



UPDATE on illegal bird trapping activity in Cyprus

Covering the autumn 2018 findings of BirdLife Cyprus' continuing monitoring programme for illegal bird trapping in Cyprus and providing an overview of the latest developments regarding the problem

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Περίληψη

Τα ευρήματα του προγράμματος συστηματικής παρακολούθησης υπογραμμίζουν μια επιτυχία στην προστασία του περιβάλλοντος, με τη διάσωση δεκάδων χιλιάδων πτηνών, σε σύγκριση με τα επίπεδα παγίδευσης των προηγούμενων ετών. Η επιτυχία αυτή είναι αποτέλεσμα της στενής και αποτελεσματικής συνεργασίας μεταξύ των αρμόδιων αρχών και των ΜΚΟς, και συγκεκριμένα του Κλιμάκιου Πάταξης Λαθροθηρίας των Βρετανικών Βάσεων.

Παρόλα αυτά, υπάρχουν τρεις σημαντικές επιφυλάξεις για τα καλά νέα που παρουσιάζονται εδώ.

1. Ο εκτιμώμενος αριθμός των πτηνών που θανατώθηκαν από την παράνομη παγίδευση στις Βρετανικές Βάσεις (c.121.000) παραμένει υψηλότερη από τον εκτιμώμενο αριθμό για τη Δημοκρατία (c.84.000).
2. Δεν υπάρχει χώρος για εφησυχασμό, καθώς η αγορά και η ζήτηση για αμπελοπούλια εξακολουθεί να υπάρχει και παραμένει να είναι επικερδής, οπότε οποιαδήποτε «χαλάρωση» στην επιβολή θα είχε ως αποτέλεσμα την αύξηση των επίπεδων παγίδευσης ξανά, όπως συνέβη στο παρελθόν.
3. Τα επίπεδα παγίδευσης εντός των περιοχών της Κυπριακής Δημοκρατίας δυστυχώς αυξήθηκαν κατά τη διάρκεια της κύριας φθινοπωρινής περιόδου παγίδευσης του 2018 (σε σύγκριση με το 2017).

Το πρόγραμμα παρακολούθησης του Πτηνολογικού καλύπτει μια περιοχή ερευνάς η οποία συμπεριλαμβάνει δύο περιοχές δικαιοδοσίας: την Κυπριακή Δημοκρατία και τις Βρετανικές Βάσεις Δεκέλειας (SBA). Συγκεκριμένα καλύπτει τις περιοχές Λάρνακας - Αμμοχώστου και Αγίου Θεοδώρου – Μαρώνη. Η ανάλυση των στοιχείων της έρευνας δείχνει ότι κατά τη διάρκεια του φθινοπώρου του 2018 υπήρχαν 3,5 χιλιόμετρα ενεργών διαδρομών στην περιοχή έρευνας. Με αυτά τα επίπεδα παγίδευσης εκτιμάται ότι σχεδόν 250 000 πτηνά μπορεί να θανατώθηκαν εντός της περιοχής έρευνας πεδίου. Η χρήση διχτύων εντός της περιοχής έρευνας για το φθινόπωρο 2018 ήταν κατά 90% χαμηλότερη σε σύγκριση με τα επίπεδα του έτους 2002 (όταν ξεκίνησε το πρόγραμμα παρακολούθησης του Πτηνολογικού) σύμφωνα με την ανάλυση που έγινε στο πρόγραμμα TRIM. Αυτά είναι τα χαμηλότερα επίπεδα παγίδευσης με δίχτυα που καταγράφηκαν από την έναρξη του προγράμματος παρακολούθησης το 2002. Πρόκειται για ένα πολύ θετικό αποτέλεσμα, ιδίως επειδή το φθινόπωρο είναι η κύρια εποχή παγίδευσης, και οφείλεται κυρίως στην πρόοδο που επιτεύχθηκε στις περιοχές των Βρετανικών Βάσεων Δεκέλειας τα τελευταία δύο χρόνια. Αντίθετα, τα επίπεδα παγίδευσης στις περιοχές της Κυπριακής Δημοκρατίας παρουσίασαν αύξηση για το φθινόπωρο του 2018, μια ανησυχητική εξέλιξη.

Ο Πτηνολογικός Σύνδεσμος Κύπρου πιστεύει ότι τα θετικά αποτελέσματα του φθινοπώρου του 2018 οφείλονται κατά κύριο λόγο στην πιο αποτελεσματική πάταξη στο πεδίο από την Αστυνομία των Βρετανικών Βάσεων Δεκέλειας, σε συνδυασμό με πιο αποτρεπτικές ποινές για παραβάτες και τις στοχευμένες επιχειρήσεις σε περιοχές όπως το Κάβο Πύλα, όπου εκτάσεις με ακακίες χρησιμοποιούνται για παράνομη παγίδευση πουλιών. Επιπλέον οι διωκτικές αρχές της Δημοκρατίας, και ιδιαίτερα η Υπηρεσία Θήρας και Πανίδας, έχουν συνεχίσει να εκδίδουν ψηλά, αποτρεπτικά εξώδικα, τα οποία ο Πτηνολογικός θεωρεί ότι έχουν επίσης συνεισφέρει στη συνολική μείωση της

παγίδευσης πουλιών με τη χρήση δικτύων. Για τρίτο συνεχές έτος, η ομάδα ερευνών του RSPB (Royal Society for the Protection of Birds) συνεργάστηκε στενά με την Αστυνομία των Βρετανικών Βάσεων, τοποθετώντας κρυφές κάμερες στις περιοχές παγίδευσης, μια συνεργασία η οποία πιστεύουμε ότι συνέβαλε σημαντικά στη μείωση της παγίδευσης, ιδίως στο Κάβο Πύλα. Η προσπάθεια καταπολέμησης της παγίδευσης στις Βρετανικές Βάσεις έχει εξελιχθεί σε μια ουσιαστική και αποτελεσματική συνεργασία μεταξύ των ΜΚΟ και των αρμόδιων αρχών. Πιστεύουμε ότι μια παρόμοια προσέγγιση θα πρέπει να υιοθετηθεί από τις αρμόδιες αρχές της Κυπριακής Δημοκρατίας, για να μπορεί να αντιμετωπιστεί επιτυχώς σε ολόκληρη την Κύπρο το θέμα της παράνομης παγίδευσης. Ταυτόχρονα ο Πτηνολογικός Σύνδεσμος Κύπρου θα συνεχίσει τις προσπάθειές του για τερματισμό της παγίδευσης, συμπεριλαμβανομένης και της αυξανόμενης προσπάθειας του σε δράσεις ευαισθητοποίησης και εκπαίδευσης.

Ο Πτηνολογικός Σύνδεσμος Κύπρου αναγνωρίζει τις προσπάθειες πάταξης από τις τρεις αρμόδιες αρχές (Κλιμάκιο Πάταξης Λαθροθηρίας των Βρετανικών Βάσεων, Υπηρεσία Θήρας & Πανίδας και Κλιμάκιο Πάταξης Λαθροθηρίας της Αστυνομίας Κύπρου). Παρά τα μειωμένα επίπεδα παγίδευσης που καταγράφηκαν από τον Πτηνολογικό, τα αποτελέσματα από την πάταξη έδειξαν περισσότερες συλλήψεις στην περίπτωση της Αστυνομίας των Βρετανικών Βάσεων σε σχέση με το 2017, ένα εντυπωσιακό αποτέλεσμα. Τα επίπεδα πάταξης, στην περίπτωση της Υπηρεσίας Θήρας και Πανίδας, ήταν παρόμοια με το φθινόπωρο του 2017. Ειδικότερα, όσον αφορά τα ξόβεργα, οι περιοχές εντός της Κυπριακής Δημοκρατίας εξακολουθούν να είναι οι κυριότερες περιοχές όπου η χρήση τους είναι εκτεταμένη - το φθινόπωρο του 2018 η Υπηρεσία Θήρας και Πανίδας κατάσχεσε διπλάσιο αριθμό ξόβεργων σε σύγκριση με το φθινόπωρο του 2017. Δυστυχώς, όσον αφορά τον Ουλαμό Πάταξης Λαθροθηρίας της Αστυνομίας Κύπρου, τα στοιχεία πάταξης δείχνουν μια πολύ μειωμένη δράση ενάντια στην παράνομη παγίδευση για το 2018 σε σχέση με τα προηγούμενα χρόνια.

Έχει επιτευχθεί πρόοδος όσον αφορά την παράνομη παγίδευση πουλιών το φθινόπωρο του 2018, ωστόσο εξακολουθεί να παραμένει ένα σοβαρό πρόβλημα, τόσο με τα δίκτυα όσο και με ξόβεργα. Οι αρμόδιες αρχές πρέπει να ενισχυθούν προκειμένου να επιτευχθεί ένας μόνιμος τερματισμός αυτού του εγκλήματος, ιδίως για την Κυπριακή Δημοκρατία, όπου καταγράφηκε αύξηση της παγίδευσης με δίκτυα (δείτε το κεφάλαιο Results). Ο Πτηνολογικός θεωρεί ότι αυτό είναι αποτέλεσμα της μειωμένης πάταξης στο πεδίο. Ο Ουλαμός Πάταξης Λαθροθηρίας της Αστυνομίας Κύπρου, ο οποίος μέχρι πριν από λίγα χρόνια είχε εξελιχθεί σε μια πολύ αποτελεσματική μονάδα, είχε πολύ μειωμένη δράση τα τελευταία δύο χρόνια. Πιστεύουμε ότι αυτό προέκυψε λόγω διαμαρτυριών από οργανωμένα σύνολα τα οποία είναι υπέρ της παγίδευσης πουλιών το φθινόπωρο του 2017. Περισσότεροι πόροι και ξεκάθαρη πολιτική στήριξη πρέπει να παρασχεθούν στον Ουλαμό Πάταξης Λαθροθηρίας της Αστυνομίας Κύπρου, προκειμένου να επανέλθει η προηγούμενη αποτελεσματικότητά του, ειδικά όταν πρόκειται για την αντιμετώπιση των μεγάλων, οργανωμένων, επίμονων παγιδευτών. Όσον αφορά τα εστιατόρια τα οποία σερβίρουν αμπελοπούλια, τα οποία βρίσκονται στην Κυπριακή Δημοκρατία, το 2018 υπήρξαν παρόμοια επίπεδα πάταξης σε σχέση με πέρσι. Οι προσπάθειες σε αυτόν τον τομέα πρέπει να αυξηθούν, προκειμένου να αντιμετωπιστεί αποτελεσματικά η μαύρη αγορά για τα αμπελοπούλια.

