



UPDATE on illegal bird trapping activity in Cyprus

Covering the autumn 2023 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 αποτελέσματα του προγράμματος συστηματικής παρακολούθησης για την περίοδο παγίδευσης φθινοπώρου 2023 δείχνουν αύξηση στα επίπεδα παγίδευσης με δίχτυα τόσο στην Κυπριακή Δημοκρατία όσο και στις περιοχές των Βρετανικών Βάσεων Δεκέλειας, σε σύγκριση με το φθινόπωρο 2022. Η μακροπρόθεσμη τάση παγίδευσης με δίχτυα από το 2002 εξακολουθεί να παρουσιάζει μια απότομη μείωση.

Το συστηματικό πρόγραμμα παρακολούθησης του BirdLife Cyprus καλύπτει μια περιοχή έρευνας η οποία περιλαμβάνει δύο επικράτειες: την Κυπριακή Δημοκρατία και τις Βρετανικές Βάσεις (SBA) Δεκέλειας. Συγκεκριμένα, καλύπτει τις περιοχές Λάρνακας - Αμμοχώστου και Αγίου Θεοδώρου – Μαρωνίου. Με βάση την ανάλυση των στοιχείων της έρευνας, εκτιμούμε ότι κατά τη διάρκεια του φθινοπώρου του 2023 υπήρχαν 4685 μέτρα ενεργών διαδρομών με δίχτυα εντός της περιοχής έρευνας. Με αυτά τα δεδομένα, εκτιμάται ότι μπορεί να θανατώθηκαν περίπου 435.000 πουλιά εντός της περιοχής έρευνας.

Συνολικά, η χρήση δικτύων για το φθινόπωρο 2023 ήταν κατά 88% χαμηλότερη σε σύγκριση με τα επίπεδα του 2002 (όταν ξεκίνησε το πρόγραμμα παρακολούθησης του BirdLife Cyprus), εντός της περιοχής έρευνας (σύμφωνα με την ανάλυση που έγινε στο πρόγραμμα TRIM). Σε σύγκριση με το 2022, η παγίδευση το φθινόπωρο του 2023 φαίνεται να αυξήθηκε κατά 6% εντός της περιοχής έρευνας, κάτι που οφείλεται στην αύξηση της παγίδευσης που σημειώθηκε στις περιοχές των Βρετανικών Βάσεων. Η δύναμη του Ουλαμού Πάταξης Λαθροθηρίας της Αστυνομίας των Βρετανικών Βάσεων μειώθηκε σημαντικά πριν την περίοδο παγίδευσης του φθινοπώρου του 2023. Αυτή η περιορισμένη επιβολή του νόμου οδήγησε σε αύξηση της παράνομης παγίδευσης, ιδιαίτερα στην περιοχή του Αγίου Νικολάου και στο Ξυλοφάγου εντός των Βρετανικών Βάσεων. Έχοντας καταγράψει αυτήν την ανησυχητική αύξηση στα επίπεδα παράνομης παγίδευσης εντός των Βρετανικών Βάσεων, κατά τις πρώτες εβδομάδες της φθινοπωρινής περιόδου παγίδευσης τον Σεπτέμβριο, τόσο το BirdLife Cyprus όσο και η RSPB εκφράσαμε τις ανησυχίες μας προς την αστυνομία των Βάσεων. Ευτυχώς, η αστυνομία των Βάσεων ενήργησε για να αντιμετωπίσει την αυξημένη δραστηριότητα παράνομης παγίδευσης, ενισχύοντας τον ουλαμό πάταξης λαθροθηρίας.

Συνολικά, η παγίδευση με δίχτυα εντός των περιοχών των Βρετανικών Βάσεων φαίνεται να παρουσίασε αύξηση 41% σε σύγκριση με το φθινόπωρο του 2022, κάτι που δείχνει τι μπορεί να συμβεί όταν αφαιρεθούν κονδύλια από τις δράσεις της αστυνομίας για την επιβολή του νόμου κατά της παράνομης παγίδευσης. Δείχνει επίσης ότι η σχέση συνεργασίας που αναπτύχθηκε τα τελευταία χρόνια μεταξύ της Αστυνομίας των Βρετανικών Βάσεων και των περιβαλλοντικών ΜΚΟ είναι αποτελεσματική και μεταφράζεται σε πράξη.

Τα επίπεδα παγίδευσης στην Κυπριακή Δημοκρατία σημείωσαν μείωση 9%, σε σύγκριση με το φθινόπωρο του 2022. Πρόκειται για μια ενθαρρυντική εξέλιξη, με τη συνέχιση της μείωσης που σημειώθηκε πέρσι. Παρά αυτή τη φαινομενική μείωση στην παγίδευση με δίχτυα τα τελευταία δύο χρόνια, το BirdLife Cyprus έχει παρατηρήσει αύξηση στην οργανωμένη παγίδευση με διάφορες συμμορίες παγιδευτών να παγιδεύουν σε μεγάλη κλίμακα με τη χρήση δικτύων, ιδιαίτερα στην Επαρχία Λάρνακας. Αυτό φαίνεται από την έρευνα της Committee Against Bird Slaughter (CABS). Με την αποκατάσταση του Ουλαμού Πάταξης Λαθροθηρίας της Αστυνομίας Κύπρου τον Ιούνιο του 2023, αναμενόταν ότι αυτές οι οργανωμένες ομάδες παγιδευτών θα αντιμετωπιζόνταν αποτελεσματικά από

αυτή τη μονάδα. Ωστόσο, το επίπεδο επιβολής του νόμου από τότε που επαναλειτούργησε ήταν απογοητευτικό. Η Αστυνομία Κύπρου, σε συνεργασία με την Υπηρεσία Θήρας και Πανίδας, χρειάζεται να αντιμετωπίσει αποτελεσματικά τους οργανωμένους αυτούς παγιδευτές, με μηδενική ανοχή και με τη λήψη αποτρεπτικών μέτρων, σε συνεργασία με τις περιβαλλοντικές ΜΚΟ. Η προσέγγιση εταιρικής σχέσης που αναπτύχθηκε τα τελευταία χρόνια μεταξύ των αρχών των Βρετανικών Βάσεων και των ΜΚΟ αποτελεί πραγματική απόδειξη της προόδου που μπορεί να επιτευχθεί, εάν εργαστούμε συλλογικά και από κοινού.

Σε αντίθεση με τη μείωση που καταγράφεται στα επίπεδα παγίδευσης με δίχτυα, η παγίδευση με ξόβεργα παραμένει σε υψηλά επίπεδα. Αυτά τα ευρήματα υποστηρίζονται τόσο από τα στοιχεία της Committee Against Bird Slaughter (CABS) και όσο και από αυτά της Υπηρεσίας Θήρας και Πανίδας. Ενώ τα πρόστιμα για την παγίδευση με δίχτυα μπορεί να είναι αποτελεσματικά και αποτρεπτικά, οι χαλαρώσεις στον «Περί Προστασίας και Διαχείρισης Αγρίων Πτηνών και Θηραμάτων» νόμο είχαν ως αποτέλεσμα μη τιμωρητικά και μη αποτρεπτικά πρόστιμα για παγίδευση με ξόβεργα.

Παρά αυτές τις χαλαρώσεις που πέρασαν στην εθνική νομοθεσία για τα πουλιά, το Κίνημα Ενωμένων Κυπρίων Κυνηγών, ένα πολιτικό κόμμα που δημιουργήθηκε από κυνηγούς, πρόσφατα πραγματοποίησε διαμαρτυρία, απαιτώντας την περαιτέρω μείωση προστίμων, την επανέναρξη του ανοιξιάτικου κυνηγιού του Τρυγονιού και τη νομιμοποίηση της παγίδευσης με ξόβεργα. Αυτό είναι μια σαφής ένδειξη της αυξανόμενης πολιτικής πίεσης που ασκούν τα τελευταία χρόνια τα κυνηγετικά λόμπι, τα οποία κερδίζουν έδαφος κάθε φορά που η σχετική νομοθεσία για τα πουλιά συζητείται στην Κυπριακή Βουλή. Αυτός είναι ο λόγος που η Ευρωπαϊκή Επιτροπή, ως θεματοφύλακας του δικαίου της ΕΕ, πρέπει να ενεργήσει για να αναστρέψει αυτές τις χαλαρώσεις. Αυτό θα έστειλε ένα σαφές μήνυμα στην Κυπριακή Κυβέρνηση και στην Κυπριακή Βουλή ότι τυχόν διατάξεις που θα οδηγούσαν σε χαμηλότερο καθεστώς προστασίας και θα είχαν αρνητικό αντίκτυπο στη διατήρηση των μεταναστευτικών πουλιών δεν επιτρέπονται και δεν γίνονται ανεκτά από την Ευρωπαϊκή Ένωση.

