

**REPORT ON THE OUTCOME OF THE
AUTUMN 2021 RESEARCH DEROGATION TO
DETERMINE MALTA'S REFERENCE POPULATION
OF THE SEVEN FINCH SPECIES**



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WILD BIRDS REGULATION UNIT

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Annex I Special Licence for the Autumn 2021 Finches Research Derogation

Annex II Report on a survey of the influx of migratory finches (Common Linnet, Common Chaffinch, European Serin, European Goldfinch, European Greenfinch, Hawfinch, Eurasian Siskin) over the Maltese Islands, made between October 2021 and January 2022 (Ecoserv, 2022)

GLOSSARY OF TERMS

Illegal possession of finches without required rings	Illegal possession of finches not used as live-decoys that are either not fitted with an official R16U ring, fitted with fake closed ring or not fitted with a ring.
Trapping on unregistered sites	Trapping on an active clap-net pair (<i>mansab</i>) not registered with the Wild Birds Regulation Unit, or the clap-net pair was not authorised to be active for that specific season (not included at application stage).
Trapping using unmarked or incorrectly marked decoys	The use of finch decoys not fitted with an official R16U ring, fitted with fake closed ring or not fitted with a ring.
Unattended trapping site	Unmanned trapping site (clap-net pair <i>mansab</i>) left active with nets not covered or removed, even if without live-decoys.

1. INTRODUCTION

This report provides a full account of the outcome of the derogation allowing an Article 9(1)(b) finches research derogation in 2021. It has been compiled in addition to Malta's formal derogation report submitted annually pursuant to Malta's reporting obligation under Article 9 of Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009, on the Conservation of Wild Birds (hereinafter the Birds Directive)¹. In this regard, this report considers various relevant aspects of the application of this derogation, including:

- the decision-making process leading up to the application of a research derogation,
- the special licensing process undertaken prior to application of derogation,
- the details of each specimen and its scientific ring identification number reported via the ring recovery form by the licensees,
- the enforcement efforts in place to ensure the strict supervision of the research derogation,
- the illegalities detected and corresponding enforcement action taken, and
- the legal and other management aspects of relevance.

¹ It should be noted that this research derogation is subject to an infringement procedure, initiated by the European Commission by means of Letter of Formal Notice 2020/2346.

2. LEGAL AND POLICY BASIS FOR THE APPLICATION OF A DEROGATION TO CARRY OUT SCIENTIFIC RESEARCH ON SEVEN FINCH SPECIES

GENERAL BACKGROUND (PRE-ACCESSION AND COURT CASE C-557/15)

- 2.1 The live-capturing, utilising traditional methods, (alternatively referred to as 'trapping') of seven species of finches, namely Common Chaffinch (*Fringilla coelebs*), Common Linnet (*Linaria cannabina*), European Goldfinch (*Carduelis carduelis*), European Greenfinch (*Chloris chloris*), Hawfinch (*Coccothraustes coccothraustes*), European Serin (*Serinus serinus*), and Eurasian Siskin (*Spinus spinus*) is a deeply-rooted traditional practice in Malta that represents significant socio-cultural value for a sizeable proportion of Maltese population.
- 2.2 Prior to its accession to the EU in 2004, Malta examined the possibility of allowing the live-capturing, including the keeping for recreational purposes of the seven finch species within the framework of EU law. During pre-accession negotiations with the European Commission in 2001, Malta suggested including the seven species of finches in Annex II of the Birds Directive.
- 2.3 This proposal was however rejected. Instead, the Commission proposed to grant Malta a transitional period during which it had to implement a series of measures aimed at establishing an alternative solution to the live-capture of the aforementioned species, in the form of a captive-breeding programme. This captive-breeding programme would purportedly allow the limited capture of finches from the wild, to the extent that their capture was necessary to ensure genetic diversity of the captive-bred species (i.e., a consanguinity-related derogation).
- 2.4 Malta accepted this proposal on the understanding that even under the breeding programme, the limited live-capturing of finches would still be necessary and permissible to ensure sufficient genetic diversity. The proposal was then crystallised in Malta's Act of Accession, which granted Malta a transitional derogation from the general protection regime of the Directive, outside of the framework of Article 9 of the Birds Directive. In

December 2008, the transitional period granted to Malta came to an end and the practice of finch live-capturing was terminated.

- 2.5 Between 2004 and 2014, Malta conducted a series of in-depth assessments of the results of captive breeding, as well as of various other potential alternatives (such as ring and release schemes, live-capturing of other species, the continuation of the ban on finch capturing and keeping)². In 2014, it was concluded that no other satisfactory solution exists for the capturing and keeping of finches, except through a derogation within the parameters of Article 9(1)(c) of the Birds Directive.
- 2.6 A derogation regime was subsequently drafted following a series of in-depth legal, technical and scientific assessments. This derogation did not aim to continue or re-instate the finch live-capturing practice as it was exercised prior to 2004, nor did it entail a consanguinity-related derogation. Following the recommendations of the Malta Ornithology Committee, in 2014, the Maltese Government applied a derogation under Article 9(1)(c) of the Birds Directive allowing live-capturing (trapping) and keeping of the seven finch species.
- 2.7 To this effect, on 15 July 2014, the Government published a legislative package consisting, *inter alia*, of a new Framework Regulation (Legal Notice 253 of 2014³) establishing the parameters for live-capturing derogations for finches in Malta, and of another legal instrument (Legal Notice 250 of 2014⁴) declaring the opening of the 2014 live-capturing season for finches in accordance with the above-mentioned new Framework Regulations and in line with the recommendations of the Malta Ornithology Committee. In 2016, the Framework Regulations were further updated through Legal Notice 319 of 2016⁵ to reflect the phasing out of the paper-based *Carnet de Chasse* reporting requirement and its substitution with a mandatory real-time telephonic game reporting requirement.