Διάφορες ομάδες υπέρ της παγίδευσης και του κυνηγίου συνέχισαν να ασκούν πίεση το 2018 (όπως συνέβη και το 2017). Τον Απρίλιο του 2018, μια ομάδα κυνηγών έκλεισε τον κύριο κυκλικό κόμβο που συνδέει τη Λάρνακα με τη Λευκωσία, στο πλαίσιο διαμαρτυρίας για την «κατάσταση του κυνηγίου» στο νησί. Ζήτησαν και δυστυχώς κατάφεραν να εξασφαλίσουν συνάντηση με τον Υπουργό Εσωτερικών

για να συζητήσουν τα αιτήματά τους, μεταξύ των οποίων ήταν η νομιμοποίηση του κυνηγιού των αμπελοπουλιών και το ανοιξιάτικο κυνήγι Τρυγονιού. Ευτυχώς, η ανταπόκριση των ΜΜΕ ήταν θετική και επέκρινε τον Υπουργό για «υποχώρηση στον εκβιασμό» από οργανώσεις υπέρ του κυνηγιού και της παγίδευσης.

Όσον αφορά τη Διοίκηση των Βρετανικών Βάσεων, η αυξημένη δέσμευσή της να αντιμετωπίσει την παράνομη παγίδευση των πουλιών είναι εμφανής τα τελευταία χρόνια, θέτοντας ως προτεραιότητα τον τερματισμό της παγίδευσης σε βιομηχανική κλίμακα στην Δεκέλεια. Η απότομη μείωση των τάσεων παγίδευσης που καταγράφηκαν το 2017 στην Βρετανική Βάση της Δεκέλειας - μετά από χρόνια αύξησης - συνεχίστηκε το 2018 με περαιτέρω σημαντικές μειώσεις (δείτε το κεφάλαιο Results). Τόσο η Διοίκηση όσο και η Αστυνομία των Βρετανικών Βάσεων αξίζουν συγχαρητήρια για τα πολύ θετικά αποτελέσματα. Το 2018 δημιουργήθηκε μια νέα μονάδα καταπολέμησης της λαθροθηρίας και σε συνδυασμό με μια σειρά άλλων μέτρων (αύξηση των ποινών εγγύησης για τους παραβάτες, κατάσχεση οχημάτων, κατάργηση των γεωργικών επιδομάτων της ΕΕ, απαγορευτικά διατάγματα για καταδικασμένους παγιδευτές και την αγορά ενός μη επανδρωμένου αεροσκάφους για χρήση κατά της παράνομης παγίδευσης) απέδειξαν την αποτελεσματικότητά τους. Η προσέγγιση συνεργασίας που υιοθετήθηκε από την Αστυνομία και τη Διοίκηση των Βρετανικών Βάσεων, η οποία περιλαμβάνει τη στενή συνεργασία με ΜΚΟ, όπως τον Πτηνολογικό Σύνδεσμο Κύπρου, την RSPB, και το Committee Against Bird Slaughter (CABS), έχει δείξει χειροπιαστά αποτελέσματα στο πεδίο.

Επιπλέον, οι Βρετανικές Βάσεις συνέχισαν με το πρόγραμμα αφαίρεσης παράνομης άρδευσης το 2018. Περίπου 50 χιλιόμετρα αρδευτικών συστημάτων αφαιρέθηκαν από το Κάβο Πύλα και τα αποτελέσματα ήταν αισθητά. Μεγάλο μέρος της πλούσιας πράσινης ακακίας, η οποία είχε φυτευτεί από τους παγιδευτές για να δημιουργήσει ένα βιότοπος για την παγίδευση πουλιών, είναι τώρα νεκρή, καθιστώντας την ακακία εντελώς άχρηστη για την παγίδευση πουλιών.

Καταληκτικά ο Πτηνολογικός τονίζει τις ακόλουθες δράσεις και μέτρα ως προτεραιότητες που πρέπει να υλοποιηθούν το 2019 και καλεί τους αρμόδιους στα κέντρα λήψης αποφάσεων όπως προχωρήσουν με την υλοποίησή τους:

1. Οι αρμόδιες αρχές της Κυπριακής Δημοκρατίας να ενισχύσουν την τοπική συνεργασία με περιβαλλοντικές ΜΚΟ, υιοθετώντας μια προσέγγιση παρόμοια με αυτή της Αστυνομίας των Βρετανικών Βάσεων, προκειμένου να καταστεί αποτελεσματικότερη η πάταξη στο πεδίο.
2. Η Κυπριακή Κυβέρνηση να ενισχύσει και να υποστηρίξει τις αρμόδιες αρχές, ιδιαίτερα το Κλιμακίο Πάταξης Λαθροθηρίας της Αστυνομίας Κύπρου, ούτως ώστε να συνεχίσουν να εφαρμόζουν τον νόμο στο μέγιστο και να συνεχίσουν να εκδίδουν αποτρεπτικά εξώδικα, όπως επίσης να υπάρξει αυξανόμενη και συστηματική διωκτική δράση κατά των εστιατορίων που παράνομα σερβίρουν αμπελοπούλια (για αντιμετώπιση της ζήτησης).
3. Η Κυπριακή Βουλή να επανεξετάσει τον τροποποιητικό νόμο 'Περί Προστασίας και Διαχείρισης Αγρίων Πτηνών και Θηραμάτων Νόμος' που ψηφίστηκε τον Ιούνιο 2017, και να αποσύρει τη δυνατότητα κατανάλωσης θηράματος σε εστιατόρια, καθώς και την αύξηση των προστίμων για την κατοχή και τη χρήση ξόβεργων ώστε να αποτελούν αποτελεσματικές αποτρεπτικές ποινές. Ο Πτηνολογικός Σύνδεσμος Κύπρου θεωρεί ότι οι πρόνοιες αυτές παραβιάζουν την Οδηγία για τα Πτηνά (2009/147/ΕΚ).

4. Η Κυπριακή Κυβέρνηση να ξεκινήσει άμεσα με την εφαρμογή του Στρατηγικού Σχεδίου για αντιμετώπιση της παράνομης παγίδευσης πουλιών (με την αφαίρεση της παρέκκλισης του 'εναλλακτικού σχεδιασμού'), το οποίο εκκρεμεί από το Μάιο 2015.
5. Η Διοίκηση των Βρετανικών Βάσεων να συνεχίσει την προσέγγιση συνεργασίας με περιβαλλοντικές ΜΚΟ.
6. Μετά την επιτυχία της αφαίρεσης άρδευσης στο Κάβο Πύλα, η Διοίκηση των Βρετανικών Βάσεων να εκπονήσει σχέδιο διαχείρισης του οικοτόπου για τη μακροπρόθεσμη εξάλειψη της επεμβατικής ακακίας στην περιοχή και να ξεκινήσει εκ νέου το πρόγραμμα αφαίρεσης ακακίας.

Η αναφορά χωρίζεται στα ακόλουθα κεφάλαια:

- Κεφάλαιο 1 παρουσιάζει μια σύνοψη της παγίδευσης πουλιών στην Κύπρο, δίνει μια ιστορική αναδρομή αυτής της δραστηριότητας, κάνει αναφορά στην εθνική νομοθεσία όσον αφορά την προστασία των πτηνών και παρουσιάζει την τρέχουσα κατάσταση,
- Κεφάλαιο 2 παρουσιάζει το πρόγραμμα παρακολούθησης του Πτηνολογικού Συνδέσμου Κύπρου,
- Κεφάλαιο 3 παρουσιάζει τα αποτελέσματα της έρευνας πεδίου και την ανάλυση από το πρόγραμμα TRIM, τα στοιχεία από τις προσπάθειες πάταξης των αρμοδίων αρχών και το πολιτικό και κοινωνικό κλίμα που επικρατεί, και,
- Κεφάλαιο 4 είναι η συζήτηση και εισηγήσεις, όπου γίνεται μια σύνοψη της κατάστασης της παράνομης παγίδευσης πουλιών, ενώ επίσης παρέχονται συστάσεις προς την Κυπριακή Κυβέρνηση και τη Διοίκηση των Βρετανικών Βάσεων.

Τα έξοδα για την εργασία πεδίου του Πτηνολογικού (καύσιμα αυτοκινήτου), καθώς και τα έξοδα των εκάστοτε εθελοντών, καλύφθηκαν από την οργάνωση NABU (BirdLife στη Γερμανία), ενώ το RSPB (BirdLife στο Ηνωμένο Βασίλειο) κάλυψε τους μισθούς. Το Ίδρυμα MAVA υποστήριξε οικονομικά την συνεργασία μεταξύ της RSPB και της Αστυνομίας των Βρετανικών Βάσεων και συγκεκριμένα στον τομέα της παρακολούθησης με κάμερες.

Summary

The findings of the systematic monitoring programme point to continued positive progress, with tens of thousands of birds saved, in comparison with the trapping activity levels of previous years. This conservation success is the result of close and effective cooperation between the competent authorities, in particular the Dhekelia Sovereign Base Area (SBA) Police anti-poaching unit and NGO's.

However, there are three important caveats to the progress achieved during the last year.

1. The estimated number of birds killed, due to illegal trapping, in the Sovereign Base Areas (c.121,000) remains higher than the kill estimate for the Republic (c.84,000).
2. There is zero room for complacency, as the demand for illegal trapped bird delicacies still exists and this illegal market remains lucrative, so any 'let-up' in enforcement would see trapping levels rapidly climb again, as has happened in the past.
3. Trapping levels within the Republic of Cyprus areas, sadly went up during the main autumn trapping season of 2018 (compared to 2017).

The systematic monitoring programme is based upon a survey area that encompasses two jurisdictional areas: the Republic of Cyprus and the UK territory of Dhekelia SBA. It specifically covers the Larnaka - Famagusta and the Ayios Theodoros – Maroni areas. The analysis of the survey data estimates that 3.5 km of mist net rides were active during the autumn of 2018 within the survey area. This suggests that an estimated 250,000 birds may have been killed within the survey area over the autumn. Mist netting activity for autumn 2018 was however 90% lower compared to the 2002 (baseline) levels within the survey area, based on analysis using the TRIM model. These are the lowest trapping levels with mist nets recorded since the start of the surveillance programme in 2002. This is a very promising outcome, especially as autumn is the main trapping season, and is mainly due to progress achieved within the Dhekelia SBA in the last two years. On the contrary, trapping activity levels within the Republic of Cyprus areas showed an increase for autumn 2018, a worrying development.

BirdLife Cyprus believes that the positive results of autumn 2018 are primarily due to more effective enforcement on the ground by the SBA Police, backed up by much more deterrent sentencing for offenders and operations targeting trapping habitat (acacia plantations) in key trapping hot-spots such as Cape Pyla. Additionally the Cyprus enforcement agencies, and particularly the Game and Fauna Service, have continued to issue high, deterrent on-the-spot fines, which BirdLife considers have also contributed to this overall reduction in bird trapping with the use of mist nets. For the third consecutive year, the RSPB Investigations team worked closely with the SBA Police undertaking covert surveillance work, which we believe has contributed significantly to the reduction in trapping. The anti-trapping effort in the SBAs has grown into a true – and truly effective – collaboration between NGOs and the authorities. We believe that a similar approach needs to be adopted by the competent authorities in the Republic of Cyprus if progress is to be made with the trapping issue across the entire island. BirdLife Cyprus will continue its efforts to build support for an end to trapping, particularly through a continuation of the NGO's growing focus on awareness-raising and education.