Το BirdLife Cyprus καλεί την Κυβέρνηση της Κύπρου να εφαρμόσει τις ακόλουθες συστάσεις:

- 1) Η Κυπριακή Βουλή να επανεξετάσει τις τροποποιήσεις του νόμου «Περί Προστασίας και Διαχείρισης Αγρίων Πτηνών και Θηραμάτων» και να επαναφέρει το πρόστιμο για τα αδικήματα κατοχής και χρήσης ξοβέργων και του κυνηγιού των 14 προστατευόμενων, μη θηρεύσιμων ειδών από τα 200 στα 2000 ευρώ. Σε περίπτωση μη κατάργησης των χαμηλότερων αυτών προστίμων, η Κύπρος θα είναι αντιμέτωπη με την πιθανότητα έναρξης της διαδικασίας επί παραβάσει.
- 2) Ο Ουλαμός Πάταξης Λαθροθηρίας, σε συνεργασία με την Υπηρεσία Θήρας και Πανίδας, να καταρτίσουν ένα σχέδιο δράσης με έμφαση στους μεγάλους, οργανωμένους παγιδευτές, δουλεύοντας μαζί για αντιμετώπιση αυτού του προβλήματος. Επιπλέον, οι Κυπριακές Αρχές πρέπει να αυξήσουν την πάταξη κατά των εστιατορίων που σερβίρουν παράνομα αμπελοπούλια (για αντιμετώπιση της ζήτησης).
- 3) Οι αρμόδιες αρχές της Κυπριακής Δημοκρατίας να ενισχύσουν τη συνεργασία με περιβαλλοντικές ΜΚΟ, υιοθετώντας παρόμοια προσέγγιση με αυτή της Αστυνομίας των Βρετανικών Βάσεων, προκειμένου να καταστεί πιο αποτελεσματική η πάταξη στο πεδίο.
- 4) Να γίνει ενημέρωση στο δικαστικό σώμα (δικαστές, κατηγορούς) σχετικά με την εξώδικη ρύθμιση και ότι η παράνομη παγίδευση πουλιών αποτελεί σοβαρό έγκλημα κατά της άγριας

ζωής, προκειμένου να αντιμετωπιστεί η μεγάλη διαφορά που παρατηρείται μεταξύ των εξώδικων που εκδίδονται και των δικαστικών ποινών που τελικά επιβάλλονται. Θεωρούμε ότι η Υπηρεσία Θήρας και Πανίδας, ως αρμόδια αρχή για την εφαρμογή της νομοθεσίας για τα πουλιά, είναι η πιο κατάλληλη για την υλοποίηση αυτής της δράσης.

Το BirdLife Cyprus και το RSPB καλούν τη Διοίκηση των Βρετανικών Βάσεων να εφαρμόσει τις ακόλουθες συστάσεις:

- 1) Η Αστυνομία των Βρετανικών Βάσεων να διατηρήσει επαρκώς στελεχωμένη την ομάδα καταπολέμησης της παγίδευσης και λαθροθηρίας. Αυτό είναι εξαιρετικά σημαντικό για να συνεχίσει να αποτελεί μια αποτρεπτική και αποτελεσματική μονάδα, διατηρώντας έτσι τα χαμηλά επίπεδα παγίδευσης που καταγράφονται τα τελευταία χρόνια.
- 2) Η Διοίκηση και η Αστυνομία των Βρετανικών Βάσεων να συνεχίσει τη συνεργασία με τις περιβαλλοντικές ΜΚΟ, καθώς και την εφαρμογή και την αναθεώρηση του σχεδίου δράσης της για την παράνομη παγίδευση και λαθροθηρία.

Συνάμα, το BirdLife Cyprus καλεί την Ευρωπαϊκή Επιτροπή να συνεχίσει να ασκεί τη δέουσα πίεση προς την Κυπριακή Κυβέρνηση για κατάργηση των χαμηλότερων προστίμων για την παράνομη παγίδευση και θήρευση μεταναστευτικών πουλιών. Αυτό θα έστελνε ένα σαφές μήνυμα στην Κυπριακή Κυβέρνηση και στην Κυπριακή Βουλή ότι τυχόν διατάξεις που θα οδηγούσαν σε χαμηλότερο καθεστώς προστασίας και θα είχαν αρνητικό αντίκτυπο στη διατήρηση των μεταναστευτικών πουλιών δεν επιτρέπονται και δεν γίνονται ανεκτές από την Ευρωπαϊκή Ένωση. Οποιαδήποτε δράση τώρα θα μπορούσε ενδεχομένως να σταματήσει την περαιτέρω χαλάρωση του νόμου στο μέλλον, ιδιαίτερα καθώς υπάρχει αυξανόμενη πίεση από τα κυνηγετικά λόμπι για περαιτέρω χαλαρώσεις.

Η αναφορά χωρίζεται στα ακόλουθα κεφάλαια:

- Το 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 πουλιών και παρουσιάζει την τρέχουσα κατάσταση,
- Το κεφάλαιο 2 παρουσιάζει το πρόγραμμα παρακολούθησης του BirdLife Cyprus,
- Το κεφάλαιο 3 παρουσιάζει τα αποτελέσματα της έρευνας πεδίου και την ανάλυση από το πρόγραμμα TRIM, τα στοιχεία από τις προσπάθειες των αρμοδίων αρχών για πάταξη και το πολιτικό και κοινωνικό κλίμα που επικρατεί,
- Στο κεφάλαιο 4 γίνεται μια σύνοψη της κατάστασης της παράνομης παγίδευσης πουλιών, ενώ επίσης γίνονται συστάσεις προς την Κυπριακή Κυβέρνηση και τη Διοίκηση των Βρετανικών Βάσεων, καθώς επίσης και προς την Ευρωπαϊκή Επιτροπή.

Τα έξοδα για την εργασία πεδίου του BirdLife Cyprus (καύσιμα), καθώς και τα έξοδα των εκάστοτε εθελοντών, καλύφθηκαν από τη NABU (BirdLife στη Γερμανία), ενώ το RSPB (BirdLife στο Ηνωμένο Βασίλειο) κάλυψε τους σχετικούς μισθούς. Τα έξοδα του εμπειρογνώμονα παρακολούθησης για το φθινόπωρο του 2023 καλύφθηκαν από το BirdLife Ελβετίας.

Summary

The results of the systematic monitoring programme for the autumn 2023 trapping season show an apparent overall increase in trapping with mist nets. On a jurisdiction level, there was an apparent decrease in trapping in the Republic of Cyprus and an apparent increase in the Eastern Sovereign Base Areas (ESBA) compared to autumn 2022. Since 2002, the longer-term trend for trapping levels with mist nets still shows a steep decline.

The BirdLife Cyprus systematic monitoring programme is based upon a survey coverage that encompasses two jurisdictional areas: The Republic of Cyprus and the Eastern Sovereign Base Areas (ESBA). It specifically covers the Larnaka - Famagusta and the Ayios Theodoros – Maroni areas. Based on analysis of the survey data, we estimate that about 4,685m of mist net rides were active within the survey area during the autumn of 2023. Based on trapping activity recorded, it is estimated that nearly 435,000 birds may have been killed within the survey area.

Overall, mist netting activity for autumn 2023 was 88% lower compared to the 2002 (baseline) levels within the survey area, based on analysis using the TRIM model. Compared to 2022, trapping in autumn 2023 showed an apparent increase of 6% within the survey area - which is due to an increase in trapping noted in the Sovereign Base Areas (SBA). The SBA Police Anti-Poaching Unit was significantly reduced in resources at the start of the autumn 2023 trapping season. This limited enforcement action on the ground subsequently led to an increase in bird trapping within the ESBA, particularly in the Ayios Nikolaos Garrison area, and the Xylofagou area. Having recorded this worrisome increase in bird trapping levels within the ESBA during the first weeks of the autumn trapping period in September, both BirdLife Cyprus and RSPB expressed concerns to the SBA Police. Fortunately, the SBA Police acted to address the increased bird trapping activity by re-enforcing the Anti-Poaching Unit.

Overall, mist net trapping within the SBA areas showed an apparent increase of 41% compared to autumn 2022. This season was a good case study of what can happen when police resources are removed/redirected from illegal trapping enforcement and deterrence action. It also shows that the partnership developed in recent years between the SBAs and environmental NGOs is effective, both on the ground and in communicating and addressing any concerns raised early on.