² These assessments and other technical and scientific information is summarised in a Technical Memorandum, annexed with Malta's report on the outcome of the 2014 finch live-capturing derogation. The 2014 report and its annexes are available online under the following link: <https://mgoz.gov.mt/en/Pages/WBRU/Reports%20and%20Statistics/Autumn-Live-Capturing-Derogations%E2%80%8B.aspx>

³ S.L. 504.124 (now S.L. 549.93), available at:

<http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12211&l=1>

⁴ S. L. 504.122 (now S.L. 549.91), available at:

<http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12209&l=2>

⁵ Conservation of Wild Birds (Framework for Allowing a Derogation Opening an Autumn Live-Capturing Season for Finches) (Amendment) Regulations, 2016, available at: <https://legislation.mt/eli/ln/2016/319/eng/pdf>

- 2.8 The decision-making process, the contents of the legislation adopted in 2014 and other relevant aspects were presented as part of Malta's report on the application of derogation in 2014⁶. These will not be re-stated in this report.
- 2.9 The Commission disputed the Government's interpretation of the legal basis for this derogation and in June 2014 initiated a Pilot procedure, to which the Government replied in August 2014. Subsequently, the Commission initiated a Letter of Formal Notice in October 2014, which was responded to in November 2014.
- 2.10 Throughout this correspondence, Malta maintained that its finch live-capturing derogation fully respects the provisions of the Birds Directive and applicable EU policy. On 28 May 2015, the Commission escalated the procedure to the Reasoned Opinion stage, to which Malta responded in July 2015. In September 2015, the Commission referred the case to the Court of Justice of the European Union (CJEU). Malta submitted its detailed statement of defence in January 2016.
- 2.11 In March 2016, the Commission submitted its reply to Malta's statement of defence. On 10 May 2016, Malta submitted its final Rejoinder to the Court, thus closing the written submissions case. In May 2016, Malta also requested the Court to schedule a verbal hearing. This request was accepted, and the hearing was held on 15 February 2017. On 26 July, the Advocate General Eleanor V. Sharpston delivered her Opinion to the Court.
- 2.12 On the 21 June 2018, the Court of Justice, in its judgment in Case C-557/15⁷, held that *"by adopting a derogation regime allowing the live capturing of seven species of wild finches (Chaffinch Fringilla coelebs, Linnet Carduelis cannabina, Goldfinch Carduelis carduelis, Greenfinch Carduelis chloris, Hawfinch Coccothraustes coccothraustes, Serin Serinus serinus and Siskin*

⁶ Report on the outcome of the autumn 2014 finch live-capturing season in Malta, available at:

<https://mqoz.gov.mt/en/Documents/WBRU/autumn%20live%20capture/2014/Report%20on%20the%20outcome%20of%20the%20autumn%202014%20finch%20live-capturing%20season%20in%20Malta.pdf>

⁷ Court of Justice of the European Union, Judgement of the Court for Case C-557/15, European Commission vs Republic of Malta, available at:

<http://curia.europa.eu/juris/document/document.jsf?docid=203222&mode=lst&pageIndex=1&dir=&occ=first&part=1&text=&doclang=EN&cid=17740679>.

Carduelis spinus), the Republic of **Malta has failed to fulfil its obligations** under Article 5(a) and (e) and Article 8(1) of Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds, read in conjunction with Article 9(1) of that directive" (Emphasis Added).

- 2.13 In summary, the court ruled *"that the 2014 and 2015 measures authorising the autumn trapping of finches do not comply with the Directive since they do not contain any reference to the absence of another satisfactory solution. The Court recalls its case-law according to which the Member States may authorise actions affecting the protected species only on the basis of decisions containing a clear and sufficient statement of reasons which refers to the conditions of the Directive. The Court finds that the declarations at issue do not contain such a statement. In addition to the fact that they do not contain any reference to the absence of another satisfactory solution, they do not refer to the technical, legal and scientific reports submitted to the Ornithological Committee, nor to the recommendations based on that information.*

Second, the Court concludes that Malta has not complied with the condition of the Directive according to which the permitted derogation must concern only 'small numbers' of birds. The Court states that the condition relating to trapping in 'small numbers' cannot be met if the trapping of birds authorised by way of derogation does not ensure the maintenance of the population of the species concerned at a satisfactory level. The Court considers that Malta has not adduced sufficient evidence to show that that condition is met.

In that regard, the Court notes in particular that, according to a 2007 study by BirdLife Malta, trapping in Malta is so intensive that only a handful of each of the common finch species regularly breed on the islands, whereas they breed in high numbers in other areas of the Mediterranean. Moreover, the Court points out that, even though Malta claims to have taken into account only reference populations from countries with stable or increasing populations, Malta's selection of those populations has not always been consistent with the stated methodology. It is thus apparent from the Maltese authorities' technical memoranda that those authorities took into account, for the purpose of

the 2015 autumn capturing season, reference populations in decline or whose conservation status was not known.

Third, the Court notes that, where the condition of trapping in small numbers is not met, recreational trapping of birds cannot be considered judicious. Furthermore, the Court considers that the condition that only the selective live-capturing of finches can be permitted is not met either. In particular, given that the Maltese authorities have notably admitted the existence of 'by-catch', the Court points out the non-selective nature of the method of capture using nets.