The enforcement efforts of all three competent authorities (the SBA Police Anti-Poaching Unit, Cyprus Game & Fauna Service and Cyprus Police Anti-Poaching Unit) are fully acknowledged by BirdLife Cyprus. Despite the reduced trapping activity levels recorded by Birdlife Cyprus within the Dhekelia SBA, enforcement results showed an impressive increase in arrests by the SBA Police this autumn year-on-year. For the Game and Fauna Service (GFS), enforcement action for autumn 2018 was similar to autumn 2017. Regarding limesticks specifically, the Republic of Cyprus still remains a hotspot – during autumn 2018 the GFS confiscated twice as many limesticks compared in autumn 2017. Unfortunately, with regards to the Cyprus Police Anti-poaching unit their enforcement statistics showed much-reduced anti-trapping action on the ground compared to previous years.

While progress has been achieved with regards to illegal bird trapping during autumn 2018, it still remains a serious problem, both using mist nets and limesticks. Enforcement agencies need to be strengthened in order to achieve a permanent halt to this wildlife crime, particularly in the Republic of Cyprus where an increase in mist netting was recorded this autumn (see Results section). BirdLife Cyprus considers this to be the result of reduced enforcement on the ground. The Cyprus Police Anti-Poaching unit, which had, until a few years ago, developed into a very effective unit, has had strikingly reduced enforcement action over the last two years. We believe that this has been the result of pressure from pro-trapping lobbying groups which protested during autumn 2017 against the unit's effective enforcement action. Both more resources and clear political backing need to be provided to the Cyprus Police Anti-poaching unit, in order to re-establish its past effectiveness, especially when it comes to tackling the big, organized, persistent trappers. Regarding the law-breaking restaurants serving *ambelopoulia*, which are restricted to the Republic of Cyprus, 2018 showed similar levels of enforcement action in comparison to last year. Efforts in this area need to be increased, in order to hit the market for *ambelopoulia* and trapped bird delicacies.

Pro-trapping and pro-hunting groups continued their lobbying in 2018 (as happened in 2017). In April 2018, a group of hunters closed the main roundabout connecting Larnaka to Nicosia as part of a protest over 'the state of hunting' on the island. They demanded and sadly succeeded in getting a meeting with the Minister of Interior to discuss their demands, among which were the legalisation of blackcap hunting, and spring turtle dove shooting. Fortunately, the media criticized the Minister for 'giving in to blackmail' from pro-hunting / pro-trapping lobbies.

Regarding the SBA Administration, its increased commitment to tackling illegal bird trapping has been apparent and consistent in the last few years, with halting industrial scale trapping within the Dhekelia SBA set as a top priority. The sharp decline in trapping trends recorded in 2017 across the Dhekelia SBA – after years of increase – continued in 2018 with further substantial reductions (see Results section). This is a very positive outcome and both the SBA Administration and SBA Police are to be congratulated for these results. In 2018, a new anti-poaching unit was put together and in conjunction with a series of other progressive measures (increased bail levels for offenders, seizure of vehicles, removal of EU farming subsidies, exclusion orders for convicted trappers and the purchase of a new drone for enforcement use) has proved its effectiveness. The partnership approach which has been adopted by the SBA Police and Administration, involving close cooperation with NGOs such as Birdlife Cyprus, RSPB and Committee against Bird Slaughter, has showed tangible results on the ground.

Moreover, the SBA Administration has continued with its irrigation removal programme in 2018. Just over 50 km of piping was removed from the Cape Pyla trapping hot-spot, and the impacts have been very noticeable. Much of the lush green acacia, planted and watered by trappers for years to create a manmade habitat to catch birds, is now dead, rendering the acacia all but useless for the setting of mist nets.

In conclusion, BirdLife Cyprus stresses the following actions and measures as areas for action in 2019 and calls upon decision makers to prioritise their undertaking:

1. The Cyprus competent authorities to strengthen the collaboration with environmental NGOs on the ground, adopting a similar approach to that taken by the SBA Police, in order to make enforcement action more effective.
2. The Cyprus Government to strengthen and support the competent authorities, particularly the Cyprus Police Anti-poaching unit, to enable them to enforce the law to its full extent and to continue issuing deterrent on-the-spot fines, as well as increased and consistent enforcement action against law-breaking restaurants serving illegal *ambelopoulia* “delicacies” (to address demand).
3. The Cyprus Parliament to revisit the June 2017 amendment to the “Protection and Management of Wild Birds and Game Species law”, and to withdraw the possibility for game consumption in restaurants, as well as to increase the fines for limestick possession and use so that they provide an effective deterrent. BirdLife Cyprus considers that these provisions are in breach of the EU Birds Directive (2009/147/EC).
4. The Cyprus Government to start the implementation of the Strategic Plan for tackling illegal bird trapping (with the removal of the ‘alternative plan’ derogation), which has been pending since May 2015, with the engagement of all stakeholders including NGOs.
5. The SBA Administration to continue with the collaborative partnership approach adopted with environmental NGOs.
6. Following the success of the irrigation removal on Cape Pyla, the SBA Administration to move to draw up a habitat management plan for the long-term eradication of invasive acacia on the Cape, in line with the responsibilities to manage the SAC (Special Area of Conservation), and to restart the acacia removal programme.

The report is separated into the following sections:

- Section 1 provides an overview of the bird trapping in Cyprus, gives some historical background to this activity, makes reference to the national legislation regarding bird protection and presents the current situation,
- Section 2 describes the historical outline of the surveillance programme of BirdLife Cyprus, and

- Section 3 presents the survey data from the monitoring programme and the analysis from the TRIM software, summarises the enforcement data of the competent authorities and gives an outline of the political and social attitudes regarding this issue, and
- Section 4 is the discussion, giving an overview of the illegal bird trapping situation, while also providing recommendations to the Cyprus Government and the SBA Administration.

All the running costs for the field work (car fuel), as well as all the volunteer costs were covered by NABU (BirdLife in Germany), while the RSPB (BirdLife in UK) covered salaries. The MAVA Foundation financially supported the covert surveillance enforcement work that was undertaken between the RSPB Investigations team and SBA Police.

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, 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 the 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 155 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 which is controlled to a large extent by the 'big' trappers who are 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 outlawed electronic calling devices that imitate the calls of migratory birds. These calling devices are normally operated during night-time, luring the birds into the trapping sites and hence increasing the illegal catch. Academic studies have shown that tape luring can increase the catch by 3 to 13 times (Savva, G.A. 2016, Schaub M. *et al*, 1999) and that various species are attracted by song playback, including target species for the trappers such as Eurasian reed warblers (*Acrocephalus scirpaceus*), Sedge warblers (*Acrocephalus schoenobaenus*), Garden warblers (*Sylvia borin*), Blackcaps (*Sylvia atricapilla*) and Grasshopper warblers (*Locustella naevia*) (Mukhin A. *et al*, 2008). These calling devices can often be heard easily from hundreds of metres away from each trapping site during night time, highlighting the extensive use of calling devices and their intensity within the trapping areas.

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

This report presents the latest survey results for autumn 2018, when trappers target migratory birds, and especially Blackcaps 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. Surveillance programme of BirdLife Cyprus

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 partner in the 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 GFS and 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. The monitoring is undertaken by visiting a random selection of sample squares (1 km²) during daytime hours, with a focus on detecting mist netting activity. Limesticks are recorded if they are found while searching for mist nets. The squares selected are stratified to ensure a representative coverage of areas under SBA administration and the Republic of Cyprus. For more details on the methodology of BirdLife Cyprus see Appendix 1.

The project is undertaken in close co-operation with the competent authorities of the Republic of Cyprus (the Game & Fauna Service and the Cyprus Police Anti-poaching unit) and the SBA Police. When trapping paraphernalia is detected, the BirdLife Cyprus team contacts 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 the RSPB for supporting the project financially since its inception in 2002 and for covering relevant salaries of staff members. Furthermore, BirdLife Cyprus would like to thank NABU (BirdLife in Germany) for their financial support from 2013 and for covering the running costs and volunteer costs of the surveillance programme. Birdlife Cyprus would also like to thank the MAVA Foundation which financially supported the covert surveillance enforcement work that was undertaken between RSPB Investigations team and SBA Police. Finally, BirdLife Cyprus would like to thank the two volunteers that have helped in the monitoring survey and the gathering of the field data.

Regarding the analysis of the field data, BirdLife Cyprus uses the TRIM (TRENds & Indices for Monitoring data) program for trend analysis. The organisation has been gathering field data in a systematic manner since 2002 as part of its surveillance programme, which makes it possible to use such programs for the analysis.

TRIM is a program for the analysis of time series of counts with 'missing' observations. The program can be used to estimate indices and trends and to assess the effects of covariates on these indices and trends. TRIM analyses time series of counts, using Poisson regression and produces estimates of yearly indices and trends (Panneelock & van Strien 2005). If observations are missing, TRIM estimates the missing values on the basis of changes observed on plots that were monitored.

In other words, TRIM enables us to use the data from all the trapping survey squares ever surveyed under the BirdLife Cyprus surveillance programme during the autumn period, in total 157 squares, even though these squares were not all covered every autumn season. The programme 'fills in' missing values for squares that were not covered in a particular year on the basis of the general trend derived from the data as a whole. The TRIM software (freely available from <http://www.ebcc.info/trim.html>) is very widely used for analysis of field data from ecological or biological studies. It works as an index, setting the first year of a time series of data (in this case year 2002) the value of 100 and then showing changes up or down in subsequent years relative to this value of 100.

3. Results

Survey results and data analysis

Field survey data

The field survey for autumn 2018 was carried out between September and October 2018 following the standard survey protocol. In total 60 squares were surveyed during this period and BirdLife Cyprus reported all trapping finds to the relevant enforcement authorities, either the SBA Police Anti-poaching Unit, the Game & Fauna Service or the Cyprus Police Anti-poaching Unit, depending on the location of the finds. Additional squares within the SBA area have been added to the sample since 2015, following the July 2015 workshop recommendation of independent science expert Alison Johnston (British Trust for Ornithology - BTO), to improve the precision of the trend within the SBA over time. Moreover, the survey area was expanded this autumn to cover the Ayios Nikolaos Garrison area of the Dhekelia SBA, where high levels of trapping activity have been recorded in recent years. This survey area expansion was consulted with Simon Wotton, RSPB science expert, in order to ensure that the robustness of the methodology is maintained.

