and action made during the Bern Convention conference on Illegal Bird killing (July 2011, Larnaca, Cyprus). The enforcement authorities of the Republic (RoC), the Game Fund and Police anti-poaching unit, deserve credit for increased enforcement efforts that led to a 41% reduction in mist net use in RoC areas during autumn 2011. In the areas of the British Sovereign Bases (SBA), levels of detected mist net use were an alarming 10 times higher than in the Republic, with Cape Pyla again a particular problem area. It should be noted here, however, that limestick use was again found to be on the rise in RoC areas and that the ambelopoulia-serving restaurants are the Republic's problem³. Also, the BirdLife survey sample does not 'capture' the big, organised mist netting sites in the RoC and there are more fenced (and hard-to-check) potential trapping sites in the RoC than in the SBAs, though this cannot be considered to account for the 10-fold difference in recorded mist netting levels.

BirdLife Cyprus, through its ongoing, systematic field monitoring in the Larnaca and Famagusta districts, located during the autumn of 2011, more than 3 km (3,055 metres) of active net rides, 39 mist nets and 440 limesticks. Our sample covered about 20% of the survey area in the Maroni-Ayios Theodoros and Larnaca-Famagusta (SE corner of Cyprus) regions and therefore through extrapolation from our findings above we estimate that there were 15km of active net rides in this region in autumn 2011.

Mist net use was 22% down compared to 2010, but this difference was not statistically significant and trapping levels remained dramatically higher than in 2009 (86% higher in 2011 compared to 2009 levels). We stress that mist net use has been on a steady rise since 2007. Mist net use (average length of active net rides per square surveyed)

³ The restaurant raids carried out during the autumn 2011 period - which resulted in ambelopoulia being found in 15 establishment - can be considered a good start but must be intensified, especially bearing in mind that none of the trapped bird finds were in the Famagusta area.

decreased for Republic squares (41%) and increased for Sovereign Base Area (2%) and Joint jurisdiction (81%) squares compared to autumn 2010. Mist net use levels were 10 times higher in Dhekelia SBA compared to areas of the Republic, per surveyed square, while limestick use was 12% up in autumn 2011 compared to autumn 2010, with all limesticks found in the Republic.

With these trapping levels recorded it can be estimated that this autumn (2011) over <u>1.4</u> <u>million birds</u> (1,447,308) were caught in mist nets and on limesticks within the survey area and over 1.9 million birds (1,929,744) across the whole of Cyprus, a catastrophic bird death toll. The confiscation of 582 nets and 4,288 limesticks reported by the Game Fund, Cyprus Police anti-poaching unit and SBA Police can be estimated to have spared the lives of 630,000 birds during the autumn of 2011. Overall, the on-the-ground cooperation with the competent authorities could have been better, since the response time to BirdLife Cyprus reports was not always as hoped for.

With the exception of the mist netting reduction in the RoC, the overall results reveal a contradictory picture to the 'zero tolerance' approach pledged by the competent authorities at the Bern Convention conference held last July. In recent years there are more active net rides recorded overall (e.g. nets in situ, decoys playing, feathers located), which suggests that trappers are becoming busier, more blatant and fearless of prosecution. In one incident, 25 nets were recorded in a single acacia 'patch' of one square in the British Bases of Dhekelia, an unprecedented find in the 10 years of the surveillance programme. Moreover there was a further increase in limestick use in the Republic, adding to the dramatic surge since 2009. BirdLife Cyprus believes this is linked to the leniency that competent authorities have shown towards trappers with limesticks, giving the message that it is an 'acceptable' trapping method. This leniency does not necessarily (or not always) result from non-enforcement but is mostly a product of the stretched capacity of the enforcement bodies in the Republic, which means they have to concentrate on bigger trapping operations, involving mist nets.

Both the UK and the Republic of Cyprus are losing the battle against this illegal activity, as bird trapping remained at record levels for the 2nd consecutive autumn, constituting an ecological disaster. In the SBA areas trapping levels with mist nets have skyrocketed while the Republic needs to deal urgently with the limestick use surge and the

restaurants selling illegally trapped birds, the main economic driver of this activity. Despite the efforts of competent authorities it is obvious that greater decisive action is needed to reverse this situation.