Finally, the Court finds that Malta has not adduced evidence that the derogation at issue is used under strictly supervised conditions within the meaning of the Directive. It considers that in the context of Malta, characterised by a very high density of licence holders, namely over 4,000, and of registered trapping stations, namely over 6,400, the fact that merely 23% of hunters have been subject to individual checks seems inadequate. Furthermore, evidence shows that failure to observe the restrictions relating to authorised catch periods and locations, in particular by trapping inside 'Natura 2000' sites, has been rather frequent during the 2014 autumn capturing season. Consequently, the Court rules that Malta has failed to fulfil its obligations under the Directive'⁸.

- 2.14 Following the Court judgment, the Government of Malta repealed the Finches Framework Regulations by virtue of LN 383/2018⁹ and suspended applications of further Article 9(1)(c) derogations for the live-capturing of finches, pending alignment of the legal, technical and scientific considerations in line with the judgment in Case C-557/15.

⁸ Court of Justice of the European Union, PRESS RELEASE No 90/18 "By adopting a certain derogation regime allowing the capture of seven species of wild birds, Malta has failed to fulfil its obligations under EU law.", available at: <https://curia.europa.eu/jcms/upload/docs/application/pdf/2018-06/cp180090en.pdf>

⁹ Legal Notice 383/2018, available at: <https://legislation.mt/eli/ln/2018/383/eng>

RECOMMENDATIONS ON THE PROPOSED ENACTMENT OF RESEARCH FRAMEWORK REGULATIONS AND APPLICATION OF ARTICLE 9(1)(B) DEROGATIONS STARTING AUTUMN 2020 TO IMPROVE THE KNOWLEDGE BASE ON THE REFERENCE POPULATION OF THE SEVEN FINCH SPECIES.

- 2.15 The C-557/15 judgment does not preclude Malta under absolute terms from putting in place a live-capturing season and (subsequent) keeping with regard to the seven finch species. However, it is clear from judgment that some changes to the previous derogation regime were necessary to enable such a live-capturing season to comply with the Birds Directive. These changes were deemed in particular necessary as regards to the “small numbers”-requirement. In its judgement the Court remarked that no sufficient data were provided that would enable a proper assessment of the “small numbers”-requirement with regard to the seven finch species.
- 2.16 In order to address the Court’s concerns on reference populations and the ‘small numbers’ criterion, in 2020, Government applied an Article 9(1)(b) derogation to allow research on the seven finch species by licensed bird ringers, as well as by licensed trappers using clap-nets and live-decoys by virtue of SL. 549.137. The trappers’ involvement was limited to the “control” of the seven finch species. For the purpose of the derogation regime, the term “control” means the temporary capturing of specimens to determine which are fitted with a scientific ring, to take note of the ring details and date/location of capture, followed by the immediate release of all specimens caught. No rings were supplied to licensed bird trappers.
- 2.17 The research programme also allowed licensed bird ringers and trappers to affix “satellite-tags” on the seven finch species, even though the suppliers of satellite-tags confirmed that they do not *currently* supply the required tags that are small enough for small passerines to enable remote data collection without the need to recapture the tagged specimens. The Framework Regulations ensured that the necessary scientific information is collated as regards to the reference population that needs to be taken into account when applying the 1%-rule (small numbers). Given the scope of the legislation, no reference was made to the “keeping”-element.

- 2.18 In 2021, the framework regulations were repealed by LN 387 of 2021¹⁰ and replaced by the Conservation of Wild Birds (Framework for Allowing a Derogation to Carry out Scientific Research on Seven Finch Species) Regulations, 2021¹¹ (S.L. 549.145) through L.N. 394 of 2021¹².

THE SCOPE OF THE RESEARCH REGULATIONS

ANALYSIS

- 2.19 Article 10 of the Birds Directive imposes an obligation on the Member States to encourage research and any work required as a basis for the protection, management and use of the population of all species of birds. This includes research and work on the listing and ecological description of areas particularly important to migratory species on their migratory routes and as wintering and nesting grounds, the listing of data on the population levels of migratory species as shown by ringing and assessing the influence of methods of taking wild birds on population levels (see Annex V of the Birds Directive).
- 2.20 Consequently, the requirements of Article 9(1)(c) of the Birds Directive ("judicious use", "selectivity", "small number", "supervision") do not apply to the finches research programme. The requirement that there is "no other satisfactory solution" remains however relevant. The derogation must also comply with the precise formal conditions set out in Article 9(2) of the Birds Directive, which are intended to limit derogations to what is strictly necessary and to enable the Commission to supervise them. An Article 9(1)(b) derogation must, therefore, also be subject to a proportionality test. The Court of Justice of the European Union considers that "although Article 9 [...] authorizes wide derogations from the general system of protection, it must be applied appropriately in order to deal with precise requirements and specific situations"¹³.
- 2.21 Although this proportionality test is not to be equated with the conditions under Article 9 (1)(c) of the Birds Directive, which have been subject to the proceedings before the Court of Justice against Malta, there is a certain

¹⁰ Legal Notice 387/2021, available at: <https://legislation.mt/eli/ln/2021/387/eng>

¹¹ Conservation of Wild Birds (Framework for Allowing a Derogation to Carry out Scientific Research on Seven Finch Species) Regulations (SL 549.145), available at: <https://legislation.mt/eli/sl/549.145/eng>

¹² Legal Notice 394/2021, available at: <https://legislation.mt/eli/ln/2021/394/eng>

¹³ ECJ 7 March 1996, nr. C-118/94, *Associazione Italiana per il World Wildlife Fund*, § 21.

analogy between both requirements. For instance, it remains essential to determine, *inter alia*, the means for capture and the period within which the derogation will apply.