A summary of the survey data for autumn 2018 is presented in Appendix 2. In total the field team recorded 25 active net rides (these are 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 sum up to a length of 513 metres of net rides used for mist netting, and 3 mist nets found *in situ* (either classified as Active Set Nets or Active Unset Nets⁴).

The total length of active mist net rides within the 405km² survey area (Larnaka - Famagusta and Ayios Theodoros – Maroni areas) can be extrapolated at almost **3.5 km** (513m x 405/ 60)⁵.

In terms of limesticks, BirdLife Cyprus detected 56 limesticks in the autumn of 2018 (see Appendix 2). However, as already explained, BirdLife Cyprus does not focus its field survey on the detection of limesticks, as other organisations do. For example, during the autumn 2018 camp of the Committee Against Bird Slaughter (CABS) / SPA Foundation which took place from 29th August to 11th November, a total of 2,596 limesticks, 53 mist nets and 69 electronic bird callers were detected and seized (CABS, March 2018). It is important to highlight that the majority of the limesticks detected by CABS / SPA Foundation were in areas controlled by the Republic of Cyprus, indicating that limestick use is still widespread and remains a problem that the enforcement agencies need to address effectively and with zero tolerance.

Based on the data gathered in the field this autumn, BirdLife Cyprus estimates that just over 250,000 **birds could have been killed within the survey area** and around 335,000 birds could have been killed

⁴ Active Set Net (ASN) is a net ride where the mist net is *in situ* and is set and ready for catching birds. Active Unset Net (AUN) is a net ride where the mist net is *in situ* but is furled i.e. the mist net is not stretched up for catching birds but lowered down.

⁵ There are 405, 1 km² squares within the survey area that are classified as suitable for trapping activity (on the basis of vegetation characteristics) and 60 of these squares were surveyed in Autumn 2018. Out of these 405, 1 km² squares, 291 squares are found in the Republic areas, 83 are found in the Dhekelia SBA and 31 squares are in “Joint” areas. Those areas are either joint between SBA and Republic, SBA and buffer zone, or SBA, Republic, and Buffer zone.

across the whole island of Cyprus⁶. However, It is important to note that the estimated death toll does not take into consideration any net rides that have been classified as 'Prepared' (previously this net ride classification was also considered for the death toll estimation), following the recommendation included in the BTO assessment report (July 2015) to revise slightly the calculation⁷ (read Appendix 3 for more details).

If one were to split the potential death toll estimate (250,000 birds) between jurisdictions within the survey area based on the trapping activity detected, then just over 84,000 birds would be the potential number killed in the Republic and just over 121,000 the potential number killed in the Dhekelia SBA⁸ - the 'joint' squares are not accounted for in these death estimates at the jurisdiction level. Note however, that the limestick toll is not fully accounted for in this estimate (as the methodology of BirdLife Cyprus focuses more on detecting mist netting activity), which would make the potential kill in the Republic higher. The total estimate of birds killed is derived using field-gathered data in combination with expert judgement for some variables (such as the number of birds caught per net) that are too dangerous to measure in the field.

Trends in autumn mist netting activity

The TRIM program was used to analyse the survey data and to produce trends in autumn bird trapping from 2002 to 2018. The metres of net rides that are recorded as active⁹ for bird trapping with mist nets within each survey square are used as the response variable, with autocorrelation and over dispersion accounted for as well. The TRIM changepoint model is used with a changepoint in every year, which returns the same result as a fully time-dependent model¹⁰ (for more details on TRIM approaches read Appendix 4). The TRIM program is a good way of analysing these data and will produce a model of the change in bird trapping activity (with mist nets) between a base year (i.e. 2002) and each subsequent year of sampling.

A key conclusion from the BTO assessment report on the monitoring methodology of BirdLife Cyprus⁷ is regarding possible observer bias deriving from how net rides are classified by different observers: *'It is important to note that even if there are some differences in how certain rides would be categorised by different observers, the trend relies on consistency over time. For this reason, even if there are differences in categorisation between observers, providing that the same observer consistently applies the criteria*

⁶ The estimate also includes any bird trapping that takes place in the occupied parts of Cyprus, although trapping levels are relatively low based on information provided to BirdLife Cyprus by other organisations and our joint survey work in the occupied areas with the Turkish Cypriot bird protection society, KUSKOR, carried out in 2008. This is also the reason why the occupied areas are not presented as a main trapping area in Figure 1.

⁷ BirdLife Cyprus organised a workshop with title 'Methodology of surveying illegal bird trapping in Cyprus' in July 2015. Independent science experts from the British Trust Ornithology (BTO) were invited to review the monitoring methodology of BirdLife Cyprus and to provide a report of their assessment and recommendations.

⁸ From the 513 metres of active net rides detected within the survey area, 176 metres were in the Republic of Cyprus (from the 38 squares surveyed), 337 metres were in the SBAs (from the 18 squares surveyed). For the calculated death estimates at a jurisdiction level, the trapping finds (excluding the 'Prepared' rides) in each jurisdiction are extrapolated to the total number of squares that are classified as suitable for trapping activity (see footnote 5 above).

⁹ This includes all 4 categories of net ride classification: P – Prepared, ANN – Active No Net, AUN – Active Unset Net and ASN – Active Set Net. Read Appendix 1 for details on net ride classification.

¹⁰ This is a linear trend model using the stepwise approach and with all years selected as changepoints.

for classifying rides over time, the trend for illegal bird trapping activity will not be compromised'. For more details on net categorisation read Appendix 1.

It is also noted that the BirdLife Cyprus monitoring methodology is different from the non-systematic field surveys undertaken by other organisations such as CABS, which are targeted at known trapping areas and are not controlled and consistent with the survey effort. Therefore, the findings and results of the two surveys are not directly comparable, but they both provide invaluable field data and are supportive and complementary to each other, provided the differences in methodology are taken into account.

Figure 2 shows the trapping activity levels since 2002 across a sample size of 157 squares within the survey area, with 95% confidence limits. Additional square coverage has been included in the last few years, particularly within the SBA, following a recommendation in the BTO assessment report (July 2015)⁷ to increase the sample size within this stratum. For autumn 2018 the survey area was expanded to include the Ayios Nikolaos Garrison area of the Dhekelia SBA where high levels of trapping activity have been recorded in recent years. In keeping with our standard methodology, a stratified random sample of 60 of the 157 squares was surveyed in autumn 2018.

It is important to highlight that the additional squares surveyed have slightly expanded the total square coverage to 157 (compared to 129 squares in 2017 and 104 squares in previous years), hence the TRIM program has imputed missing values for these extra squares as well. As a result, if one were to compare the index values presented in Figure 2 below with the trend analysis results reported in the previous autumn trapping reports¹¹, the index values may vary slightly for the previous autumn seasons (i.e. for autumn 2017 and earlier).

¹¹ BirdLife Cyprus trapping reports can be found [here](#).

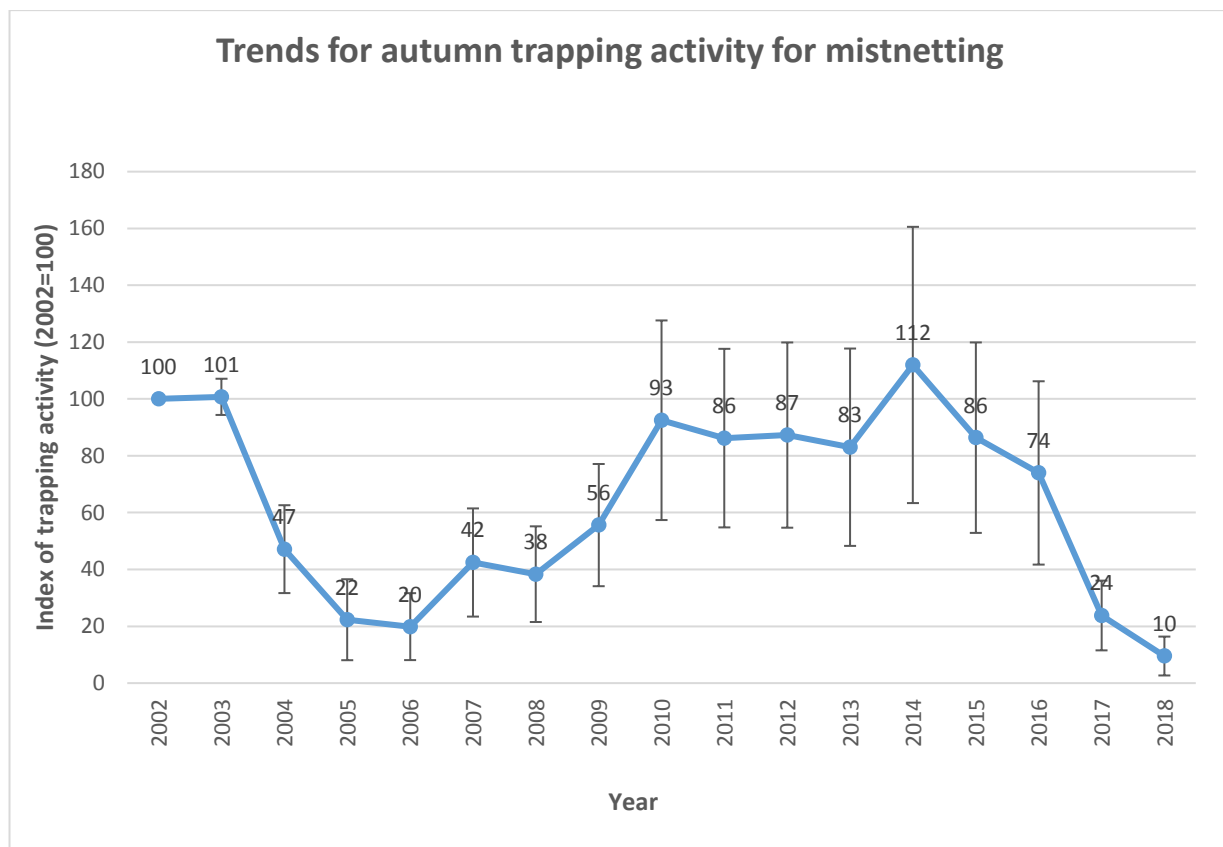


Figure 2 Trends for autumn bird trapping activity with the use of mist nets for the survey area

Table 1 Statistics for trend for autumn trapping levels based on Figure 2

	Multiplicative trend	Standard error	95% confidence interval	Significance
All squares	0.9796	0.0140	0.02744	Stable

Note 1: The multiplicative trend reflects the changes in terms of the average percentage change per year i.e. if the trend is equal to 1 then there is no trend. Hence value 0.9796 calculated above indicates an overall decrease of around 2% per year in mist netting activity.