Trapping activity levels within the Republic of Cyprus areas showed an apparent decrease of up to 9% compared to autumn 2022, a positive result overall, continuing the decrease noted last year. Despite this apparent reduction in mist netting in the last couple of years, BirdLife Cyprus has observed an increase in organized trapping by various groups of trappers, undertaking large scale trapping with the use of mist nets, particularly in the Larnaca District. This is also substantiated from the Committee Against Bird Slaughter (CABS) survey. With the re-instatement of the Cyprus Police Anti-Poaching Unit in June 2023, it was expected that these organized trapping groups would be effectively tackled by this unit. However, enforcement statistics from the units' first autumn season back in operation were disappointing. The Cyprus Police, in collaboration with the Game and Fauna Service need to effectively tackle these trapping groups, with zero tolerance and with the adoption of deterrent measures, in collaboration with the environmental NGOs. The partnership approach that has been developed in recent years between the SBA authorities and the NGOs is a testament to the positive progress that can be achieved on the ground, if we work collaboratively and jointly.

Contrary to the progress noted with regards to mist net trapping levels in the recent years, limestick trapping activity has remained at high levels. These findings are supported by CABS survey data and the Game and Fauna Service enforcement statistics data. While fines for mist netting can be effective and provide a deterrent, relaxations in the “Protection and Management of Wild Birds and Game Species law” have seen fines for limestick trapping become non-punitive and non-deterrent.

Despite these relaxations passed in the relevant Cyprus law, the Movement of United Cypriot Hunters, a political party formed by hunters, recently carried out a protest to demand a further reduction of fines, the re-opening of the Spring turtle dove hunting season, and the legalization of limestick trapping. This is a clear indication of the growing political pressure that hunting lobbies have exerted in recent years, winning ground every time the relevant bird legislation is discussed at the Cyprus Parliament. It is for this reason that the EU Commission, as guardian of the EU law, needs to act to reverse these relaxations. This would send a clear message to the Cyprus Government and the national Parliament that any provisions that lead to a lower protection status and that negatively impact the conservation of migratory wild birds would not be permitted and tolerated by the European Union.

BirdLife Cyprus calls upon the Government of Cyprus to implement the following recommendations:

- 1) The Cyprus Parliament to reverse amendments to the law "Protection and Management of Wild Birds and Game Species" and to restore the fine for the offenses of possession and use of limesticks and hunting of 14 protected, non-game species from 200 for up to 50 birds to 2000 euros for one bird. Unless this happens, Cyprus will be faced with the possibility of infringement proceedings from the European Commission.
- 2) The Cyprus Police Anti-Poaching unit, in collaboration with the Game and Fauna Service, need to draw up an action plan which focusses on the large scale, organized trappers, working together to tackle this issue. Furthermore, the Cyprus authorities need to undertake increased and consistent enforcement action against law-breaking restaurants serving illegal ambelopoulia “delicacies” (to address demand).
- 3) The Cyprus competent authorities need 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.
- 4) Training to be provided to the Judiciary and Prosecutors regarding the on-the-spot fine system and the seriousness of trapping as a wildlife crime. Such training would address the large discrepancy observed between on-the-spot fines issued and court sentences handed out. We consider that the Game and Fauna Service, as the responsible authority for the implementation of the Birds legislation, is best placed to carry out this training.

BirdLife Cyprus and RSPB calls upon the SBA Administration to implement the following recommendations:

- 1) The SBA Police to maintain a well-staffed anti-trapping team, in order to continue to be a deterrent and effective unit, thus maintaining the low trapping levels recorded in recent years.
- 2) The SBA Administration and Police to continue with the collaborative partnership approach adopted with environmental NGOs and the implementation and review of its action plan.

At the same time, BirdLife Cyprus calls on the European Commission to continue to pressure the Cypriot Government for the abolition of the lower fines for illegal trapping and hunting of migratory birds. This would send a clear message to the Cyprus Government and the national Parliament that any provisions that would lead to a lower protection status and negatively impact the conservation of migratory wild birds would not be permitted and tolerated by the European Union. Action now would potentially stop further relaxations to the law in the future, particularly as there is increasing pressure from hunting lobbies for further relaxations.

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, refers 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,
- 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,
- 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 the UK) covered relevant salaries. The costs of the covert surveillance expert for autumn 2023 were covered by BirdLife Switzerland.

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 '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, the 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 at least 157 bird species have been found trapped in mist nets or on limesticks, of which 90 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. Thanks to the high price of the banned *ambelopoulia* 'delicacy', this illegal activity of bird trapping 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 and Fauna Service have recently estimated this illegal business to be valued in the order of 10 million Euros per year³.

Apart from the extensive use of non-selective methods for illegal bird trapping in Cyprus, trappers nowadays use illegal electronic calling devices that imitate the calls of migratory birds (song playback). These calling devices are normally operated during night-time, luring the birds into the trapping sites and hence increasing the illegal catch. An academic study undertaken in Cyprus has shown that the use of electronic calling devices is highly effective in luring birds towards trapping sites (Sebastianelli M. *et al*, 2020³). The findings of this study showed that playback not only increased the number of individuals of target species captured by around 11 times, but also significantly increased bycatch. The study authors concluded that: '*Our findings thus show that in contrast to popular belief that tape lures are a selective trapping method, they also lead to increased captures of non-target species, which can include species of conservation concern*'.

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 The study can be found [here](#).

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

This report presents the latest survey results, for the 2023 autumn season, when trappers target migratory birds, and especially Blackcaps and other 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 in Cyprus of BirdLife International. 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 Game and Fauna Service (GFS) and Sovereign Base Area (SBA) police at the start of the programme. Figure 1 shows the main areas of bird trapping; monitoring is concentrated in the two areas (numbered 1 and 2) where extensive trapping takes place:

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

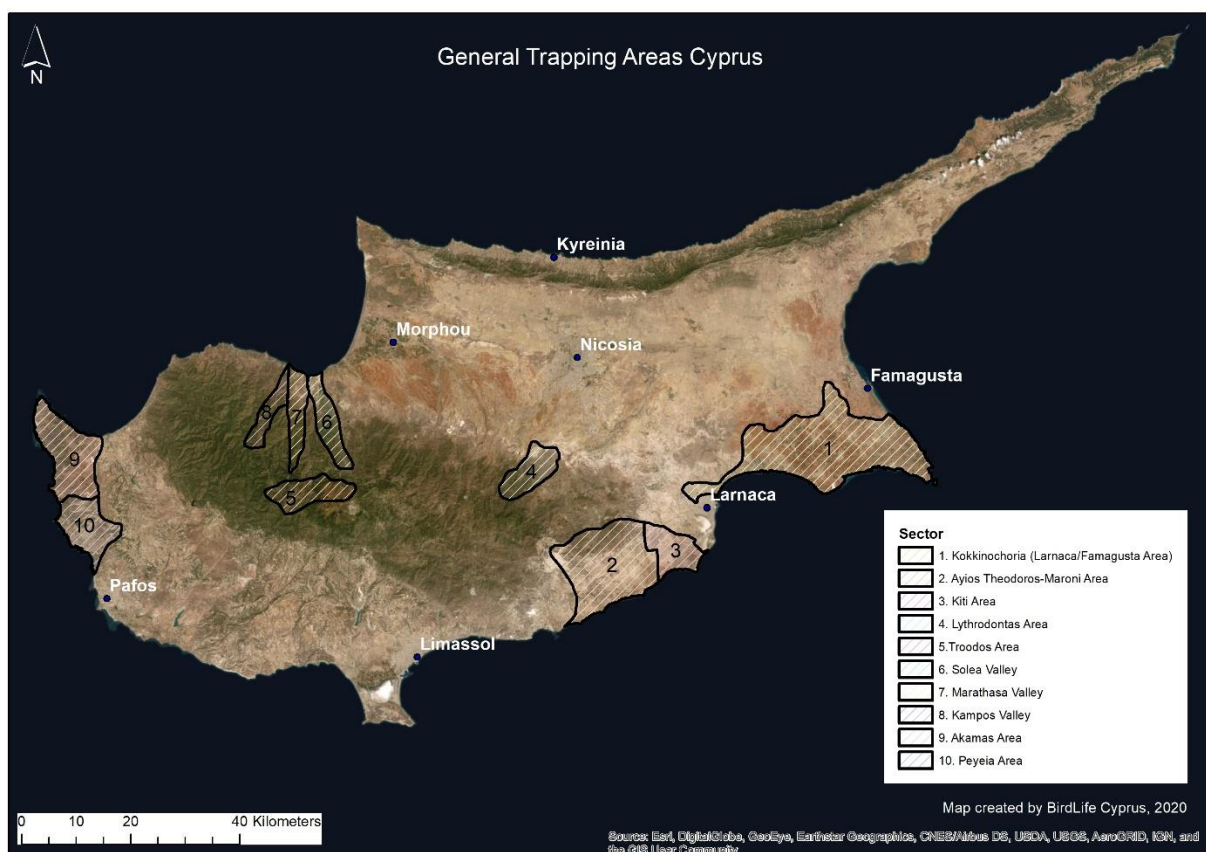


Figure 1: Map of Cyprus showing the main trapping areas

Although trapping is also an issue in other areas of Cyprus, the survey efforts focus on these two main areas due to resource limitations and because they hold the highest trapping activity. The monitoring is undertaken by visiting a random selection of sample squares (each 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 across the SBA administration and the Republic of Cyprus. For more details on the methodology see Appendix 1.