LEGAL BASIS – THE BIRDS DIRECTIVE, APPLICABLE JURISPRUDENCE AND POLICY

No other satisfactory solution

2.22 As stressed by the Court of Justice of the European Union in its judgment in *European Commission v. Ireland, C-418/04 of 13 December 2007*, Member States must transpose Article 10 of the Birds Directive in their national legal order. In accordance with this obligation, Malta decided to launch a research programme that deals with some of the activities specified in Annex V of the Birds Directive.

2.23 The fact that the aim of the research is to provide for sufficient scientific information for allowing the trapping of finches under Article 9(1)(c) of the Birds Directive does not render the recourse to Article 9(1)(b) of the said Directive, flawed. Annex V(d) of the said Directive explicitly refers to research on the influence of methods of taking wild birds on population levels.

Proportionality test

2.24 A derogation under Article 9(1)(b) is only allowed to the extent it is strictly necessary to pursue the identified objective. This principle of proportionality applies both to the duration of the derogation, as well as to the means allowed under the derogation, the amount of captured birds and the type of birds that are subject to the derogation. In other words, the derogation should only be granted as long as it is required to attain its objective. The objective of the research programme is to obtain conclusive information on the regions of origin of the main bird contingents of finches migrating through Malta. This means that as soon as this conclusive evidence is obtained, the research project should stop.

Limitation on the numbers of birds to be caught, ringed, controlled or tagged

2.25 The research programme does not provide limitation on the numbers of birds to be caught, ringed, controlled or tagged, given that the derogation regime has a specific research purpose. The research programme does not

allow the keeping of any specimen of the seven finch species longer than it is strictly necessary to fit the specimen with a ring (by licensed bird ringers, not by trappers) or to gather ring details within the context of a recapture (by bird ringers and trappers) or affixing satellite-tags or geo-locators (by bird ringers and trappers), if and when such tags are commercially available (vide para. 2.17).

- 2.26 Given that, when it comes to the trappers, the research programme is limited to controlling birds (without affixing scientific rings since they are not licensed bird-ringers), there is no reason to impose any limitation of numbers of birds to be controlled. In light of the pursued objective, in fact, the more birds that are being controlled, the better. The logic of Article 9(1)(b) of the Birds Directive is totally different from the logic of Article 9(1)(c).

Selectivity

- 2.27 Although no reference is made to the selectivity-requirement in Article 9(1)(b) of the Birds Directive, any capture of specimens must serve the pursued objective; if the objective of the derogation is research on specific finch species, the capturing methods must be finch-selective. The selectivity-requirement therefore plays a central role in the application of the Article 9(1)(b) derogation.

Strict supervision

- 2.28 Although no reference is made to the strict supervision-requirement in Article 9 (1)(b) of the Birds Directive, a strict enforcement framework is a prerequisite for an effective implementation of any derogatory regime. The supervision-requirement therefore is relevant in light of the proportionality test.
- 2.29 The research programme addresses some of the concerns raised by the Court in its C-557/15 judgment. For instance, during the procedure before the Court it was argued that several infractions were committed in protected areas (Natura 2000 sites) and that police control was lacking in these areas. The research programme provides for an unprecedented level of minimum daily police spot-checks in all the regions. Moreover, no research stations /

clap-nets are allowed in protected areas as defined in the overarching Conservation of Wild Birds Regulations (S.L. 549.42).

- 2.30 The research programme sets a higher minimum enforcement deployment than that agreed between the European Commission and the Maltese authorities for the Golden Plover and Song Thrush Framework Regulations, that is, from “in the region of forty (40)” to “in the region of fifty (50)”. The enforcement regime is now more robust than it was under the previous finch live-capturing regulations (2014–2017).
- 2.31 In addition, the finch research regulations set a clear obligation to report ringing details, including the automatic rendering of licensee who failed to submit the ring recovery form within a pre-set deadline as ineligible to obtain another special licence the following research period, if such period is declared.

APPLICABLE PROVISIONS OF NATIONAL LAW

- 2.32 The Conservation of Wild Birds Regulations (S.L. 549.42) is the main legal instrument which transposes the Birds Directive. The following provisions of these Regulations are of particular relevance:
- Regulation 2 defines, *inter alia*, the geographical areas where live-capturing is prohibited (definition of ‘protected area’).
 - Regulation 8 prohibits any capturing of wild birds, except where authorised through the derogation regime prescribed in Regulation 9, and lays down other conditions pertaining to any licences that may be issued pursuant to any capturing derogation regimes (i.e. live-capturing to keep or capturing for scientific purposes followed by release).
 - Regulation 9 lays down parameters for consideration of any derogations, essentially transposing the corresponding provision (Article 9) of the Birds Directive. However, the national Regulation goes further, by prescribing the precise decision-making procedure that must be followed in the course of consideration of any such

derogation, which includes a mandatory consideration by the Malta Ornis Committee.