BirdLife Cyprus calls upon the Republic of Cyprus and the UK government to adopt and implement the '*Larnaca declaration*' and the recommendations discussed at the July Bern conference, as they contain the core elements for effectively eliminating illegal bird trapping in Cyprus. In essence the Republic and the UK Government need a) to strengthen enforcement at each stage of the bird crime, hence targeting both the 'big' trappers as well as small scale trapping based on a 'zero tolerance' approach, and the restaurants serving trapped birds, b) to recognize bird crime as a significant risk to conservation efforts and to the maintenance of bird populations, thus imposing deterrent court fines and showing real political will, and c) to develop and support communication strategies between relevant stakeholders e.g. with the promotion of a public awareness campaign to change public opinion.

1. Introduction

Bird trapping in Cyprus is an indiscriminate and illegal practice that threatens many bird species of priority conservation concern for the EU. Trappers are mainly after blackcaps (*Sylvia atricapilla*) and other migrant songbirds, destined for home consumption or to be served as expensive *ambelopoulia* delicacies in local restaurants. Trapping activity is concentrated in the autumn season, when the largest numbers of birds pass through Cyprus on their way to winter grounds. Trappers are also active both during spring and winter. Many 'non-target' birds are known to die in the mist nets and on the limesticks trappers use, significantly increasing the conservation impact of trapping.

Mist nets can generally catch many more birds than limesticks, though experienced limestick users, with expert knowledge of how to prune trees or bushes for optimum placement of the glue sticks, can probably catch as many birds as mist net users. The catch is significantly increased by the now widespread use of sound devices that reproduce bird song, which draw migrating birds into areas set with nets and/or sticks. Mist net use became widespread in the 1980s, while the extensive use of recorded bird song began in the 1990s. Nets are often erected in established plantations of citrus, olives, figs or other fruit trees. Additionally large areas of land have been planted with non-native acacia bushes specifically in order to create good bird trapping habitat. Cape Pyla, in the Eastern British Sovereign Base area (ESBA), is the most obvious example of extensive habitat management for trapping.

Though bird trapping has been illegal in Cyprus for over 30 years (since 1974), the practice was widespread and largely blatant prior to a clampdown by authorities in the new millennium. Financial gain is the main motivation for illegal trapping. Determined poachers can make thousands of Euros a year by selling *ambelopoulia*, thrushes and other birds for home or restaurant consumption. Trappers have become well organized due to increased enforcement and it is generally acknowledged that the 'big' trappers are a hard-core network of ruthless criminals. However, a resurgence of smaller-scale limestick use has also been noted in recent years, a response to a generally (and unacceptably) more "permissive" climate when it comes to limesticks.

In the autumn of 2002, concerns about the conservation impacts of bird trapping in Cyprus led the Royal Society for the Protection of Birds (the RSPB, BirdLife in the UK) and BirdLife Cyprus (BirdLife in Cyprus) to launch a groundbreaking joint project to monitor the illegal activity. Systematic monitoring has subsequently been carried out every spring and autumn season and, since 2007, in winter too. This report covers the findings of the autumn 2011 surveillance programme, the 10th successive autumn survey.

2. Methodology of field survey

The monitoring programme for illegal trapping follows a "Bird trapping protocol" that has been developed and implemented by BirdLife Cyprus and the RSPB, in consultation with the Cyprus Game Fund and the British Sovereign Base Area (SBA) police. Monitoring is concentrated in the two main trapping areas of the Island:

- the SE corner of the island, covering Paralimni, Ayia Napa, Cape Greco and Cape Pyla in the Famagusta and Eastern Larnaca Districts (including the Dhekelia Eastern Sovereign Base (ESBA) area), and
- Ayios Theodoros and Maroni valleys, west of Larnaca.

The project is undertaken with the close co-operation of the competent authorities of the Republic of Cyprus (the Cyprus Game Fund Service and the Anti-poaching unit of the Cyprus Police) and the British Sovereign Base Areas (SBAs) - the SBA Police. When trapping evidence is found, the observers immediately contact the relevant enforcement authorities. It is stressed here that the BirdLife Cyprus observers never confront suspected trappers and never remove trapping paraphernalia.

For further details on the methodology of the surveillance programme see Appendix 1.

3. Results and Discussion

Overview of autumn 2011 trapping season

The autumn survey 2011 was carried out during September and October and 60 squares were surveyed in total. In keeping with BirdLife's standard practice, the survey team immediately reported all bird trapping finds to the relevant enforcement authorities, the SBA Police or the Cyprus Game Fund / Police Anti-poaching Unit, depending on the location of the finds.