The project is undertaken in close co-operation with the Game and Fauna Service, the SBA Police, and the Cyprus Police Anti-Poaching Unit. 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 onwards and for covering the running costs and volunteer costs of the surveillance programme. BirdLife Cyprus would also like to thank BirdLife Switzerland for their support and for covering the expenses of the covert surveillance expert in autumn 2023.

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 (Panneloek & 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 186 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 [here](#)) 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.

In 2016, the SBA Administration and police began working closely with RSPB Investigations, installing covert surveillance cameras at known trapping sites in order to gather video evidence of illegal trapping activity. This cooperation has continued every year until 2023 (apart from 2020 due to covid), leading to the prosecution of multiple trappers, contributing significantly to the reversing of the pattern of large-scale bird trapping on Cape Pyla, which was until then a known trapping blackspot.

3. Results

Survey results and data analysis

Field survey data

The field survey for autumn 2023 was carried out in September and October 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 and Fauna Service, or the Cyprus Police Anti-Poaching Unit, depending on the location of the finds.

A summary of the survey data for autumn 2023 is presented in Appendix 2. In total, the field team recorded 40 active net rides (these are cleared “runs” in acacia plantations or other habitats e.g. orchards, olive groves, either holding nets or where there was clear evidence of preparation for the setting and/or use of nets), which sum up to a total length of 694 metres of net rides used for mist netting. Ten mist nets were found *in situ* (either classified as Active Set Nets or Active Unset Nets⁴). **The total length of active mist net rides within the 405 km² survey area (Larnaka - Famagusta and Ayios Theodoros – Maroni areas) can be extrapolated to 4685 m (694m x 405/ 60)⁵.** Opportunistic checks outside the selected survey squares detected an additional 23 active net rides summing up to 400 metres of active net rides, one mist net *in situ* and 61 set limesticks (see Appendix 2).

In terms of limesticks, BirdLife Cyprus detected 43 limesticks within the selected survey squares for autumn 2023 (see Appendix 2). However, as already explained, BirdLife Cyprus does not focus its field survey effort on the detection of limesticks, as other organisations do. For example, during the autumn 2023 survey by the Committee Against Bird Slaughter (CABS / SPA Foundation), a total of 1,528 limesticks, along with 62 mist nets and 35 electronic bird callers, were detected and/or seized⁶. It is important to highlight that the majority of the limesticks detected by CABS were in areas controlled by the Republic of Cyprus, indicating that limestick use is still widespread and remains a significant 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 435,000 birds could have been illegally killed within the survey area and just over 580,000 birds could have been killed across Cyprus⁷** (read Appendix 3 for more details).

If one were to split the potential death toll estimate (435,000 birds) between jurisdictions within the survey area, based on the trapping activity detected, then just over 256,000 birds would be the potential

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 2023. 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.

⁶ Information received from CABS on 27/12/22

⁷ The estimate does not include any illegal bird trapping possibly taking place in the Turkish occupied parts of Cyprus.

number killed in the Republic and just under 129,000 the potential number killed in the Dhekelia SBA⁸. (The ‘joint’ squares i.e. where the two jurisdictions overlap, are not included 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 estimate higher, especially in the Republic. 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 (see Appendix 3).

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 2023. 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 Cyprus¹¹ 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 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 regarding the survey effort. Therefore, the findings and results of the two surveys are not directly comparable. However, both surveys provide invaluable field data and are supportive and complementary to each other, provided the differences in methodology are considered.

Figure 2 shows the trapping activity levels since 2002 across a sample size of 186 squares within the survey area, with standard error margins. Additional square coverage has been included in the last few

⁸ From the 694 metres of active net rides detected within the survey area, 342 metres were in the Republic of Cyprus (from the 38 squares surveyed), 352 metres were in the SBAs (from the 20 squares surveyed), zero meters were in joint squares between the Republic and SBA areas. 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.

¹¹ 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.

years, particularly within the SBA, following a recommendation in the BTO assessment report (July 2015) to increase the sample size within this stratum¹². In keeping with our standard methodology, a stratified random sample of 60 of the 186 squares was surveyed in autumn 2023 (while ensuring balanced coverage between Republic and SBA areas).

The sample of 186 squares surveyed in various years during the surveillance programme includes 116 squares within the RoC, 57 within the SBA and 13 squares that cover areas in both jurisdictions (referred to as 'joint' squares, including also areas that cover the SBA and UN buffer). For autumn 2023, the breakdown of the squares randomly selected and surveyed at a jurisdiction level were as follows:

- 38 squares within the Republic of Cyprus,
- 20 squares within the Dhekelia SBA, and
- 2 'joint' squares.

It is important to highlight that the additional squares surveyed have slightly expanded the total square coverage (to 186 in 2022, 185 in 2021, 2020 and 2019, 157 squares in 2018, 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 reports¹³, the index values may vary slightly for the previous autumn seasons (i.e. for autumn 2022 and earlier).

¹² 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

¹³ Earlier BirdLife Cyprus trapping reports can be found [here](#).

Figure 2. Trends for autumn bird trapping activity with the use of mist nets, for all jurisdictions in the survey area

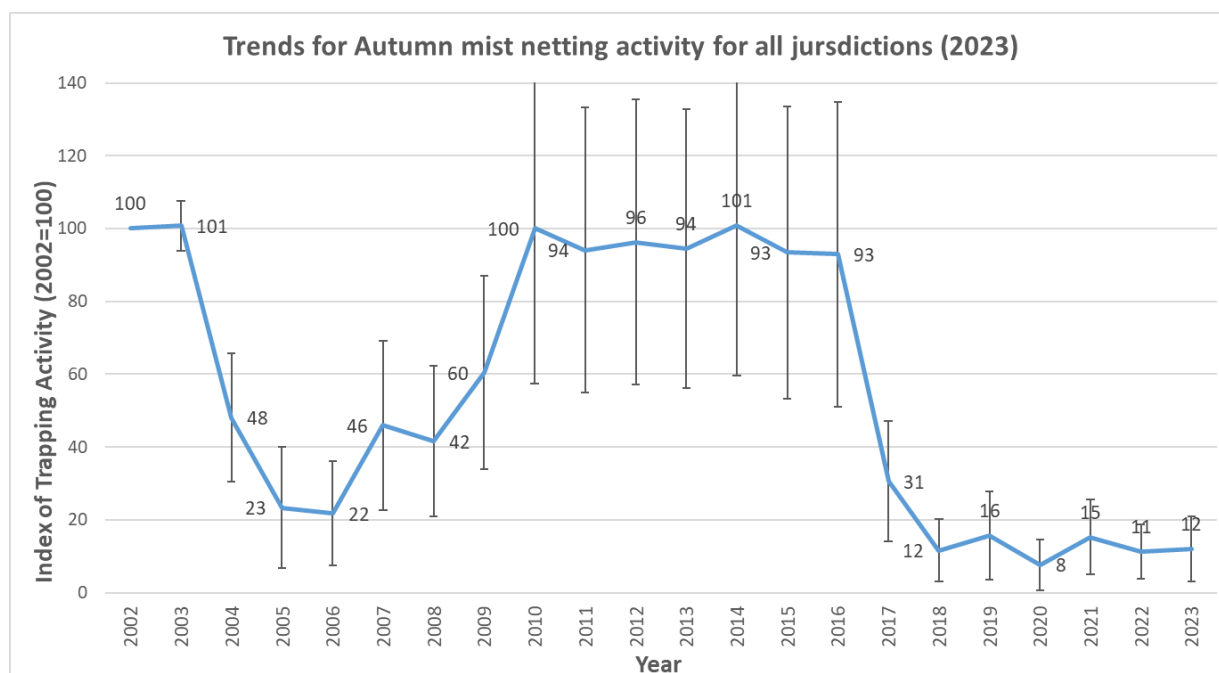


Table 1. Statistics for trend for autumn trapping levels 2002-2023 based on Figure 2

	Multiplicative trend	Standard error	95% confidence interval	Trend direction
All squares	0.9232	0.0119	0.02332	Steep Decline

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 change. Hence, value 0.9232 calculated above indicates an overall decrease in mist netting activity of around 8% per year.