- Regulation 10 prescribes the role of the Malta Ornis Committee, which includes an array of specific functions, including under sub-regulation 10(6)(c) the function "to make recommendations to the Minister on the authorization of derogations from the provisions of regulations 4, 5, 6, 7, 18 and 21" and "to verify at regular intervals that the conditions governing the granting of such authorization or authorizations continue to be fulfilled". The fourth proviso to the same sub-regulation furthermore prescribes in detail the powers of the Minister, upon considering recommendations of the Committee, to decide on whether to authorize derogations, as well as the mandatory obligation upon the Minister to state in writing the reasons for his decision where substantial divergence exists between the Committee's recommendations and the Minister's decision.
- Regulation 11 provides the Wild Birds Regulation Unit with a range of legal powers to enforce the provisions of these regulations in conjunction with the Police.
- Regulation 27 prescribes the way offences under these Regulations are to be dealt with, and provides for an array of punishments that, in the case of breaches under derogations, range from a minimum of €500 fine and immediate revocation of the special licence, to €15,000 fine, two years imprisonment, revocation of all licences issued under these regulations for life, as well as the confiscation of *corpus delicti*. Regulation 27 also provides for a set of gravity factors which the judiciary takes into consideration in determining the seriousness of the offence and the applicable level of penalty.
- The Conservation of Wild Birds (Framework for Allowing a Derogation to Carry out Scientific Research on Seven Finch Species) Regulations, 2021 (SL 549.145), hereafter referred to as the 'Framework Regulations' aim to establish a framework allowing a research derogation to determine Malta's reference population of the seven finch species enumerated in regulation 2 (defined as the "relevant

species" for the purpose of these regulations) on the basis of Article 9(1)(b) of the Birds Directive, in particular read in conjunction with Article 10 and Annex V(c) of the same Directive, and in terms of sub-regulation 9(1)(e) of the Conservation of Wild Birds Regulations.

- The Framework Regulations empower the Minister, after taking into consideration the recommendations of the Malta Ornithology Committee, to determine whether there is a satisfactory solution in terms of Article 9(1) of the Birds Directive. Moreover, proportionate to the envisaged purpose set out under sub-regulation 1(2), in particular in light of Article 9(2) of the Birds Directive, the Minister may declare a research period for the relevant species by means of a notice in the Government Gazette (Notice of Derogation). In 2021, this was issued via S.L. 549.146¹⁴. According to the Framework Regulations, a research period may only be opened for a maximum period of sixty-four (64) days in autumn. The Framework Regulations further provide the criteria for eligibility for a special licence for the capturing and handling of birds and set a procedure for the application stage, including, *inter alia*, mandatory examination, an application fee, and the special licence conditions. These Regulations also establish the means of capture, that is, by means of traditional clap-nets on sites that had been previously approved by the Wild Birds Regulation Unit, registered with the Commissioner of Police (on portable GIS tablets to facilitate spot-checks) and published on WBRU's website prior to the opening of the research period.
- The Framework Regulations stipulate a special licensing requirement and eligibility criteria, together with a set of binding special licence conditions, which include:
 - Possession of a valid general live-capturing licence or a valid bird ringing licence issued in terms of the Wild Birds Regulations.
 - Successful completion of a written examination process prepared for this purpose by the Wild Birds Regulation Unit.
 - The dates and permitted hours of the research period.

¹⁴ S.L. 549.146, available at: <https://legislation.mt/eli/sl/549.146/eng>

- Provisions related to location and configuration of research sites and research stations.
- Restrictions pertaining to the use of only one research station containing not more than one pair of clap-nets from one hide, use of mesh size of not less than 18mm x 18mm and the maximum footprint of 38 square metres.
- Provisions related to authorised method of capture and requirement to remove or completely cover the nets before the licensee leaves the research station and during prohibited hours.
- Limiting possession and use of pre-recorded bird calls to finches only.
- Limitations concerning the use of live-decoys to birds from the relevant species that were fitted with a single-use ring issued by the Wild Birds Regulation Unit in 2016 and 2017 (both bearing the same code), to their colour mutations (colour-variants) fitted with a seamless closed ring of the correct size for the species and to mules and/or hybrids. Colour mutations (colour-variants) from the relevant species could only be used by the licensee as call birds ('għajjat') and not as fluttering decoys ('taħrik').
- Requirement to record the scientific ring identification numbers, details of the specimens and the site location from where it was captured, as specified on the ring recovery form issued by the Wild Birds Regulation Unit, after the specimens from the relevant species have been ringed or controlled, followed by the immediate release of all specimens from the same research station. The special licence also requires that the ring recovery form is returned to the Unit within the deadline as specified in a separate letter issued to the licensee following closure of the research period—non-compliance with this obligation would render the licensee automatically ineligible to apply for another special licence the following research period (if such period is declared).
- Requirement to keep relevant documentation, including approved site plans, General Licence (which also serves to identify the licensee) and Special Licence at all times whilst participating in the research activity or travelling to and from the research site.

- Restrictions pertaining to permitted size of cages in which birds can be kept during research activity, and other restrictions and prohibitions.

2.33 In addition to these conditions, licensees were also to abide with the provisions laid down in the Conservation of Wild Birds Regulations (S.L. 549.42). Offences against any provision of the Special Licence are subject to penalties as set out in Regulation 27 of the Conservation of Wild Birds Regulations (S.L. 549.42). Except where the offence consists solely of an administrative or minor violation listed in Schedule VIII of the said Regulations, any other offences or breaches of licence conditions trigger automatic seizure of the special licence issued under these regulations and any equipment used for the research activity in violation of these regulations, prior to criminal proceedings being initiated in terms of Regulation 27. The Framework Regulations also provide that persons convicted by the Court for crimes related to this research derogation, shall be prohibited from applying for a new special licence issued under these regulations or under the Wild Birds Regulations.