Mist netting activity for autumn 2018 is **90% lower compared to the baseline year of 2002**: index value is 10 for autumn 2018. As shown in the graph above, this trapping activity for autumn 2018 was the lowest recorded since the start of the surveillance programme, a very encouraging outcome. **However, it must be noted that the statistical significance for the overall trend is 'Stable', which suggests that these low trapping levels need to continue and be maintained before a significant long term decrease is achieved.**

Figure 3 summarises autumn mist netting activity in the Republic of Cyprus (RoC) applying the same 'Linear trend model using the stepwise approach' in the TRIM program – with all years initially selected as changepoints in the TRIM analysis. Figure 4 summarises autumn mist netting activity in the Sovereign Base Area (SBA) applying the same 'Linear trend model using the stepwise approach' in the TRIM program. Note, however, that for the SBA analysis, TRIM would not run with the year 2003 as a changepoint. The sample of 157 squares surveyed at various seasons during the surveillance programme includes 99 squares within the RoC, 48 within the SBA and 10 squares that cover areas in both jurisdictions (referred to as 'joint' squares, including also areas that cover the SBA and UN buffer). For autumn 2018, the breakdown of the squares randomly selected and surveyed at a jurisdiction level were as follows:

- 38 squares within the Republic of Cyprus,
- 18 squares within the Dhekelia SBA, and
- 4 'joint' squares.

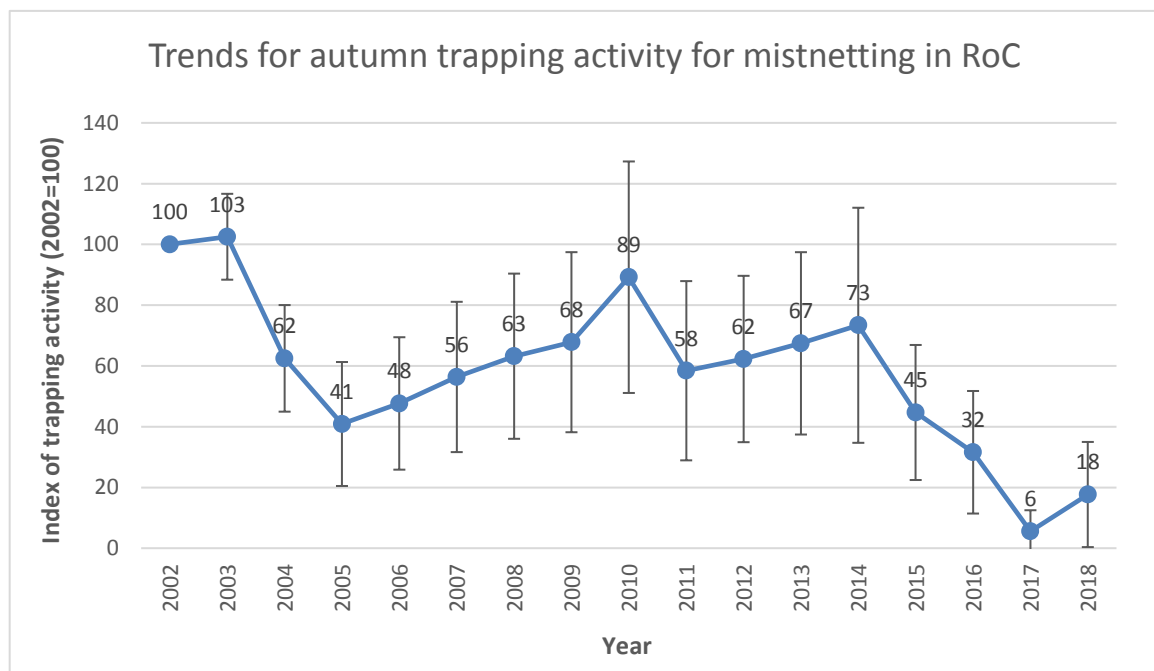


Figure 3 Trends for trapping activity for autumn mist netting within the Republic of Cyprus.

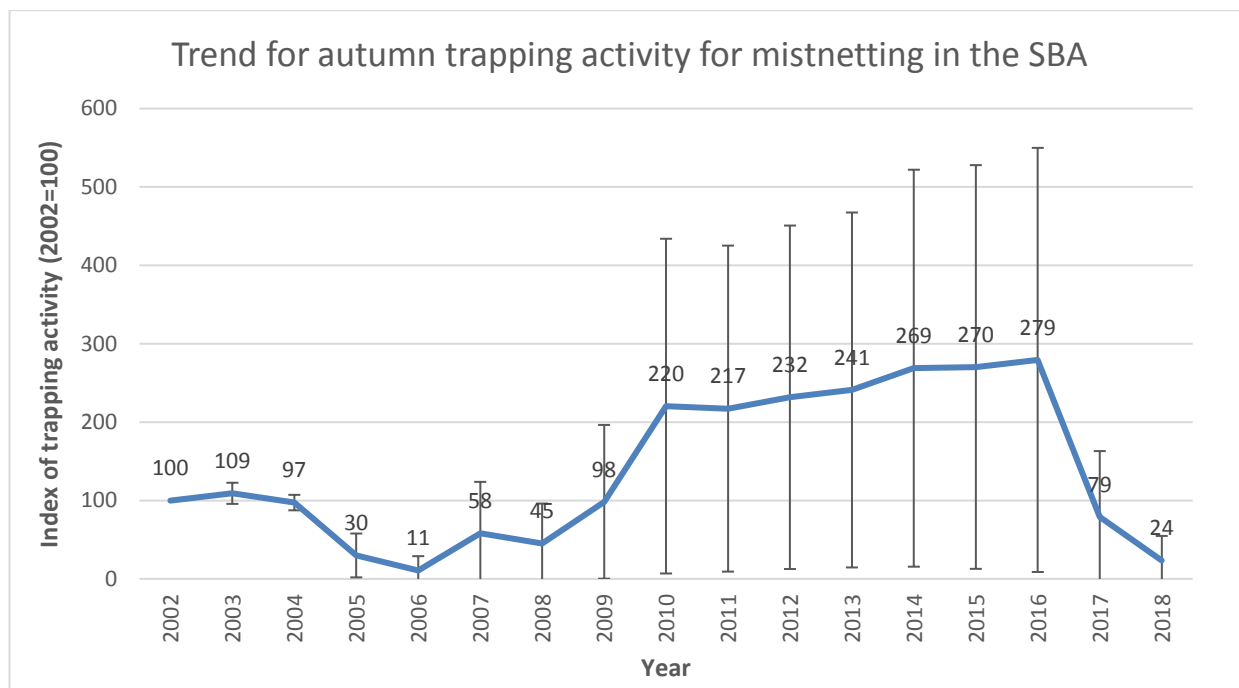


Figure 4 Trends for trapping activity for autumn mist netting within the SBA.

Table 2 Statistics for trends for autumn trapping activity levels based on Figure 3 and Figure 4

	Multiplicative trend	Standard error	95% confidence interval	Significance
RoC squares	0.9159	0.0170	0.0332	Steep Decline (p<0.05)
SBA squares	1.0626	0.0332	0.065	Uncertain (p<0.05)

At a jurisdiction level, the trapping activity trends indicate that:

- **For the Republic areas, autumn 2018 mist netting activity (index value 18) was 200% higher compared to autumn 2017 (index value 6). In comparison to 2002, the autumn 2018 levels were 82% lower.** Overall the trapping levels in the Republic are still low compared to 2016 and previous years, however the increase during autumn 2018 is worrying.
 - For the 38 squares covered within the Republic, the range of counts was from 0 to 76 metres of active net rides, while no trapping at all was recorded in 34 squares. The average within the Republic was 4.6 metres of active net rides per square surveyed (176 / 38 squares surveyed within the Republic = 4.6).
- **For the SBA areas, autumn 2018 mist netting activity (index value 24) showed a decrease of 70% compared to 2017 (index value of 79). In comparison to 2002 the autumn 2018 levels were 76% lower, continuing the positive downward trend for a second consecutive year. The autumn 2018 figure is 91% below the all-time high values witnessed in 2016.** It is noted that the lowest mist netting activity for the SBAs was recorded in 2006 (index value of 11).

- As seen in Figure 4, the confidence limits for the SBA trend are noticeably wide. This is due to the following factors: the relatively small sample size (18 squares surveyed in autumn 2018), the large number of zero counts (11 out of the 18 squares surveyed recorded no trapping activity at all). It is anticipated that the new larger sample size in the SBA will only start to have an impact on the confidence limits in a few years' time.
- **It is highlighted that this further decrease in mist netting activity in the SBAs is primarily due to the much reduced trapping activity recorded in the trapping hotspot of Cape Pyla.** Table 3 below compares the findings in Cape Pyla for 2016, 2017, and 2018.

Table 3 Numbers and metres of net rides found active for years 2016 – 2018 in Cape Pyla.

	2016	2017	2018
No. of net rides	101	33	5
Meters of active net rides	1,999m	675m	96m

- Unlike in 2017 (and previous years), the highest counts for mist netting activity were not recorded in squares located in the Cape Pyla area. The average value per square is 18 metres of active net rides per square (337 metres / 18 squares surveyed within the SBAs = 18). The findings of trapping activity within Cape Pyla in the last 2 years, compared to autumn 2016 when 1,999 metres of active net ride were recorded in that area, highlight the significant reduction in trapping levels that has been achieved.

Overall it is clear that mist netting activity continued to decrease within the Dhekelia SBA during autumn 2018 for a second consecutive year, reversing the dramatic increase observed since 2009 and the record breaking levels reached in autumn 2016. This dramatic reduction in trapping activity, particularly in the mist netting hotspot of Cape Pyla and its peripheral areas, has been achieved within only 2 years and is very encouraging indeed. From the statistical analysis of TRIM, the significance of trapping activity levels is assessed as 'uncertain' – this indicates that these positive results must be maintained for a few more years in order to become statistically significant.

As for the Republic, even though there is a 'steep decline' in statistical significance, the findings for autumn 2018 are worrying. Any relaxation on enforcement, as we believe has happened during 2018, could result in an increase in trapping levels again and setback the positive result of 2017. Moreover, the Republic remains a hotspot for limestick use, as indicated by the enforcement statistics of the GFS (see Table 4) and the survey data of other environmental NGOs ([CABS, February 2019 "Autumn 2018 report"](#)). Additionally, all the restaurants serving *ambelopoulia*, are found exclusively in the Republic, and still constitute the main economic incentive for organised trappers. Therefore, the Cyprus authorities have a major role to play in clamping down on the supply – demand business chain.