Mist netting activity for autumn 2023 appears to be 88% lower compared to the baseline year of 2002 (index value is 12 for autumn 2023). The overall trend is a statistically significant ‘Steep Decline’. Compared to autumn 2022, trapping showed an apparent increase of 6% during autumn 2023 (index values from 11 to 12).

Figure 3 summarises autumn mist netting activity in the Republic of Cyprus 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 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.

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

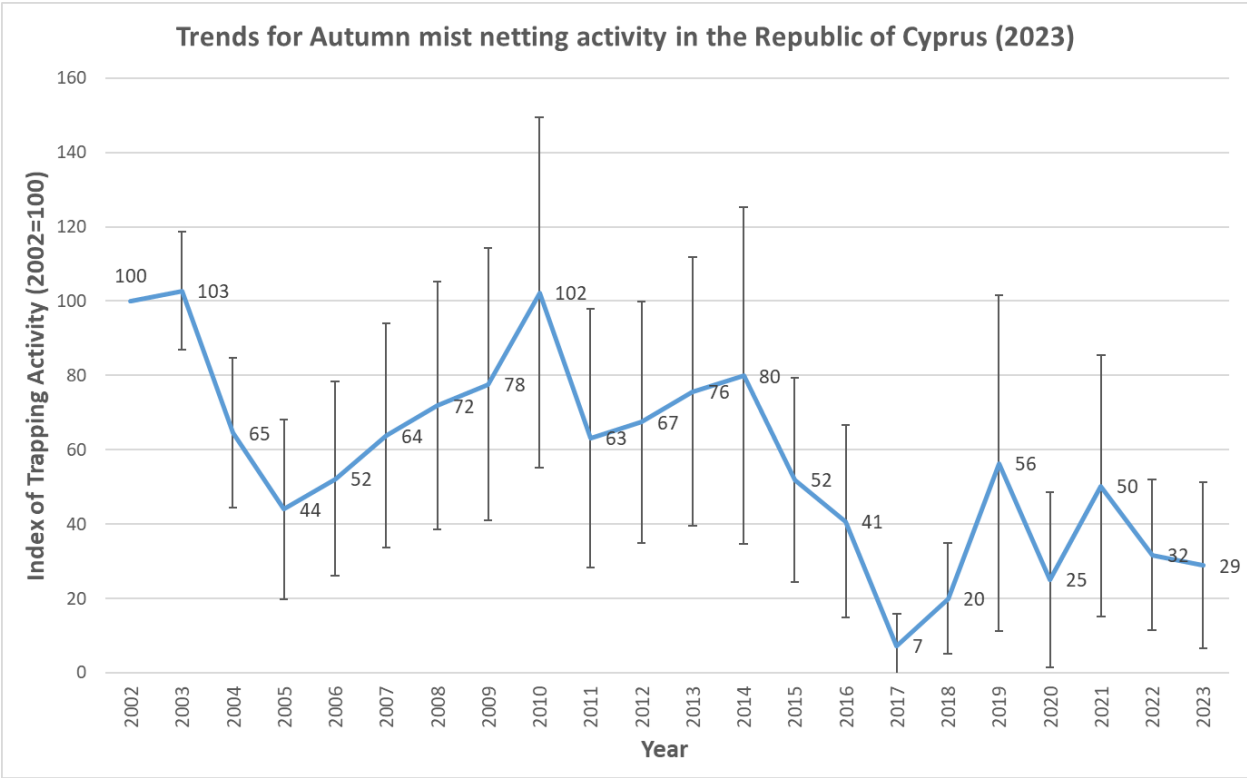


Figure 4. Trends for trapping activity for autumn mist netting within the ESBA area

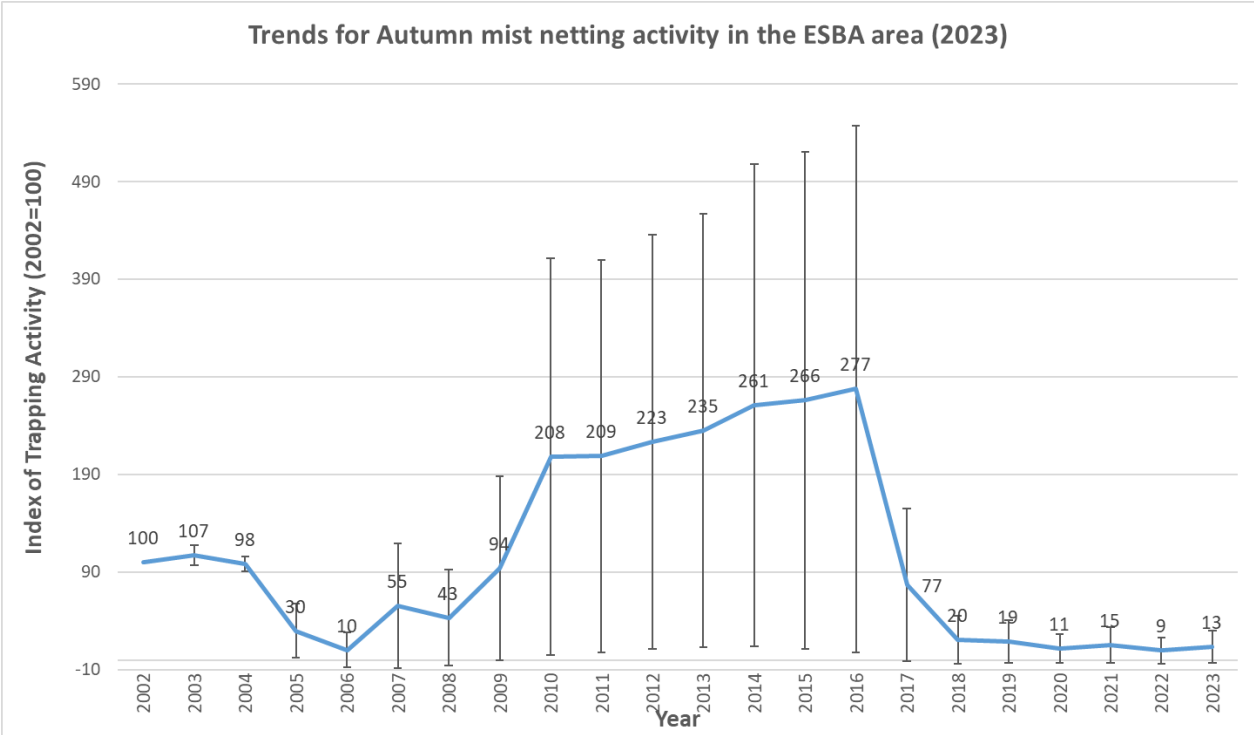


Table 2. Statistics for trends for autumn trapping activity levels 2002-2023 based on Figure 3 and Figure 4

	Multiplicative trend	Standard error	95% confidence interval	Trend direction
RoC squares	0.9448	0.0116	0.022736	Moderate Decline
SBA squares	0.9331	0.0230	0.04508	Moderate Decline

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

- **For the Republic areas, autumn 2023 mist netting activity (index value 29) showed an apparent decrease of 9% compared to autumn 2022 (index value 32). In comparison to 2002, the autumn 2023 levels were 71% lower.**
 - For the 38 squares covered within the Republic, the average within the Republic was nine metres of active net rides per square surveyed (342/ 38 squares surveyed within the Republic = 9). The range of counts was from 0 to 120 metres of active net rides, while no mist net trapping at all was recorded in 32 squares.
 - For the period 2002-2023, the trend direction for the Republic is assessed as “Moderate Decline” (see Table 2).
- **For the SBA areas, autumn 2023 mist netting activity (index value 13) showed an apparent increase of 41% compared to 2022 (index value of 9). In comparison to 2002, the autumn 2023 levels were 87% lower.**
 - As seen in Figure 4, the standard error bars for the SBA trend between the years 2010 and 2016 are noticeably wide, suggesting there may be no statistically significant difference between those years. This is due to the following factors: the relatively small sample size (20 squares surveyed in autumn 2010-2016) and the large number of zero counts. 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.
 - For the 20 squares covered within the SBA areas in 2023, the average within the SBA areas was eighteen metres of active net rides per square surveyed (352/ 20 squares surveyed within the SBA areas = 17.6). The range of counts was from 0 to 105 metres of active net rides, while no mist net trapping at all was recorded in 14 squares.
 - For the period 2002-2023, the trend direction for the SBA areas is assessed as “Moderate Decline” (see Table 2).

Overall, across all jurisdictions, a small increase in mist netting levels was noted in autumn 2023.