More than 3 km (3,055 metres) of active net rides (cleared "runs" for mist net setting in acacia plantations or other habitats e.g. orchards, olive trees) were found. A simple extrapolation (our sample covered 20%, or 1/5 of the survey area) suggests there were 15 km (3km x 5) of active net rides within the survey area during autumn 2011. It is worth noting that over 65 fenced compounds could not be fully checked by our field team – these may well have contained more net runs. A breakdown of the netting finds shows:

- 604 metres were coded as "prepared" ("P") rides,
- 1,704 metres as "active no net" ("ANN"),
- 377 metres as "active set net" ("ASN") and
- 370 metres as "active unset nets" ("AUN").

Moreover, 39 mist nets were found (19 set and 20 unset) during the survey; in one square the team counted 25 mist nets (6 set and 19 unset), an unparalleled find during the 10 years of the monitoring programme! Opportunistic checks beyond the survey area recorded an additional 415 metres of active net rides, with 4 nets found.

With regards to limesticks, a total of 440 were found in autumn 2011 within the surveyed squares. An additional 95 limesticks were located during opportunistic searches beyond the checked squares. It is highlighted here that the BirdLife Cyprus methodology focuses mainly on locating mist nets and other organisations⁴, which focus much more on finding limesticks, reported finding thousands of limesticks during autumn 2011.

It can be estimated, based on our survey finds, that, during the autumn of 2011, more than **1.4 million birds** were killed (1.447.308) within the survey area and nearly 2 million

⁴ Friends of the Earth (Cyprus), Committee Against Bird Slaughter (CABS) and Migratory Birds Conservation in Cyprus (MBCC).

birds (1.929.744) for the whole of Cyprus (see Appendix 2 for more details on the methodology and key assumptions). The confiscation of 582 nets and 4,288 limesticks reported by the Game Fund, Cyprus Police anti-poaching unit and SBA Police can be estimated to have spared the lives of 630,000 birds during the autumn of 2011⁵.

Results analysis

The figure below shows the trends in mist netting per square surveyed over the period 2002-2011. Note that the sample size (number of squares surveyed) varies between the years. The errors bars on the average length of net rides indicate the standard error of the mean values for each year.



Figure 1 Trends in autumn mist netting

It is clear from this graph that there has been a dramatic increase in trapping with mist nets since 2007, particularly in the last 2 years:

⁵ This estimate of number of birds saved by enforcement is based on the simple assumption that confiscations made in August/September removed the nets/limesticks from the field for the full 60 day duration of the season, while confiscations made in October for only 30 days.

- <u>Average length of net rides (m) per square surveyed</u>: a small decrease of 8% was recorded for autumn 2011 compared to 2010 (*not* a statistically significant difference, as suggested by the overlap in error bars in figure 1). However trapping levels remained much higher in comparison to 2009, with 64% higher levels recorded.
- <u>Average length of set nets (m) per square surveyed</u>: an increase of 29% and 62% for autumn 2011 was recorded in comparison to 2010 and 2009 respectively.

Recent trends in trapping activity

A more reliable trend analysis of recent trapping levels is arrived at by analyzing the data for <u>60 squares</u> which have been surveyed consistently since autumn 2007. The figure below shows the recent trends in mist netting for these squares. The errors bars on the average length of net rides indicate the standard error of the mean values for each year.



Figure 2 Recent trends in autumn trapping with mist nets

This graph depicts a similar picture as figure 1:

- <u>Average length of active net rides (m) per square surveyed</u>: a decrease of 22% was recorded for autumn 2011 comparing to 2010 (*not* a statistically significant difference as suggested by overlap in error bars in figure 2). However trapping levels remained much higher in comparison to 2009, with 86% higher levels recorded in 2011.
- <u>Average length of set nets (m) per square surveyed</u>: an increase of 10% and a decrease of 3% for autumn 2011 compared to 2010 and 2009 respectively. The dramatic increase in average set net length since 2008 is obvious from the graph.

As discussed in the methodology section each net ride is classified into one of 4 categories: prepared (P), active no net (ANN), active unset net (AUN) and active set net (ASN) (see Section 2 and Appendix 1 for more details,). The following figure shows the percentage breakdown of the different net codes categories for the total length of active net rides recorded for each autumn season, for the 60 repeatedly surveyed squares.