Enforcement

Overview of enforcement for autumn 2018

There are 3 competent authorities that are responsible for enforcement against illegal bird trapping in Cyprus: the Game & Fauna Service and the Cyprus Police Anti-Poaching unit that are responsible for areas controlled under the Republic of Cyprus, and the SBA Police Anti-Poaching unit responsible for areas within the UK Sovereign Base Areas. The resources of the above-mentioned enforcement bodies are as follows:

- Game & Fauna Service, the responsible body for the implementation of the Birds Directive, has about 85 game wardens in total across the whole of island. The Larnaca & Famagusta district, where most of the bird trapping takes place in Cyprus and where the survey area of BirdLife Cyprus is focused, has about 20 game wardens,
- Cyprus Police Anti-Poaching Unit had 7 officers at the start of 2018, reduced to 6 during spring time, and then further reduced to 5 during the autumn 2018 season,
- SBA Police Anti-Poaching Unit was comprised of 9 officers (1 inspector, 1 sergeant and 7 police constables), as well as 2 office staff dealing with the investigation and filing of cases at the Eastern Dhekelia Sovereign Base Area during the autumn trapping period (September to October). BirdLife Cyprus would like to thank the SBA Administration and SBA Police APU team for its willingness and support in undertaking joint field monitoring of illegal bird trapping with the BirdLife Cyprus team.

Table 4 summarizes the enforcement data of the 3 competent authorities regarding illegal bird trapping for the months of August, September and October, the main period for bird trapping in Cyprus, for years 2011 - 2018.

Table 4 Summary of illegal bird trapping statistics of the competent authorities for the months of August, September and October for years 2011 - 2018

	Game & Fauna Service – Larnaca & Famagusta district ²								Dhekelia SBA Police Anti- Poaching Unit ³								Cyprus Police Anti- Poaching Unit ⁴							
<i>Years</i>	2011	2012	2013	2014	2015	2016	2017	2018	2011	2012	2013	2014	2015	2016	2017	2018	2011	2012	2013	2014	2015	2016	2017	2018
No of trappers arrested	57	70	78	64	54	35	19	21	23	22	22	30	17	29	6	12	N/A	N/A	N/A	27	28	36	13	4
No of mist nets¹	204	311	287	235	230	195	39	34	361	275	227	184	181	496	154	51	N/A	116	N/A	116	121	164	37	5
No of limesticks¹	2,550	5,372	3,830	1,577	1,740	1,291	521	1,186	290	314	516	256	234	295	259	116	N/A	4,799	N/A	3,950	3,359	1,915	811	213

N/A: Not available

Note 1: The total number includes both trapping paraphernalia (mist nets and limesticks) collected as court evidence when an arrest takes place and from confiscations.

Note 2: Data for 2018 provided from Game & Fauna Larnaca & Famagusta district officer via email (6th February 2019).

Note 3: Data for 2018 received from SBA police Anti-poaching unit officer via email (19th February 2019).

Note 4: Data for 2018 provided from Sergeant of Cyprus Police Anti-poaching unit (11th February 2019).

- Game & Fauna Service – Larnaca & Famagusta district: The enforcement data for autumn 2018 showed that enforcement action was similar to last year (arrests and mist nets confiscated), even though BirdLife monitoring recorded an increase in trapping with mist nets. Moreover, the number of limesticks confiscated by the Game and Fauna Service increased from last year, suggesting that limestick use is still widespread within the Republic.
- SBA Police Anti-Poaching Unit (APU) – Dhekelia Sovereign Base: The enforcement data for autumn 2018 show that 12 people were arrested compared to last year (autumn 2017 only 6 people were arrested). Despite the reduction in trapping activity (between autumn 2017 and 2018 within the Dhekelia SBA – see Figure 4), the number of arrests increased which indicates that the operational effectiveness of this unit has been further improved and strengthened. Moreover the strategic and tactical approach which has been adopted by the SBA Police and Administration since 2017, is having tangible results. This approach involves a series of measures to deter and to disrupt illegal bird trapping activity including: the buying and use of two high quality drones, the increase of resources for the Unit, the removal of irrigation paraphernalia in Cape Pyla area, the continuation of covert surveillance of trapping activity in collaboration with RSPB Investigations team, as well as strengthening the cooperation and partnership with the NGOs such as Birdlife Cyprus and CABS.
- Cyprus Police Anti-Poaching Unit: The enforcement data for autumn 2018 show the lowest number of cases and trappers arrested since 2012 for this agency. The reduced resources of this unit (only 5 officers during autumn 2018) has resulted in much fewer arrests and confiscations. It is very worrying that this previously deterrent and effective unit has much reduced enforcement action against bird trapping.

Illegal bird trapping with mist nets decreased further for a second consecutive year during autumn 2018 based on the survey data from BirdLife Cyprus. This is a very encouraging outcome. Despite the reduction in trapping, the SBA Police made more arrests, highlighting that the new approach to trapping adopted by the SBA Administration and Police, which includes close cooperation with NGOs, is having tangible results. With regards to enforcement action by the Cypriot authorities, both the GFS and in particular the Cyprus Police anti-poaching unit need to step up their efforts. The increase in mist netting activity recorded by BirdLife Cyprus monitoring survey and the widespread use of limesticks (GFS statistics and CABS findings) are indicative of what has happened in the past i.e. an increase in bird trapping levels when enforcement action on the ground was reduced, once Cyprus had joined the EU (see Figure 2). Hence a zero-tolerance approach, both for limesticks and mist nets, must be applied and enforcement agencies need to be strengthened and maintained in order to achieve a long term halt to this wildlife bird crime in Cyprus.

Illegal bird trapping has become a demand-driven wildlife crime, with the trading of trapped birds in lawbreaking restaurants being the key economic driver for organised trappers, who, as is generally acknowledged, make thousands of euros of illegal profit every year. These restaurants selling *ambelopoulia* are exclusively within the Republic. From data provided from the Cyprus Police and the Game and Fauna Service, restaurant checks and prosecutions were at similar levels as 2017 (see Table 5). BirdLife Cyprus believes that more enforcement is needed, particularly on the big organised trappers and on restaurants, in order to stop this illegal demand-supply profitable business.

Table 5 Summary of restaurant checks and prosecutions in Cyprus

	2010 ¹	2011 ¹	2012 ¹	2013 ¹	2014 ²	2015 ³	2016 ^{3,4}	2017 ⁴	2018 ⁵
Restaurant checks	20	31	18	7	14	8	12	21	20
Restaurant prosecutions	13	15	8	3	1	1	1	7	5

Note 1: Data source for years 2010-2013: Ombudswoman report dated 27/5/2014

(http://www.ombudsman.gov.cy/ombudsman/ombudsman.nsf/index_new/index_new?OpenForm).

Note 2: Data source: Reply from Ministry of Interior to question of Member of the Parliament Mr Perdikes (question dated 15/6/2015, ref no 23.06.010.04.629) regarding restaurant prosecutions by the Game and Fauna Service for year 2014

(http://www2.parliament.cy/parliamentgr/008_02/by_name/gioryo_perdiki.htm).

Note 3: Data source: Reply letter from Game Service dated 11/8/2017.

Note 4: Data source: Letter from Cyprus Police headquarters dated 25th January 2018.

Restaurant check breakdown: Nicosia – 10, Limassol – 3, Larnaca – 8, Famagusta – none, Paphos – none

Restaurant prosecution breakdown: Nicosia – 5, Limassol – 1, Larnaca – 1, Famagusta – none, Paphos – none

Note 5: Data source: Letters from both GFS headquarters and Cyprus police Headquarters (Information received on 11/1/19 and 11/2/19 respectively)

Restaurant check breakdown from Cyprus police for 2018: Nicosia -3, Limassol-none, Larnaca – 6, Famagusta – none, Paphos – none.

Restaurant checks from GFS for 2018: 11 checks in total

Restaurant prosecution breakdown from both agencies: Nicosia - 4, Limassol – none, Larnaca – 1, Famagusta – none, Paphos – none.

Feedback from competent authorities to BirdLife Cyprus reports

Table 6 summarises the number of reports that BirdLife Cyprus provided to the competent authorities regarding active trapping sites and the overall feedback given by the competent authorities. The information presented in the table below refers to active trapping sites as recorded by the survey team (this includes all net codes, P, ANN, AUN and ASN – see Appendix 1 for net ride classification - and sites where limesticks were found) and were reported to the competent authorities for further action.

With regards to the Game and Fauna Service, 17 locations were reported to this agency but unfortunately no feedback was provided to BirdLife Cyprus regarding the outcome of any enforcement action. It is assumed that no action was taken by the Game and Fauna Service to investigate the BirdLife Cyprus reports.

With regards to the Dhekelia SBA Police Anti-poaching Unit, 12 locations were reported to this agency. Based on the feedback provided from the SBA police, covert cameras, with RSPB support, were placed at 5 locations, confiscations of limesticks occurred at 2 locations, while the remaining 5 locations were placed under observation. Based on covert surveillance footage obtained at 2 locations, the SBA Police was able to arrest 7 people for bird trapping offences (link), (link). Feedback and response time from SBA Police about locations visited has improved significantly compared to previous years as feedback on sites found active was given on the same day, or next day at most.

Table 6 Summary of trapping reports provided to competent authorities from Birdlife Cyprus during Autumn 2012-2018

	Game and Fauna Service – Larnaca & Famagusta							SBA Anti-Poaching Police Unit							Cyprus Police Anti- Poaching Unit						
	2012	2013	2014	2015	2016	2017	2018	2012	2013	2014	2015	2016	2017	2018	2012	2013	2014	2015	2016	2017	2018
Number of reports¹	50	43	33 ⁶	23	21	8	17 ⁹	52	38	40	51	34	26	12	none	3	13 ⁶	12 ⁸	8	none	7
Arrests²	17 (34%)	19 (44%)	8 ⁶ (24%)	11 (48%) 7	10 (48%)	N/F	N/F	9 (17%)	8 (21%)	6 (15%)	4 (8%)	5 (15%)	0 (0%)	7 ¹⁰	N/R	1 (33%)	2 (15%) 6	1 (8%)	2 (25%)	N/R	2
Confiscations³	10 (20%)	8 (19%)	11 (33%)	None	1 (5%)	N/F	N/F	22 (42%)	18 (47%)	5 (15%)	10 (20%)	14 (41%)	3 (12%)	2	N/R	N/A	N/A	2 (17%)	0 (0%)	N/R	3
Clearance⁴ / Nothing Found⁵	23 (46%)	16 (37%)	14 (42%)	12 (52%)	10 (48%)	N/F	N/F	21 (40%)	12 (32%)	29 (70%)	37 (72%)	15 (44%)	23 (88%)	8	N/R	N/A	N/A	9 (75%)	6 (75%)	N/R	2

N/R – Not relevant; N/A – Not available; N/F – No feedback provided

Note 1: Reports may also include reports from members of the public that were sent to the competent authority via BLCY.

Note 2: Arrests represent individual people and not specific sites. E.g. If 4 people are arrested at one trapping site that will count as 4 arrests.

Note 3: Confiscations of mist nets, limesticks and/or calling devices

Note 4: Clearance refers to collection of trapping paraphernalia such as pole bases, poles, loudspeakers, wires etc.