The apparent increase noted in the SBA areas can be attributed to the reduction in police resources, for 2023, of the Police Anti-Poaching unit. At the start of the autumn season the Anti-Poaching unit, was comprised of just one officer. However, after we expressed concern about several active trapping sites being found during the first weeks of our anti-trapping monitoring survey, the unit was re-enforced with a second officer, and also received support from the military. This increase in mist net activity should

serve as a warning of what could happen if police resources are removed/redirected away from enforcement action against illegal bird trapping activity.

An apparent reduction in mist netting was noted in the Republic of Cyprus, however, similarly to last year, we noted that many of the sites found by our field team were known to be operated by large scale, organized trappers, on whom increased enforcement efforts need to be focussed. 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.

Overall, illegal bird trapping with mist nets showed an apparent increase during autumn 2023, based on the survey data from BirdLife Cyprus. Despite this increase, the enforcement efforts of both the SBA police and the Game and Fauna Service are fully acknowledged. Autumn 2023 was a good case study of what would happen if resources are removed/ or diverted too soon. Pressure and sufficient enforcement resources committed to tackling bird trapping need to be maintained for many years, to ensure that trapping levels remain low. Any relaxation could undo the positive progress recorded over the last few seasons.

We have long been emphasizing the need for more – and more effective - enforcement against big, organised trappers by the Game and Fauna Service, as well as the need for more support in the enforcement effort from the Cyprus Police, who we strongly believe have a particular role to play when it comes to big, organised trappers. After much pressuring, the Cyprus Police Anti-Poaching Unit was re-instated in June 2023, four years after it was unjustifiably dismantled. The Cyprus Police then signed a memorandum of understanding with the Game and Fauna Service to work together on poaching and bird trapping issues. However, the enforcement action of the Cyprus Police against illegal bird trapping activity during autumn 2023 was disappointing, and a serious step up is needed in 2024, particularly focusing on the large-scale organised trappers.

Enforcement

Overview of enforcement for Autumn 2023

There are three competent authorities responsible for enforcement against illegal bird trapping in Cyprus. The Game and Fauna Service is responsible for areas controlled by the Republic of Cyprus. In June 2023, the Cyprus Police Anti-Poaching unit was re-instated after it was dismantled in November 2019. They are also responsible for enforcement against illegal bird trapping in areas controlled by the Republic of Cyprus. The SBA Police Anti-Poaching Unit is responsible for enforcement against illegal bird trapping in areas within the UK Sovereign Base Areas.

The resources of the above-mentioned enforcement bodies are as follows:

- Game and Fauna Service, the responsible body for the implementation of the Birds Directive and the equivalent bird national legislation, has around 210 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 around 50 game wardens.
- SBA Police Anti-Poaching Unit was for the first few weeks of the season comprised of one officer. After being alerted of an apparent increase in trapping activity within the ESBA, the Anti-Poaching Unit was enforced with an additional officer, as well as assistance from the military.
- Cyprus Police Anti-Poaching Unit was re-instated in June 2023. It is comprised of ten officers, dealing with poaching and trapping issues.

Table 3 summarizes the enforcement data of the two competent authorities regarding illegal bird trapping for the months of August, September and October, the main period for bird trapping in Cyprus, for years 2011-2023.

Table 3 Summary of illegal bird trapping statistics from the competent authorities for the months of August, September and October for years 2011-2023

	Game and Fauna Service – Larnaca & Famagusta district ²													Dhekelia SBA Police Anti-Poaching Unit ³												
Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
No of trappers arrested	57	70	78	64	54	35	19	21	25	26	57	48	41	23	22	22	30	17	29	6	12	8	4	9	10	8
No of mist nets ¹	204	311	287	235	230	195	39	34	21	34	83	52	58	361	275	227	184	181	496	154	51	20	13	26	16	18
No of limesticks ¹	2,550	5,372	3,830	1,577	1,740	1,291	521	1,186	903	1,876	1,883	1,554	1,873	290	314	516	256	234	295	259	116	97	29	105	36	95

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 2023 provided from Game and Fauna Larnaca & Famagusta district officer via email (18th January 2024)

Note 3: Data for 2023 provided from SBA Police Anti-Poaching Unit sergeant after official email (18th January 2024).

Table 4 Summary of illegal bird trapping statistics of the Cyprus Police APU for the months of August, September and October for years 2011 – 2019, and 2023.

	Cyprus Police Anti-Poaching Unit												
Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023 ²
No of trappers arrested / cases	N/A	N/A	N/A	27	28	36	13	4	N/A				1
No of mist nets ¹	N/A	116	N/A	116	121	164	37	5	N/A				6
No of limesticks ¹	N/A	4,799	N/A	3,950	3,359	1,915	811	213	N/A				N/A

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: Information obtained from a news article showing the enforcement efforts of the unit in 2023. Article available [here](#). Number of trappers arrested is not complete, as this data was not provided in the news article, and was instead gathered from feedback from sites reported to the unit by BirdLife Cyprus.

This Cyprus Police Anti-Poaching unit was dismantled without proper justification in November 2019 and re-instated in June 2023. Hence there is a gap of four years in the data. The unit was then re-instated in June 2023, in keeping with a pre-election promise made by the new President, Nikos Christodoulides.

- Game and Fauna Service – Larnaca & Famagusta district: The enforcement data for autumn 2023 show comparable levels of prosecutions (41) compared to autumn 2022 (48).
- SBA Police Anti-Poaching Unit (APU) – Dhekelia Sovereign Base: The enforcement data for autumn 2023 show that three people were arrested for trapping, compared to ten during autumn 2022. This reduced enforcement effort from the SBA Police is not surprising, considering that the Anti-Poaching Unit was reduced to one (albeit experienced) police officer at the start of the autumn trapping period.
- Cyprus Police Anti-Poaching Unit: The Cyprus Police Anti-Poaching Unit was re-instated in June 2023, however, enforcement levels for Autumn 2023 were near to zero – except for the one notable case detailed in the next section.

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 almost exclusively located within the Republic. Data provided from the Game and Fauna Service indicate that restaurant checks in 2023 were reduced compared to Autumn 2022, however there were two prosecutions (see Table 5). BirdLife Cyprus believes that more enforcement is needed 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	2019 ⁶	2020 ⁷	2021 ⁸	2022 ⁹	2023 ¹⁰
Restaurant checks	20	31	18	7	14	8	12	21	20	7	10	5	6	4
Restaurant prosecutions	13	15	8	3	1	1	1	7	5	0	1	1	0	2

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 available [here](#).

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 – 7none, 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.

Note 6: Data source: Email sent to BirdLife Cyprus by Game and Fauna Service official (13/1/20).

Note 7: Data source: Email sent to BirdLife Cyprus by Game and Fauna Service official (12/1/21).

Note 8: Data source: Email sent to BirdLife Cyprus by Game and Fauna Service official (24/1/22)

Note 9: Data source: Email sent to BirdLife Cyprus by Game and Fauna Service official (2/1/23)

Note 10: Data source: Email sent to BirdLife Cyprus by Game and Fauna Service official (25/1/24)

Feedback from competent authorities to BirdLife Cyprus reports

Table 6 summarises the number of reports that BirdLife Cyprus submitted 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, 25 locations were reported to this agency. Prosecutions took place related to eleven of the locations reported by BirdLife Cyprus, either just before the site was found to be active, or sometime after. The other 14 locations were checked, but with no further action taken.

With regards to the Cyprus Police Anti-Poaching unit, one location was reported to this agency. After multiple reports of this location, a prosecution occurred. The specific site reported is run by organised trappers, and is considered one of the worst trapping sites on the island. So, while there wasn't much engagement from the Cyprus Police Anti-Poaching Unit this past autumn, the fact that they were able to successfully raid this large trapping site, is a positive step. However, we hope that the unit will focus more on organised trapping sites in 2024.

With regards to the Dhekelia SBA Police Anti-Poaching Unit, 21 locations were reported to this agency. Prosecution took place related to one location, while mist nets were confiscated at another location. At a further eight locations, clearance took place (removal of pole bases and poles). The other eleven locations were placed under observation, but with no further results.