2.34 The Notice of Derogation: Conservation of Wild Birds (Declaration on a Derogation Allowing Scientific Research on Seven Finch Species) Regulations, 2021 (S.L. 549.146¹⁵) includes, *inter alia*, the Minister's declaration that there is no other satisfactory solution to the research programme and established the dates of the research period for finches from 20 October 2021 to 20 December 2021, both dates included.

3. DISCUSSION WITHIN MALTA ORNIS COMMITTEE LEADING UP TO THE APPLICATION OF A RESEARCH DEROGATION IN 2021

3.1 The Malta Ornis Committee discussed the finch research programme during its meeting held on 13 October 2021¹⁶. During the meeting, the Committee noted that an infringement procedure 2020/2346 related to the finches research derogation regime was initiated by the European Commission in December 2020. Malta's reply to the Reasoned Opinion was submitted to the Commission within the one-month deadline, in July 2021, after the

¹⁵ S.L. 549.146, available at: <https://legislation.mt/eli/sl/549.146/20211019/eng>

¹⁶ Meeting of the Malta Ornis Committee held on 13 October 2021. Minutes available at: <https://mgoz.gov.mt/en/Documents/WBRU/Ornis%20Committtee/oMinThirtOct21.pdf>

Maltese authorities carried out extensive consultations with independent law firms and the State Advocate. The Committee agreed that given that the European Commission is pursuing infringement proceedings against Malta with regard to the finches research derogation regime, the Ornithology Committee felt that it does not need to pronounce itself again on this matter and the decision should therefore be left to the Government. The Government of Malta opted to allow a Finch Research Derogation in 2021 under the terms set out in the Framework Regulations and Notice of Derogation.

4. ISSUANCE OF AUTUMN 2021 FINCHES RESEARCH LICENCES

- 4.1 Applications for a special finch research licence were received during a 6-day period between 30 August and 4 September 2021, inclusive of both dates. Only those applicants who were at the time of application already in possession of a valid general live-capturing licence for 2021 (5-year general licence card) were eligible to apply. Only those who subsequently passed a mandatory written examination in 2020 and had returned the scientific ring recovery form following the closure of the 2020 research period were issued with a special licence, as detailed in this section.
- 4.2 Applicants were informed that their applications were provisional, and that the issuance of a special licence would be subject to the actual decision to apply the derogation.
- 4.3 To apply, eligible persons were requested to submit a completed and signed application form, produce a valid general licence card for 2021 (which was to include a general live-capturing licence component) and provide the booklet stamped by an official hunting organisation. Each application was accepted against a licence fee of €25.
- 4.4 Applications for new general live-capturing licences were not accepted after 2014 and therefore no further examinations for this category of licence were conducted during 2021.
- 4.5 A total of 2,908 individuals submitted applications for special finch research licence (2,057 in Malta and 851 in Gozo). Of these, 1,039 persons (803 in Malta and 236 in Gozo) also applied to obtain a special licence to capture

Golden Plover and Song Thrush under the terms of a separate Article 9(1)(c) derogation. No applications were submitted by licensed bird ringers.

- 4.6 Applications were screened against a database of criminal records and previous applications and as a result of this exercise, four applicants were found to be ineligible and thus were not issued with a special licence.
- 4.7 For the purposes of the 2020 finches research derogation, applicants were obliged to sit and pass an exam which tested their understanding of the rules set out for this derogation, including capability of recording the required data on a ring recovery form. Only applicants that had passed this exam were eligible to apply for a Special Licence for 2021 finch research derogation.
- 4.8 The amount of finch research special licences issued by 20 October stood at 2,904, of which 2,054 licences were issued to applicants residing in Malta and 850 to applicants residing in Gozo. As outlined in the Section 2 of this report, the finches research licence (vide Annex I) set a number of conditions for the 2021 research activity, as provided in the Framework Regulations and the Notice of Derogation.
- 4.9 The registration and screening procedure for site plans, which ensured compliance with the rigorous criteria established in the legislation, was described in detail in Malta's report on the outcome of the 2014 finch live-capturing derogation¹⁷. Coordinates indicating the exact location of the clap-nets eligible for the 2021 research programme were provided to the Malta Police Force via portable PC tablets and published online¹⁸.
- 4.10 Licensees were only allowed to participate in the research programme from a single clap-net pair (*mansab*), activated from a single hide (the research station). The total number of clap-net pairs for the 2021 finches research derogation stood at 2,251, registered on 2,904 licensees (Table 1). A total of 1,504 registered clap-net pairs were located in Malta whereas 747 clap-net pairs were located in Gozo. Out of these two totals, 1,089 clap-net pairs in

¹⁷ Vide "Screening and registration of site plans" in the 2014 derogation report (paras. 4.11–4.18). Available at: <https://mgoz.gov.mt/en/Documents/WBRU/autumn%20live%20capture/2014/Report%20on%20the%20outcome%20of%20the%20autumn%202014%20finch%20live-capturing%20season%20in%20Malta.pdf>.

¹⁸ Registered clap-nets for 2021 finches research derogation. Available at: <https://mgoz.gov.mt/en/Documents/WBRU/autumn%20live%20capture/2021/finTraSitCoor2021.pdf>

Malta and 648 clap-net pairs in Gozo were exclusively used for the finches research programme. The other registered clap-net pairs (415 in Malta and 99 in Gozo) were used for both the finches research and for the Golden Plover and Song Thrush live-capturing derogation.