Note 5: 'Nothing found' refers to reports where the competent authority checked the trapping location but reported it inactive (no nets or limesticks were found) upon its visit, hence no prosecution or confiscation took place, or no feedback was provided.

Note 6: Two sites were reported to both the Game Service and the Cyprus Police (autumn 2014) – both reports resulted in prosecutions and they are accounted for in the statistics of both enforcement agencies shown above. The feedback for these two sites was provided from the Game & Fauna Service and is used to calculate the % value for the Cyprus Police.

Note 7: Two of the BirdLife Cyprus' reports that resulted in prosecutions were for illegal shooting of bee-eaters.

Note 8: The feedback for the reported sites to the Cyprus Police APU for autumn 2015 was provided by CABS, which worked closely with this enforcement agency during the season.

Note 9: Three reports are for illegal hunting of bee-eaters and one is for illegal feeding of birds for hunting purposes.

Note 10: 7 people were arrested due to video evidence collected at 2 different trapping locations.

As for the Cyprus Police Anti-poaching Unit, BirdLife Cyprus reported 7 trapping locations to this agency in autumn 2018. Our reports led to 2 arrests, 3 confiscations, and at 2 locations they found no trapping taking place. The response time of the Cyprus police anti-poaching squad, ranged from same day to 2 days after trapping locations were reported to them. The officers always called back with feedback after a location was checked. Unfortunately, similarly to 2017, this unit was reduced in size from 7 officers at the start of 2018 to 5 officers in September 2018.

Enforcement on the ground – on-the-spot fine provision in the Republic, a year later

In July 2017 an amendment to the 'Protection and Management of wild birds and game species Law of 152/2003' law would regulate all bird trapping and poaching offences as on-the-spot fines (as opposed to court prosecution). At the time BirdLife Cyprus expressed its opposition regarding this amendment, having serious reservations over how game wardens and police officers would be able to impose on-the-spot fines without risking their personal safety – read relevant article [here](#) published early July 2017.

Over the past year Cyprus enforcement agencies, and particularly the Game and Fauna Service, have been implementing the new on-the-spot fine provisions, issuing high fines, which we believe have contributed to the general decline in bird trapping with the use of mist nets since 2016. On the spot fines have continued to be handed out and to be paid, however it would seem that the higher the fine, the less chance there is of it being paid. Table 7 below shows that even though more than half the fines handed out so far have been paid (161) the money these fine equate to (€380,000) only adds up to around one third of the total money from all the fines (€960,000). These numbers suggest that the smaller fines are paid, however the larger fines are generally not being paid. Offenders who do not pay their fines are led to court prosecution; however, it is not clear yet whether the Cyprus courts would issue a similar / higher fine or if a lower one would be issued, which would clearly determine the sustainability and impact of the new on-the-spot fine system.

Table 7 Breakdown of on the spot fines handed out so far from July 2017 till February 2019¹²

	No. of Fines	Amount in Euro
Fines that have been paid	161	€380,000
Fines still pending payment	33	€112,000
Fines that haven't been paid and will/have gone to court	99	€468,000
Total	293	€960,000

¹² Information given to BLCY by GFS official via email on 22/2/19

Despite the very high fines for mist netting activity stipulated in the new amendment, the fines for the possession and use of limesticks are much lower, at ONLY 200 euros for the possession of up to 72 limesticks (1% of the maximum penalty of 20,000 euros stipulated in the relevant legislation). The original proposal was for 10% i.e. 2,000 euros. However, during the discussions at the Environment Committee of the Cyprus Parliament this was sadly watered down. BirdLife Cyprus believes this was due to pressure from pro-trapping lobby groups. We believe that this very low fine for limestick possession and use has no deterrent value and is effectively a message of decriminalisation of this non-selective method, creating a loophole in the legislation for limestick trappers to continue this illegal practice.

And indeed it seems that this loophole is being exploited by trappers. In September 2018, our field team spotted 7 limesticks on a tree, which were reported to the Cyprus Police Anti-poaching unit and were confiscated the next day. Around one week later, CABS found the same location active again, with 70 limesticks placed in the same location. The arrested trapper received a €400 fixed penalty, in accordance with the 2017 law amendment - €200 for having fewer than 72 limesticks and €200 for protected birds caught on limesticks. Shockingly the following day, the Birdlife Cyprus field team checked the same location and found 32 limesticks. This incident is a clear indication that the fines for limestick use provide no deterrent for trappers, compared to the other offences, a concern that BirdLife Cyprus had raised at the time of the adoption of the new amendment law.

Social and political attitudes

Developments in the Republic of Cyprus

Pro-trapping and pro-hunting organizations continued to lobby for further amendments to the 'Protection and Management of wild birds and game species Law of 152/2003'. This included a protest that occurred in April 2018 that was conducted by a group of hunters, who have since formed their own political party. As part of this protest these hunters closed a large roundabout on the motorway which connects Larnaka to Nicosia. They demanded and sadly succeeded in getting a meeting with the Minister of Interior to discuss their demands, among which were the legalisation of blackcap hunting, and spring turtle dove shooting. Fortunately, the media response was positive and criticized the Minister as 'giving in to blackmail' from pro-hunting / pro-trapping lobbies. ([Link](#)).¹³

Developments in the Eastern (Dhekelia) Sovereign Base Area

The new anti-poaching team which was put together in spring of 2018 is working well, and are following the SBA Administrations new and improved strategy with great success. The last few years there has been an increased and consistent commitment of the SBA Administration to stopping industrial scale trapping within the Dhekelia SBA, including the drawing and implementation of an action plan to stop illegal bird trapping. The plan has included a series of new measures including increased bail levels for offenders, exclusion orders for convicted trappers and acquiring new equipment, including night vision equipment and a second drone. (See relevant [article](#))

Furthermore covert surveillance work has continued for a third consecutive year with the collaboration between the SBA Police and the RSPB Investigations team. During autumn 2016, with the use of covert cameras, 19 individuals were recorded on camera at 7 sites illegally trapping birds with mist nets and all were successfully prosecuted. During autumn 2017, at least 5 individuals were recorded at 2 sites illegally trapping with mist nets, 2 of whom were successfully prosecuted. During autumn 2018, illegal bird trapping was recorded at 2 locations. The evidence gathered led to the arrest of 7 individuals (court cases are still pending). We believe that the covert surveillance work has been the primary driver in the dramatic decrease in bird trapping within the SBAs, and especially in Cape Pyla. Building on this, the SBA Police and Administration have applied a partnership approach, strengthening the collaboration with NGOs. The continuation of the joint-monitoring survey with Birdlife Cyprus, and the collaboration with CABS, has resulted in tangible results on the ground.

Another positive development that took place is the removal of illegal irrigation that took place during 2018 around Cape Pyla – just over 50 km were removed. This maze of pipes took precious water to the acacia trees and kept them lush and green, making them very attractive habitat to birds. When the Birdlife Cyprus field team visited Cape Pyla with SBA Police in October, much of the non-native acacia had died. This is a very positive result, however the removal of the acacia from the area, dead or alive, needs to re-start, in order to allow the native plants to start growing there again. The current lack of activity in Cape pyla is the ideal opportunity for acacia removal to take place.

¹³ Information from Cyprus-mail article which was published on 24/4/18

4. Discussion & Recommendations

2018 showed a decrease in trapping levels with mist nets for a second consecutive autumn season, a very welcome development. Overall, a 90% reduction in mist netting activity was recorded during autumn 2018 compared to the 2002 baseline within the survey area; these are the lowest levels for mist netting activity since the start of the BirdLife surveillance programme in 2002.

This overall reduction observed in the last 2 years is mainly due to the substantial reduction in trapping in the SBA, and particularly in Cape Pyla. Birdlife Cyprus would like to congratulate the SBA Police and Administration on their success in tackling the illegal trapping issue in the SBA as it would appear that their new partnership approach and close collaboration with NGOs, as well as the new measures implemented since 2017, are having very positive results. These new measures must be continued into 2019 and beyond, to ensure this success continues. Additionally the Cyprus enforcement agencies, and particularly the Game and Fauna Service, have continued to issue high, deterrent on-the-spot fines, which BirdLife considers have also contributed to this overall reduction in bird trapping with the use of mist nets.

Unfortunately, trapping activity levels within the Republic of Cyprus areas showed an increase for autumn 2018 (compared to autumn 2017), a worrying development. Limestick use still remains a widespread problem within this jurisdiction. BirdLife Cyprus attributes this increase to reduced enforcement action on the ground by the Cyprus competent authorities, particularly by the Cyprus Police Anti-Poaching Unit. We believe this limited enforcement action to have resulted from pressure from pro-trapping lobbying groups during autumn 2017 and 2018. We believe that more resources and clear political backing need to be provided both to the Cyprus Police Anti-poaching unit, in order to re-establish its past effectiveness, and to the Game and Fauna Service, especially when it comes to tackling the big, organized, persistent trappers. BirdLife Cyprus will at the same time continue its efforts to build support for an end to trapping, including a continuation of the NGO's growing focus on awareness-raising and education.

In no way can it be assumed that the problem of illegal bird trapping has been solved. Similar reductions in trapping were recorded in the past, but did not last. Prior to and just after Cyprus joining the European Union (EU), a significant decrease in bird trapping was recorded due to increased enforcement effort, resulting from behind-the-scenes pressure from the EU to tackle this problem. However, a few years later, the zero-tolerance approach was no longer being applied, and trapping levels increased dramatically. It is therefore vital that the positive results of 2017 and 2018 are built upon and 'nailed down' through ongoing enforcement action at all levels, to ensure no slide back to higher trapping levels. An indication of a setback is the increase in trapping levels recorded in the Republic during autumn 2018, which we believe has resulted from the lack of enforcement action, particularly from the Cyprus Police Anti-poaching unit.

With regards to the amendment to the 'Protection and Management of wild birds and game species Law of 152/2003' and specifically the introduction of on-the-spot fines, this appears to have been implemented by the enforcement agencies. From July 2017 to this date a total of 293 fines have been issued adding to a total of 930,000 Euros. From the data provided from the competent authority, the Game and Fauna Service, it appears that the lower fines are being paid, while the higher fines are not.

Offenders who do not pay are taken to court, however it is not as yet clear whether the Cyprus courts would issue a similar / higher fine or a lower one. The concern is if the latter takes place, then the sustainability and impact of the new on-the-spot fine system would essentially collapse. Moreover, the much lower penalties for limestick trapping is a serious concern, and incidents of limestick trapping sites are indicative of the non-deterrent effect for this offence.