Table 6 Summary of trapping reports provided to competent authorities from BirdLife Cyprus during autumns 2012-2023

	Game and Fauna Service – Larnaca & Famagusta												SBA Anti-Poaching Police Unit											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Number of reports¹	50	43	33	23	21	8	17	11	17 ⁸	23 ¹²	16	25	52	38	40	51	34	26	12	14	9	18	6	21
Arrests²	17	19	8	11	10	N/F ⁵	N/F	N/F	N/F	N/F	7	11	9	8	6	4	5	0	7 ⁶	0	2 ⁷	3 ⁹	0	1
Confiscations³	10	8	11	None	1	N/F	N/F	2	2	2	7	0	22	18	5	10	14	3	2	6	4	4 ¹⁰	3	1
Clearance⁴ / Nothing Found⁵	23	16	14	12	10	N/F	N/F	N/F	N/F	N/F	9	14	21	12	29	37	15	23	8	8	6	14 ¹¹	3	19

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

Note 7: 2 people were prosecuted for trapping at the same location

Note 8: No official feedback was provided. However, 2 locations were reported on the spot to Game wardens who responded to the reports and provided feedback to BirdLife Cyprus directly.

Note 9: All three people were arrested at the same location

Note 10: In total 9 mist nets and 13 limesticks were confiscated at 4 separate locations.

Note 11: Clearance occurred at two locations. Cameras were placed at four locations. The other locations were placed under observation with no results

Note 12: No official feedback was provided. However, 2 locations were reported on the spot to Game wardens who responded to the reports and provided feedback to BirdLife Cyprus directly.

Table 7 Summary of trapping reports provided to the Cyprus Police Anti-Poaching unit by BirdLife Cyprus during autumns 2012-2019, and 2023

Cyprus Police Anti-Poaching Unit									
	2012	2013	2014	2015	2016	2017	2018	2019	2023
Number of reports¹	none	3	13 ⁵	12 ⁶	8	none	7	2 ⁷	1
Arrests²	N/R	1	2 ⁵	1	2	N/R	2	2	1
Confiscations³	N/R	N/A	N/A	2	0	N/R	3	0	0
Clearance/Nothing found⁴	N/R	N/A	N/A	9	6	N/R	2	0	0

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: 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 and Fauna Service and is used to calculate the % value for the Cyprus Police.

Note 6: 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 7: Both reports involved the same site.

Enforcement on the ground – on-the-spot fines in the Republic, six years later

In July 2017, an amendment to the 'Protection and Management of Wild Birds and Game Species Law 152/2003' regulated all bird trapping and poaching offences as on-the-spot fines (as opposed to court prosecution). At the time, BirdLife Cyprus expressed its opposition to 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. That said, over the past five years, the Cyprus enforcement agencies, and particularly the Game and Fauna Service, have been issuing high fines, implementing the on-the-spot fine provisions adopted in July 2017. The on-the-spot fine system acted as a deterrent for most trappers, and particularly when it comes to mist netting.

However, in December 2020, the law was amended again. Fines for trapping with limesticks or shooting birds from a list of 14 specific species, was reduced from 2000 euro for one bird to 200 euro for up to 50 birds. It should also be noted that the SBA administration, did not adopt this change to the law and kept fines for shooting and trapping these 14 species at the original fine of 2000 euro for one bird.

Contrary to the progress noted with regards to mist net trapping levels in the recent years, limestick trapping activity has remained at high levels. These findings are supported by CABS survey data and the Game and Fauna Service enforcement statistics data. We believe this to be a setback regarding the conservation and protection of migratory birds in Cyprus, as explained in the following sections, and something which has sent a message of decriminalisation of limestick trapping and of shooting of migratory songbirds.

Another issue is that, as seen from the on-the-spot fine data provided to BirdLife Cyprus for the period of July 2017 to December 2023 by the Game and Fauna Service, it seems that the higher the fine, the less chance there is of it being paid by the offender. Table 8 below shows that just over 60% of the fines handed out so far have been paid (573 from 950), however the money these fines equate to (€1,165,073) only add up to around 39% of the total money from all the fines (€2,506,264). It appears that fines of approximately 5,000 euros and higher are usually not paid (based on averages), with offenders being led to the courts for prosecution. It is important to highlight that unpaid fines led to court (362 in number) equate to a noticeable 38% of all fines issued.

BirdLife Cyprus has expressed concerns about the lack of information regarding the court sentencing and specifically the rulings made by judges regarding unpaid fines. The data in Table 7 shows some indicative values of fines under different circumstances, provided by the Game and Fauna Service, and confirms BirdLife Cyprus' fears that once an on-the- fine is not paid and goes to court, the offenders are routinely handed out lower fines. Although there is still an improvement compared to the much lower fines given out by courts prior to 2017, this significant difference between the unpaid on-the-spot fines and the court sentences is still very concerning.

On-the-spot fines have been effective in reducing mist netting overall. Large fines have acted as a good deterrent for small time trappers. However, in recent years we have noticed that poachers who trap birds on a larger, more organized scale, appear to be unaffected by the fines. They earn so much money from trapping that, if they're caught, they will just pay the fine and continue their trapping activity, or they don't pay the fine at all, go to court, and are given a much lower fine. As a result of this, this autumn

we noted an increase in organised trapping with small gangs of trappers running multiple trapping sites, particularly in the Larnaca District.

Table 8. Breakdown of on the spot fines handed out from July 2017 until the end of December 2023

	No. of Fines	Amount in Euro
Fines that have been paid	573	€ 1,165,073
Fines still pending payment	15	€102,000
Fines that haven't been paid and will/have gone to court	362	€ 1,752,000
Total¹	950	€ 3,019,073

Table 9. Average fines under different circumstances

Average fine given by courts prior to 2017 law amendment (€)	Average size of on-the-spot fine which is not paid and thus taken to court (€)	Average fine issued by courts to people who did not pay their on-the-spot fine (€) ¹⁴
780	4,840	1,600

¹⁴ Information provided from Game and Faun Service official during telephone conversation on 29/1/2024

Social and political attitudes

Developments in the Republic of Cyprus

In July 2017, when the “Protection and Management of Wild Birds and Game Species” Law (152/2003) was amended and on-the-spot fines were introduced, we saw the on-the-spot fines for limestick trapping specifically, reduced from €2000 to €200. In December 2020, a further amendment in the same law was passed by the Cyprus Parliament. This change saw the fines for the killing of up to 50 birds from a list of 14 protected¹⁵, non-game species, being reduced to €200 whether with the use of limesticks or by shooting. Previously, the fine for killing even a single bird from this list was set at €2000. Moreover, these specific species are the target species for trappers and poachers for the *ambelopoulia* dish.

These two relaxations to the law represent a major step backwards regarding bird conservation in Cyprus, as they have created a subcategory of ‘less protected’ bird species. The absurdity of this law change is even more evident when one realizes that the fines for offences in relation to game species have been kept high and deterrent, at €2000. We consider that the creation of this ‘less protected’ category is a major setback for bird protection in Cyprus. Several species on this list are very similar to species not on the list, particularly warblers, making this change in the law non-enforceable in the field, as identifying these species can be difficult. The combination of law changes in recent years, has sent a message of decriminalisation of trapping with limesticks.

In January 2024, the Movement of United Cypriot Hunters, a political party formed by hunters and for the interests of hunters, closed the main highway in Cyprus which joins the Nicosia, Larnaca, and Famagusta Districts in protest. They were calling for various amendments to the law, including the reduction of fines for the use of calling devices when in use for hunting, the re-opening of the Spring turtle dove hunting season, and the legalisation of limestick trapping. The “Protection and Management of Wild Birds and Game Species” Law (152/2003) has already seen various amendments over the last few years which have weakened its effectiveness, and yet this political party is asking for more. This is a very clear example of the pressure which is constantly placed on the government for the further decriminalization of various illegal activities.

Fines for mist net trapping appear to be effective, as there has been a notable reduction in mist net trapping over the last few years. However, levels of limestick use over the last few years, including Autumn 2023, appear to have remained high, indicative of the non-punitive and non-deterrent nature of the 2020 law change. These high levels of limestick trapping are supported by the enforcement data provided to us by Game and Fauna Service as well as information from CABS. While there is a reduction in mist net trapping levels, both ourselves and CABS noted an increase in organised trappers in Autumn 2023. Various small gangs of trappers have taken on trapping as a quick and easy source of income, particularly in the Larnaca district. These gangs are not afraid to use violence to ensure that they are not caught, something which CABS members experienced first-hand on several occasions in Autumn

¹⁵ The 14 species in question are: Blackcap (*Sylvia atricapilla*), European Bee-eater (*Merops apiaster*), Common Chaffinch (*Fringilla coelebs*), Spanish Sparrow (*Passer hispaniolensis*), House Sparrow (*Passer domesticus*), European Robin (*Erithacus rubecula*), Common Whitethroat (*Sylvia communis*), Spotted Flycatcher (*Muscicapa striata*), Common Chiffchaff (*Phylloscopus collybita*), Willow Warbler (*Phylloscopus trochilus*), Eurasian Reed Warbler (*Acrocephalus scirpaceus*), Sedge Warbler (*Acrocephalus schoenobaenus*), Cetti’s Warbler (*Cettia cetti*), Golden Oriole (*Oriolus oriolus*).