TABLE 1 - REGISTERED FINCH RESEARCH STATIONS AND LICENSEES IN POSSESSION OF A SPECIAL LICENCE IN 2021

	<u>Clap-net pairs</u>	<u>Licensees</u>
Malta	1,504	2,054
Gozo	747	850
Total	2,251	2,904

5. RING RECOVERIES

- 5.1 Licensees were legally required to check if any of the finches they caught were fitted with a scientific ring ("controlled") and to write down the ring details and the details of the specimen together with the date/location of capture on the scientific ring recovery form included with the special licence.
- 5.2 During the 2021 research period, 20 licensees reported twenty-two ring recoveries. The Wild Birds Regulation Unit forwarded the data to the National Ringing Scheme for cross-verification with the EURING database. Seven rings (Siskins) did not match the EURING database. Table 2 lists the ring recoveries confirmed by EURING.

TABLE 2 – SCIENTIFIC RINGS RECOVERED IN 2021

Date	Time	Area	Species	Ring Number	Country	Ringed
20/10/2021	06:30	Żabbar	Hawfinch	BIRDLIFE MALTA VALLETTA BB0922	Għadira Nature Reserve, Malta	24/09/2021
22/10/2021	13:00	Qala	Linnet	BIRDLIFE MALTA VALLETTA 355999	Simar Nature Reserve, Malta	20/10/2021

Date	Time	Area	Species	Ring Number	Country	Ringed
23/10/2021	10:00	St Paul's Bay	Siskin	BIRDLIFE MALTA VALLETTA 408456	Simar Nature Reserve, Malta	20/10/2021
23/10/2021	10:00	St Paul's Bay	Siskin	BIRDLIFE MALTA VALLETTA 408433	Simar Nature Reserve, Malta	20/10/2021
26/10/2021	11:30	Mellieħa	Siskin	BIRDLIFE MALTA VALLETTA 51P501	Comino, Malta	20/10/2021
08/11/2021	08:18	Sanap	Siskin	INBS OZZANO BO ITALY 9J0411	Monte Pizzoc, Fregona TV, Italy	03/10/2021
14/11/2021	12:45	Delimara	Siskin	SLOVAKIA S457477	Trenčianska Teplá, Trenčín, Slovakia	08/11/2018
16/11/2021	10:30	Marsaskala	Siskin	INBS OZZANO BO ITALY 4J7633	Passo della Berga, Bagolino, Italy	23/10/2021
16/11/2021	Not provided	Not provided	Siskin	ATHENS ZOOL MUS A310077	Rodokalos, Oiti,Fthiotis, Stereia Ellas, Greece	23/10/2021
17/11/2021	08:30	Żebbuġ (Gozo)	Siskin	BUDAPEST T81-981	Ostoros (Tópart út. 46.), Heves, Hungary	01/10/2020
22/11/2021	15:45	Kerčem	Siskin	LJUBLJANA SLOVENIJA KK30353	Verd, Vrhnika, Slovenija	11/10/2021
26/11/2021	07:15	Swieqi	Siskin	ZOOLMUS LITHUANIA XX71996	Juodkrantės didžioji gaudyklė, Kuršių nerija, Lithuania	30/09/2021
26/11/2021	07:30	Qala	Greenfinch	INBS OZZANO BO ITALY LJ13414	San Giovanni in Marignano, Invaso del Conca, Italy	16/04/2021

Date	Time	Area	Species	Ring Number	Country	Ringed
02/12/2021	10:00	Mizieb	Siskin	BIRDLIFE MALTA VALLETTA 408439	Simar Nature Reserve, Malta	20/10/2021
05/12/2021	08:00	Rabat	Siskin	CD-MUSSSC1 B045819 BARCELONA	Madrigueres, El Vendrell, Tarragona, Spain	16/10/2021

5.3 Fifteen rings recovered by licensees through this research were confirmed by EURING: nine specimens were ringed abroad (all EU Countries) and six ringed in Malta. Comparatively, finch ring recoveries using the mist-net system obtained far fewer results over a much longer period. As detailed by the report '*The international impact of hunting and trapping in the Maltese islands*'¹⁹ published by BirdLife Malta in 2007, between the 1920s and 2006, the number of finches recovered per species from other EU Member States was as follows: 53 Linnet, 9 Siskin, 16 Greenfinch, 16 Serin, 5 Chaffinch and 3 Goldfinch. In a later report²⁰ documenting ring recoveries over a ten-year study period (2008–2018), BirdLife Malta reported only 3 finches: 1 Greenfinch and 2 Siskin. As evidenced by the published bird ringing data (Table 3) and as further pronounced by the Court of Justice of the European Union in Case C-557/15, the number of rings recovered in Malta is indeed small. In this regard, the number of finches successfully 'controlled' through this research derogation confirms that through the use of the traditional clap-net method and the involvement of persons with vast expertise in the operation of such method, the current data gap can be effectively filled. The results obtained during the two-month research period also confirm that the mist-net system used by bird-ringers is not a satisfactory solution for the collation of data to assess Malta's reference population of the seven finch species.

¹⁹ The international impact of hunting and trapping in the Maltese islands, BirdLife Malta, 2007. Available at: https://birdlifemalta.org/wp-content/uploads/2016/08/BLM-Report_The-international-impact-of-hunting-and-trapping-in-the-Maltese-Islands.pdf

²⁰ Birdlife Malta ring recoveries 2008-2018 report. Available at: <https://mgoz.gov.mt/en/Documents/WBRU/Reports%20and%20Statistics/ringRecov0818.pdf>

TABLE 3 - RINGS RECOVERED BY LICENSEES THROUGH THE RESEARCH DEROGATION AND CONFIRMED BY EURING IN 2020 AND 2021 (F=FOREIGN RINGS; L=LOCAL RINGS).