Recommendations

In conclusion, BirdLife Cyprus stresses the following actions and measures as areas for action in 2019 and calls upon decision makers to prioritise their undertaking:

1. The Cyprus competent authorities to strengthen the collaboration with environmental NGOs on the ground, adopting a similar approach to that taken by the SBA Police, in order to make enforcement action more effective.
2. The Cyprus Government to strengthen and support the competent authorities, particularly the Cyprus Police Anti-poaching unit, to enable them to enforce the law to its full extent and to continue issuing deterrent on-the-spot fines, as well as increased and consistent enforcement action against law-breaking restaurants serving illegal ambelopoulia “delicacies” (to address demand).
3. The Cyprus Parliament to revisit the June 2017 amendment to the “Protection and Management of Wild Birds and Game Species law”, and to withdraw the possibility for game consumption in restaurants, as well as to increase the fines for limestick possession and use so that they provide an effective deterrent. BirdLife Cyprus considers that these provisions are in breach of the EU Birds Directive (2009/147/EC).
4. The Cyprus Government to start the implementation of the Strategic Plan for tackling illegal bird trapping (with the removal of the ‘alternative plan’ derogation), which has been pending since May 2015, with the engagement of all stakeholders including NGOs.
5. The SBA Administration to continue with the collaborative partnership approach adopted with environmental NGOs.
6. Following the success of the irrigation removal on Cape Pyla, the SBA Administration to move to draw up a habitat management plan for the long-term eradication of invasive acacia on the Cape, in line with the responsibilities to manage the SAC (Special Area of Conservation), and to restart the acacia removal programme.

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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). In terms of the analysis of the survey data BirdLife Cyprus is using the TRIM (Trends & Indices for Monitoring data) programme, which enables the analysis of time series of counts with missing observations (read more about TRIM in Appendix 4).

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. Trapping activity includes:

- mistnetting activity, which is the main focus of the surveillance programme of BirdLife Cyprus. This is calculated using the total length of active net rides recorded within the survey area; and
- limesticks, using the total number of active limesticks found within the survey area.

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 detected. 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

<u>Net code</u>	<u>Habitat code</u>	<u>Tape lure code</u>
O – old ride	A – acacia	P – tale lure present, playing
P – ride recently prepared	C – citrus	L – loudspeakers present
ANN – active no nets present	E – eucalyptus	Y – tape lure present, not playing
AUN – active unset net present	F – fig	U – unknown
ASN – active set net present	J – mulberry	W – electrical wires associated with tape lures
IUN – inactive unset net present	O – olive	B – car battery present
	M – maquis	
	P – pomegranate	
	K – carob	
	Cy – cypress	
	L – lentisk	
	S – syrian plum	

The main net ride classifications are described below:

- Prepared (P): 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 (see Figure 4),
- Active No Net (ANN): 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 (see Figure 5),
- Active Unset Net present (AUN): A net ride where the trapper has left the mist net on the poles but it is furled i.e. the mist net is not stretched up for catching birds but lowered down (or the net is placed e.g. under a tree) (see Figure 6), and
- Active Set Net present (ASN): A net ride where the trapper has left the mist net set on the poles and it is ready for catching birds (see Figure 7).



Figure 5: Prepared (P) net ride



Figure 6: Active No Net ride (ANN) with poles, bases, feathers & signs of trampling in an olive grove



Figure 7: Active Unset Net present (AUN) in an olive grove



Figure 8: Active Set Net present (ASN) –corridors in orchards are often used for mist netting

Limesticks

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

Survey data for autumn 2018

Confidential Information - This information is only provided upon request.

Appendix 3

Estimation of numbers of birds caught during autumn 2018

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
- 60 days is the duration of the trapping period for spring and autumn seasons
- 50% scaling factor – applied for spring estimates to account for a lower number of migrating birds passing via Cyprus compared to the autumn
- 405 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)
- 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 autumn:

For nets = [(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)

$$= [(301+40+15) / (12) \times (20) \times (405/60) \times (60)]$$

= **240,300** birds could have been caught within the survey area in **mist nets**.

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

$$= 56 \times 0.5 \times (405/60) \times 60$$

= **11,340** birds caught within the survey area on **limesticks**

In total 251,640 birds could have been killed in mist nets and on limesticks within the survey area during autumn 2018. Assuming that the survey area accounts for 75% of the trapping activity in Cyprus, the bird death toll across Cyprus is:

$$= 251,640 / 75\%$$

= **335,520 birds** could have been killed in nets and on limesticks across all Cyprus during autumn 2018.

Appendix 4

TRIM model description

TRIM (Trends & Indices for Monitoring data) is a program for the analysis of time series of counts with missing observations. The program can be used to estimate indices and trends and to assess the effects of covariates on these indices and trends. TRIM analyses time series of counts, using Poisson regression and produces estimates of yearly indices and trends (Panneeloeck & van Strien 2005). If observations are missing, TRIM estimates the missing values on the basis of changes observed on plots that were monitored.

In other words, TRIM enables us to use the data from all the trapping survey squares ever surveyed under the BirdLife Cyprus surveillance programme during the autumn period, in total 104 squares, even though these squares were not all covered each autumn season. The programme 'fills in' missing values for squares that were not covered in a particular year on the basis of the general trend derived from the data as a whole. The TRIM software (freely available from <http://www.ebcc.info/trim.html>) is very widely used for analysis of field data from ecological or biological studies. It works as an index, setting the first year of a time series of data the value of 100 (in this case year 2002) and showing up or down changes in subsequent years relative to this value of 100. TRIM program allows the user to select various models to undertake the analysis: a) Model 1: No time-effects, b) Model 2: Linear (switching) trend, and c) Model 3: Effects for each time-point. **For the analysis presented in this report BirdLife Cyprus has selected Model 2, following the advice of RSPB senior conservation scientist Mr Simon Wotton.** Below is an explanation of why.

Which model should one use: the time-effects model or the linear trend model? (Panneeloeck & van Strien 2005)

The time effects model (= year effects model in case the time points are years) estimates parameters for each separate year and should be chosen if one wants to assess indices for each year. The linear trend model should be chosen if one is interested in testing whether a trend has happened across a number of years, by selecting one or more years as changepoints. The linear trend model should also be chosen when the data are too sparse to run the time effects model. Using the linear trend model also allows testing trends before and after particular changepoints. Options are (1) to test trends before and after a priori selected changepoints or **(2) to let TRIM search for the substantial changepoints by using the stepwise procedure.** If all years are selected as changepoints, the linear trend model is equivalent to the time effects model (although it results in a description in terms of trend slope parameters rather than time point parameters). Note that the linear trend model also produces indices for each year, but not necessarily based on yearly parameters as in the time effects model. Instead of yearly parameters, the linear trend uses the trend across a number of years to approximate the indices.

BirdLife Cyprus has used the 'Linear trend model by using the stepwise procedure and with all years selected as changepoints' for the trend analysis presented in this report, following the recommendation of RSPB senior conservation scientist Mr Simon Wotton. The linear trend model can be run without any changepoints selected. Thereby it imputes missing counts based on the trend over the whole period studied. Be careful in using the model without any changepoints; the resulting indices might be unrealistic (this is the key point why this approach was not recommended and all years were selected as changepoints).

Appendix 5

Shortlist of media coverage related to illegal bird trapping for 2018

- alphanews – Ξανά στα χαρακώματα κυνηγοί και Υπ. Θήρας για τα αμπελοπούλια <http://alphanews.live/cyprus/xana-sta-charakomata-kynegoi-kai-yperesia-theras-gia-ta-ampelopoulia-binteo> 10/03/2018
- reporter –Σκληρή ανακοίνωση από ομάδα κυνηγών, καταφεύγουν σε διαμαρτυρία <http://www.reporter.com.cy/local-news/article/313724/skliri-anakoinosi-apo-omada-kynign-katafevgyn-se-diamartyria> 09/03/2018
- city.sigmalive – Από ταις 8000ευρώ ξεκινά το πρόστιμο για όσους κυνηγούν εκτός της καθορισμένης περιόδου <http://city.sigmalive.com/article/26351/apo-ta-8000-eyro-xekina-prostimo-gia-osoys-kynigoyn-ektos-tis-kathorismenis-periodoy> 14/03/2018
- alphanews – Δεκέλεια: Κατέστρεψαν χιλιάδες τεκμήρια για παγίδευση αμπελοπουλιών <https://alphanews.live/cyprus/dekeleiakatestrepsan-chiliades-tekmeria-gia-pagideyse-ampelopoulylion-binteophoto> 23/03/2018
- Κυνηγοί απειλούν ότι θα κλείσουν επ' αόριστον τη Ριζοελιά 18/04/2018 <http://www.sigmalive.com/news/local/502395/kynigoi-apeiloun-oti-tha-kleisoun-ep-aoriston-ti-rizoelia>
- Protesting hunters block roundabout 22/04/2018 <http://cyprus-mail.com/2018/04/22/protesting-hunters-block-roundabout/>
- Η Ομ. Κυνηγιού καταδικάζει το κλείσιμο του κυκλικού κόμβου στην Ριζοελιά 23/04/2018 <http://tvonenews.com.cy/h-omospondia-kynhgioy-katadikazei-to-kleisimo-toy-kyklikoy-komboy-rizoelias>
- 65 old woman caught in the act of wild bird trappinh 27/04/2018 <http://in-cyprus.com/news/local/65-year-old-woman-caught-in-the-act-of-wild-bird-trapping/>
- Έπιασαν στα πράσα γυναίκα-λαθροθηρία 27/04/2018 <http://www.philenews.com/koinonia/eidiseis/article/518212/epiasan-sta-prasa-gnaika-lathrothira>
- Αστυνομία : Το οργανωμένο έγκλημα θα μας βρει απέναντι του 17/05/2018 <http://www.kathimerini.com.cy/gr/kypros/astynomia-to-organomeno-egklima-mas-exei-apenanti-toy>
- Σκέψεις αστυνομίας για κατάργηση του Ουλαμού Πάταξης Λαθροθηρίας ανησυχούν στο Ταμείο Θήρας 15/06/2018 <http://tvonenews.com.cy/skepseis-astynomias-gia-katarghsh-toy-oylamoy-patakshs-lathrothhrias-anhsyxoy-sto-tameio-thhras>
- Τον τσάκωσαν με δίκτυα παγίδευσης στα ΒΒ Δεκέλειας 07/09/2018 <http://www.reporter.com.cy/police/article/387819/ton-tsakosan-me-dichtya-pagdefsis-stis-bretanikes-baseis-dekeleias>
- Combined operation nets birdtrappers 23/10/2018 <https://cyprus-mail.com/2018/10/23/combined-operation-nets-six-bird-trappers/>
- Στο στόχαστρο του Ελεγκτή το τάϊσμα των περδικιών από το Ταμείο Θήρας 19/10/2018 <http://www.reporter.com.cy/local-news/article/406267/sto-stochastro-toy-eleggti-to-taisma-ton-perdikion-apo-to-tameio-thiras>
- <https://cyprus-mail.com/2018/11/10/man-fined-e2k-for-possession-of-dead-birds/>