Figure 3 Percentage breakdown of mist net code categories

From this graph it is evident that in recent years trapping activity has not only increased overall (as shown in Figure 2) but trapper activity levels have also increased (more

active nets found) and trappers have become more blatant since the survey team has been finding more set nets (also seen in Figure 2). In many cases mist nets, loudspeakers and decoys are left on site, suggesting that trappers are little concerned about getting caught and being prosecuted.

The following graph shows the autumn trapping levels with the use of limesticks for the 60 squares.





Trapping levels with limesticks increased by 12% further for autumn 2011 compared to autumn 2010, while a comparison to 2009 shows a dramatic increase of more than 200%. These increases, BirdLife Cyprus believes, are connected to the fact that limesticks are considered a 'harmless traditional' practice by many and to the leniency that competent authorities have sometimes shown towards trappers with limesticks, giving the message that it is an 'acceptable' trapping method despite the fact that it is illegal and highly damaging.

Trapping levels under different jurisdictions

Surveyed squares can be under the jurisdiction of the Republic of Cyprus (RoC) or of the United Kingdom, as part of the Sovereign Base Areas (SBA). If a square is partly controlled by the Republic and partly by the UK then it is referred as 'Joint'. The following graph summarises the trapping levels using mist nets under the different jurisdictions⁶. It is noted that the sample size of the squares (number of squares) surveyed varies between years.



Figure 5. Trends in autumn trapping levels using mist nets under different jurisdictions

It is evident from this graph that trapping with mist nets is much higher in SBA and Joint squares compared to RoC controlled squares, particularly in the last 3 years.

For RoC squares: Trapping with mist nets for autumn 2011 has decreased by 41% and 16% compared to 2010 and 2009 respectively (average length of net ride was 17 metres, 29 metres and 20 metres for 2011, 2010 and 2009 respectively). The Game Fund reported that during the months of August-October 2011, in the Larnaca & Famagusta and Lefkosia districts, 57 people (for

⁶ The average net ride length per square surveyed for a jurisdiction is calculated as:

⁼ sum of length of net rides found for that jurisdiction / number of squares surveyed for that jurisdiction

54 cases) were arrested for illegal bird trapping and it seized 221 mist nets and 3,998 limesticks.

- For SBA squares: Trapping with mist nets for autumn 2011 has increased by 2% and 146% compared to 2010 and 2009 respectively (average length of net ride was 171 metres, 167 metres and 70 metres for 2011, 2010 and 2009 respectively). The SBA police reported that during the months of August-October 2011, 25 arrests were made and it seized 361 mist nets and 290 limesticks.
- For Joint squares: Trapping with mist nets for autumn 2011 has increased by 81% and 128% compared to 2010 and 2009 respectively (average length of net ride was 130 metres, 72 metres and 57 metres for 2011, 2010 and 2009 respectively).

The following graph gives an overview of the trapping levels (with mist nets and limesticks) under different jurisdictions for autumn 2011.



Figure 6 Trapping under different jurisdiction for autumn 2011

 <u>Trapping with mist nets</u>: Trapping levels (average length of net ride per square surveyed) was 10 times higher in SBA controlled areas compared to the Republic. Joint squares remained at very high levels as well, apparently acting as 'grey' areas of no clear jurisdiction. <u>Trapping with limesticks</u>: All the limesticks found were in the Republic for autumn 2011 and at much higher levels compared to previous years (on average 9.6 limesticks per square for autumn 2011 compared to 4.3 limesticks for autumn 2010).

An overview of the results suggests the RoC made significant inroads on mist net use during the autumn of 2011, but on the other hand the Republic has a growing problem with limesticks (and also 'hosts' the persistent problem of restaurants serving *ambelopoulia*). For the SBA authorities, the picture emerging from autumn 2011 is grim:

- In SBA areas, trapping with mist nets has reached unprecedented levels, while in the Republic net use was down by a noteworthy 41% but we are witnessing a dramatic increase in limestick use since 2009, since competent authorities have at times been lenient on limesticks, or have had to focus on mist nets due to limited enforcement capacity, and the general public impression regarding limesticks is that it is a 'harmless tradition'.
- The Republic has also the issue of restaurants offering the illegally trapped birds to deal with, the key economic driver for the big trappers. For 2011 (till end November) the Game Fund reported that 22 restaurants had been checked for *ambelopoulia* serving (in cooperation with the Police anti-poaching unit) and 10 of these were charged. The charged restaurants were in the Limassol (4), Kakopetria (2), Nicosia (2), Larnaca (1) and Paphos (1) areas. Restaurants within our survey areas (the real 'hot' areas for *ambelopoulia* serving) are notably *absent* from this list. One positive from the autumn season, was the imposition of a €10,000 court fine for an 82-year-old restaurant owner from the Larnaca area convicted for possession of over 2,000 dead wild birds. In mid-December, the Cyprus Police anti-poaching unit and the Game Fund reported further raids, covering 16 restaurants in four districts. Dead wild birds were found in 5 establishments none of these finds were in the Famagusta area, but one was within our survey area, in the Larnaca district.
- Mist net use may be recorded as 'down' in the Republic, but some of the sites where the 'big', organised mist net users are known to be active in the Republic are not covered by the (randomly selected) survey squares. If these areas were surveyed then it is almost certain that mist net levels in the Republic would be recorded as higher.

- There was only one coordinated raid against big, organised trappers during the autumn of 2011, when the Cyprus police anti-poaching unit and Game Fund raided known sites in the Larnaca district in mid-October.
- Trappers increasingly fence off their 'patches'. Fenced / compound areas are noted during the field survey and a record is made of whether they could not be checked at all or only partly checked by the survey team. From an analysis of the field data it was found that squares in the Republic have on average 50% more fenced areas (1.5 compounds / square surveyed) compared to the SBA areas (1 compound / square surveyed). Furthermore, compounds were generally better fenced and therefore harder to check in the Republic (80% of them could not be fully checked by the field team) compared to compounds in the SBA areas (where 55% could not be fully checked). It is very likely that trapping activity takes place in some of these compounds. This pattern may *partly* explain the huge difference in netting levels in the SBAs and Republic, as may the (chance) 'absence' of 'big' trappers' patches in our survey, but it is highly unlikely it explains the 10-fold difference in recorded mist net use!

Cooperation with the competent authorities during Autumn 2011

As mentioned earlier, the BirdLife Cyprus team never acts in any way that could be considered activist and always informs the competent authorities when evidence of bird trapping is found. The team contacted and reported to the Cyprus Game Fund 38 locations and to the SBA Police 9 locations which had trapping paraphernalia on site and were classified as 'active' (ANN, AUN and ASN).

Despite the fact that BirdLife Cyprus has been working with the Cyprus Game Fund and SBA Police on illegal bird trapping for a number of years and there is a good working relationship between the different organisations, the response time with regards to reports of active trapping we pass on is still disappointing. This response is often slow and sometimes non-existent.

BirdLife Cyprus recognizes the efforts of all the competent authorities against bird trapping (numbers of arrests and confiscations have increased year after year) but believes that both competent authorities could better prioritize their time in order to respond to reporting of trapping activity as efficiently and effectively as possible, with the

aim of securing arrests and making early confiscations. Above all else, however, we are convinced that the enforcement authorities are too stretched on the ground and need to be re-enforced if they are to "win" the battle against the increasingly organised and determined trappers.

Appendix 1 – Methodology of the trapping surveillance programme

Survey area and sampling strategy

The surveillance project began in 2002 with the coverage of 60 sample squares (each 1x1 km) chosen at random from within a 261 km² study area, which covered most of the Famagusta/Eastern Larnaca area and the Ayios Theodoros – Maroni area.

In 2005, the monitoring became more targeted, focusing on habitat suitable for trapping. Each 1 km square within the study area was classified as either a 'possible bird trapping area' or 'unlikely bird trapping area' based solely on the presence or absence of vegetation suitable for setting limesticks or nets. Surveillance subsequently took place in 'possible' squares only. Some 44 of the original 60 sample squares were 'possible bird trapping area' squares under the new classification. These 44 squares were kept, with another 16 new squares chosen randomly to bring the total sample to 60 again.

Then, in 2007, the survey area was expanded to cover 295 km² for Famagusta/Eastern Larnaca area and 111 km² for Ayios Theodoros – Maroni area, bringing the total survey area to 406 km². This was done after preliminary surveys in autumn 2006 found evidence of extensive trapping on the margins of the original (261 km²) survey area. The sample size was expanded to 100 squares (40 new squares were randomly chosen) to allow for this extension of the survey area. Out of the 406 1 km² squares of the expanded survey area, 301 have been classified as 'possible bird trapping area' squares.

The random selection of sample squares is stratified to ensure representative coverage of areas under SBA, Republic of Cyprus and "Joint" jurisdiction (squares where the two jurisdictions meet).