2023. On two separate occasions they had their vehicle windscreens smashed ([link](#)), as well as being assaulted physically on several other occasions.

In June 2023, the Cyprus Government announced that they would be re-instating the Cyprus Police Anti-Poaching unit to tackle the increase in poaching and trapping. This was a pre-election promise of the new president of Cyprus, Nikos Christodoulides. This is a very welcome development, as BirdLife Cyprus has been calling for the re-instatement of the unit since 2019 when it was dismantled, without real cause or reason. After its re-instatement, a memorandum of understanding was signed between the Cyprus Police and the Game and Fauna Service, to work together on poaching and bird trapping issues. We had hoped that the Cyprus Police Anti-Poaching unit would deal mainly with larger scale organised trappers. BirdLife and CABS reported a very well-known trapping site, run by an organised gang, to the newly re-instated unit on several occasions, however the unit was only able to conduct a single raid on the site, in which they only found two mist nets. Overall enforcement statistics for this unit in autumn 2023 were disappointing, and it seems that not enough emphasis is placed on bird trapping cases.

Developments in the Eastern (Dhekelia) Sovereign Base Area

The SBA Police and Administration have continued to apply the partnership approach adopted in 2016, strengthening their collaboration with NGOs. The joint field monitoring with BirdLife Cyprus continued, as did collaboration with CABS. For more information on this follow the [link](#).

In Autumn 2023, similarly to autumn 2021, the SBA Police Anti-Poaching unit was reduced in size, this time from nine officers, to just one officer. The unit was very understaffed, and this was evident from the results of the first few joint monitoring surveys conducted between SBA Police and BirdLife Cyprus. BirdLife Cyprus noted a large number of active trapping sites, particularly in the Ayios Nikolaos Garrison area, and the Xylofagou area of the ESBA. The lack of presence of police patrols every night meant that crime prevention was no longer effective, something which the trappers evidently took advantage of. We voiced our concern regarding the increase in trapping, and the Anti-Poaching Unit was reinforced with an additional officer, as well as assistance from the military, who conducted patrols in the Ayios Nikolaos garrison area. This Autumn survey was a very pertinent example of what can happen when resources are removed/redirected away from bird trapping too soon. Any relaxation in pressure can see years of progress undone, in a single season. We hope that the SBA Police will learn from this, and maintain a well-staffed Anti-Poaching Unit for the next autumn bird trapping season.

4. Discussion & Recommendations

2023 saw an apparent increase in bird trapping with mist nets of 6%, compared to autumn 2022. Over the long-term, compared to 2002 there has been an 88% reduction in mist netting activity, within the survey area, which covers the worst trapping areas of Cyprus (see Figure 2).

With regards to the SBAs, trapping in autumn 2023 appeared to increase by around 41% compared to autumn 2022, a concerning result. Over the longer-term, mist netting levels for autumn 2023 showed a decrease of 87% compared to autumn 2002. Just prior to the Autumn 2023 trapping season, the SBA Police Anti-Poaching unit was reduced in size, from nine officers to one. The lack of police officers meant that it was not possible to conduct effective enforcement action on the ground, and during the first few weeks of the anti-trapping monitoring programme a large number of locations were found active. BirdLife Cyprus and RSPB expressed concern over the apparent increase in trapping, and the Anti-Poaching Unit was increased with an additional officer as well as patrols by the British military. This was a good case study of what can happen when police resources are removed/redirected from illegal trapping enforcement and deterrence action. It also shows that the partnership developed in recent years between the SBAs and environmental NGOs is truly effective, both on the ground and in communicating and addressing any concerns raised early on. This approach and associated measures must be continued into 2024 and beyond, to ensure this success is maintained.

In the Republic of Cyprus, there was an apparent decrease in trapping with mist nets during autumn 2023, compared to autumn 2022. Trapping with mist nets appeared to decrease by 9%, continuing the decrease noted in autumn 2023 (See Figure 3). Overall, mist netting levels for autumn 2023 showed a decrease of 71% compared to autumn 2002. Birdlife Cyprus acknowledges the enforcement effort of the Game and Fauna Service wardens. However, BirdLife Cyprus continues to emphasize the need for more effective enforcement against large, organized trappers, who are still trapping with impunity, for the most part, and against restaurants offering *ambelopoulia*.

BirdLife Cyprus was pleased to see the re-instatement of the Cyprus Police Anti-Poaching unit, four years after it was dismantled. BirdLife Cyprus has been lobbying for the unit's re-instatement as we believe that this unit can play a key role in tackling the larger organised trappers. However, enforcement statistics from this unit for autumn 2023 were very disappointing, indicating that the unit has not been very actively involved in tackling illegal bird trapping activity. We hope and expect the Cyprus Police Anti-Poaching unit to tackle all wildlife crime issues, including illegal bird trapping of migratory birds with a focus on the large and organised trapping groups, who are often involved in organised crime as well.

As well as this, limestick trapping has remained at high levels, for yet another year, after an increase first noted in 2020. We strongly believe that the increased use of limesticks, that has been maintained in recent years, can be attributed to the relaxations to the "Protection and Management of Wild Birds and Game Species law" which have happened over the last few years.

Recommendations

BirdLife Cyprus calls upon the Government of Cyprus to implement the following recommendations:

- 1) The Cyprus Parliament to reverse amendments to the law "Protection and Management of Wild Birds and Game Species" and to restore the fine for the offenses of possession and use of limesticks and hunting of 14 protected, non-game species from 200 for up to 50 birds to 2000 euros for one bird. Unless this happens, Cyprus will be faced with the possibility of infringement proceedings from the European Commission.
- 2) The Cyprus Police Anti-Poaching unit, in collaboration with the Game and Fauna Service, need to draw up an action plan which focusses on the large scale, organized trappers, working together to tackle this issue. Furthermore, the Cyprus authorities need to undertake increased and consistent enforcement action against law-breaking restaurants serving illegal ambelopoulia "delicacies" (to address demand).
- 3) 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.
- 4) Training to be provided to the Judiciary and Prosecutors regarding the on-the-spot fine system and the seriousness of trapping as a wildlife crime, in order to address the large discrepancy observed between on-the-spot fines issued and court sentences handed out. We consider that the Game and Fauna Service, as the responsible authority for the implementation of the Birds legislation, is best placed to carry out this training.

BirdLife Cyprus and RSPB calls upon the SBA Administration to implement the following recommendations:

- 1) The SBA Police to maintain a well-staffed anti-trapping team, in order to continue to be a deterrent and effective unit, thus maintaining the low trapping levels recorded in recent years.
- 2) The SBA Administration and Police to continue with the collaborative partnership approach adopted with environmental NGOs and the implementation and review of its action plan.

At the same time, BirdLife Cyprus calls on the European Commission to continue to pressure the Cypriot Government for the abolition of the lower fines for illegal trapping and hunting of migratory birds. This would send a clear message to the Cyprus Government and the national Parliament that any provisions that would lead to a lower protection status and negatively impact the conservation of migratory wild birds would not be permitted and tolerated by the European Union. Action now would potentially stop further relaxations to the law in the future, particularly as there is increasing pressure from hunting lobbies for further relaxations.

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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.

In 2017, the Ayios Nikolaos Area of the ESBA was added into the survey after reports from CABS of extensive trapping taking place in this area. An additional 18 squares were added to the survey area bringing the new total to 405 squares adding up to 310 square kilometres.

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:

- Mist netting 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 2023

Confidential Information. Only provided upon approval of request

Appendix 3

Estimation of numbers of birds caught during autumn 2023

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 calculation.

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 considered 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)

$$= [(434+0+198) / (12) \times (20) \times (405/60) \times (60)]$$

$$= \mathbf{426,600} \text{ birds could have been caught within the survey area in } \mathbf{mist \text{ nets}.}$$

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)

$$= 43 \times 0.5 \times (405/60) \times 60$$

$$= \mathbf{8,708} \text{ birds caught within the survey area on } \mathbf{limesticks}$$

In total 435,308 birds could have been killed in mist nets and on limesticks within the survey area during autumn 2023. Assuming that the survey area accounts for 75% of the trapping activity in Cyprus, the bird death toll in Cyprus is:

$$= 435,308 / 75\%$$

$$= \mathbf{580,410} \text{ birds could have been killed in nets and on limesticks across all Cyprus during autumn 2023.}$$

Note: these death toll estimates do not take into consideration any illegal bird trapping taking place into the Turkish occupied part of Cyprus.

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 (Panneloek & 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 [here](#)) 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? (Panneloek & 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).