Surveying for trapping activity

Surveying consists of a two-man team systematically searching for evidence of illegal trapping activity in the randomly selected one by one kilometre squares. The time taken to survey each square is recorded, as are weather patterns and the presence or absence of large numbers of migrant birds.

For safety reasons (avoidance of possible confrontation with trappers) the BC observers do not go out in the field at dawn, which is the main period of trapping activity, but carry out surveys between 09:00 and 17:00. Each sample square is surveyed only once each season, partly for safety reasons (minimising the risk of the observers becoming known to trappers) and partly because repeat sampling of each square has no particular value when it comes to analysis of the collected data. Opportunistic observations are also made in the surroundings of squares where mist netting is suspected.

Mist nets

The two observers carry out a thorough search of all habitat patches suitable for the setting of mist nets (i.e. all areas with bushes and/or trees) within each sample square. The observers record all direct and indirect evidence of mist net and tape lure use and of net ride preparation and use (e.g. cleared corridors within vegetation for putting up nets, presence of pole bases). The codes used for the various categories of mist netting activity and tape lure use are given below, as are the codes used for recording the type of habitat where trapping activity is detected⁷. The surveyors note cases where they come across enclosed (fenced) areas that they cannot see into at all, or cannot see into well enough to survey fully.

Box 1 Key to survey codes used for the field			
Net code	Habitat code	Tape lure code	
O – old ride		P – tale lure present, playing	
P – ride recently prepared	A – acacia	L – loudspeakers present	
ANN – active no nets present	C – citrus	Y – tape lure present, not playing	
AUN – active unset net present	E – eucalyptus	U – unknown	
ASN – active set net present	F – fig	W - electrical wires associated	
IUN – inactive unset net present	J – mulberry	with tape lures	
	O – olive	B – car battery present	
	M – maquis		
	P – pomegranate		
	K – carob		
	Cy - cypress		

Limesticks

⁷These codes are explained fully in detail in the Autumn 2002 Bird Trapping surveillance report

While the main effort of the observers is to locate evidence of mist netting, all evidence of limestick activity is also recorded. Limesticks are much harder to locate in the field than mist nets and are often set in a different habitat to mist nets. In addition, incidental evidence for limestick use is hard to detect (though trees pruned to hold limesticks are readily identifiable). It is impractical to search entire 1 km² sample squares for limesticks due to the time consuming nature of the task. The protocol is therefore for the observers to look out for limesticks while concentrating on surveying for mist netting activity.

Appendix 2 Estimation of numbers of birds caught during spring 2011

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, 1986⁸)
- 0.5 birds are caught per limestick per day
- 60 days is the duration of the trapping period for autumn, starting on 1st September
- 301 are the possible bird trapping squares within the survey area as identified from the surveillance programme in 2007 (the random sample of squares surveyed by BirdLife Cyprus is taken from these 301 squares)
- 75% of illegal trapping activity for all of Cyprus takes place within the survey area (based on input from enforcement authorities and other experts)
- For P (prepared) nets it is assumed that they are active *every other day* while for ANN (Active No Nets), ASN (Active Set Nets) and AUN (Active Unset Nets) nets it is assumed that they are active every day during the trapping season.

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

For nets = [(Total length of P category net rides/2) + (Total length of ANN+AUN+ASN rides)] / (average length of a net) x (20 birds per net per day) x (total number of 'possible bird trapping area' squares / number of squares surveyed) x (length of trapping season in days)

= ((604/2) + (1,704+370+377)) x (301/60) / (12) x 20 x 60

= 1,381,088 birds caught within the survey area in mist nets.

For limesticks = (Total number of limesticks found) x (0.5) x (total number of 'possible bird trapping area' squares / number of squares surveyed) x (length of trapping season in days)

= 440 x 0.5 x (301/60) x 60

= 66,220 birds caught within the survey area on limesticks.

⁸ Magnin G. (1986) "An account of the illegal catching and shooting of birds in Cyprus during 1986". International Council for Bird Preservation

In total **1,447,308 birds** can be estimated to have been caught on mist nets and limesticks within the survey area in autumn 2011. Assuming that the survey area accounts for 75% of the trapping activity in Cyprus, the bird death toll across Cyprus is:

= 1,447,308 / 75%

= 1,929,744 killed in nets and on limesticks across all Cyprus in autumn 2011.