Year	Linnet		Siskin		Greenfinch		Serin		Chaffinch		Goldfinch		Hawfinch	
	F	L	F	L	F	L	F	L	F	L	F	L	F	L
2020	4	0	1	0	0	0	1	0	0	1	0	0	0	0
2021	0	1	8	4	1	0	0	0	0	0	0	0	0	1
Totals	4	1	9	4	1	0	1	0	0	1	0	0	0	1

5.4 Considering that the Court of Justice of the European Union in judgment C-557/15 declared that 53 ring recoveries for Linnet do not provide scientific certainty on the reference population of this species, and notwithstanding the fact that the Court did not pronounce itself on what constitutes sufficient data on ring recoveries with which the 'small numbers' requirement pegged to Article 9(1)(c) derogations can be assessed, it follows that for all the seven finch species, scientific certainty can only be obtained if the total number of ring recoveries from other EU Member States exceeds 53 per species. The Maltese authorities believe that scientific certainty can be achieved when the sample size is in the region of 70 ring recoveries for each species *if and only if* additional ring recoveries beyond the 60 threshold do not provide insight into new regions not previously recorded. In other words, data saturation may be reached at a threshold of 60 ring recoveries per species. The additional 15 foreign ring recoveries recorded during the 2020 (n=6) and 2021 (n=9) research periods are still deemed insufficient in this regard. Thus, in line with the Court judgment, additional ring recoveries are still required before scientific assessment of Malta's reference populations of the seven finch species can be initiated.

6. ACTIVITY DATA (RESEARCH EFFORT)

6.1 Licensees were obliged to report their research effort through the reporting systems (mobile or app) every time they were active at the research sites, even if they did not record any finches on that day.

- 6.2 By the end of the research period, 675 persons licensed to participate in this research derogation were active at least once during this period. This constitutes a 23.2% activity rate from the total licences issued. Figure 1 shows the number of licensees participating in the finch research (research effort) during the 2021 research period.

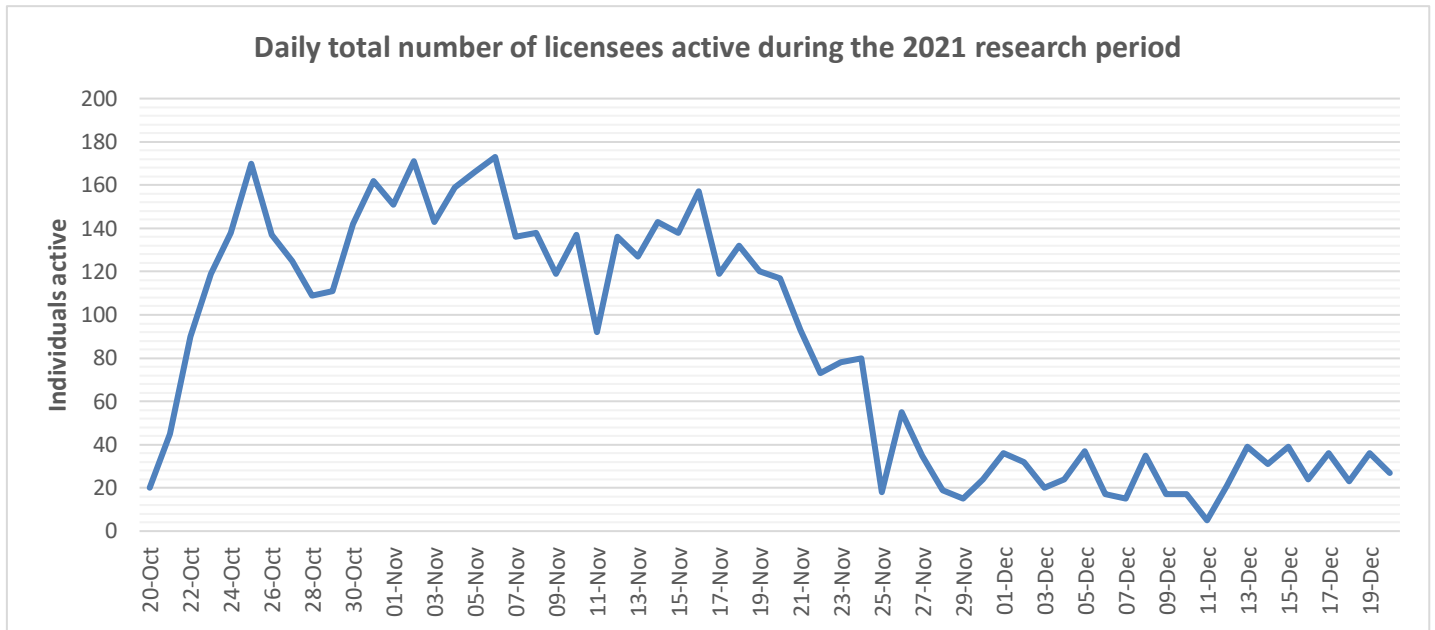


FIGURE 1 - DAILY TOTAL NUMBER OF LICENSEES ACTIVE DURING THE 2021 RESEARCH PERIOD

- 6.3 Licensees were also legally required to report any finch that was caught and released, regardless of whether it had a scientific ring or not. Figure 2 shows the total amount of finches reported per species throughout the season.

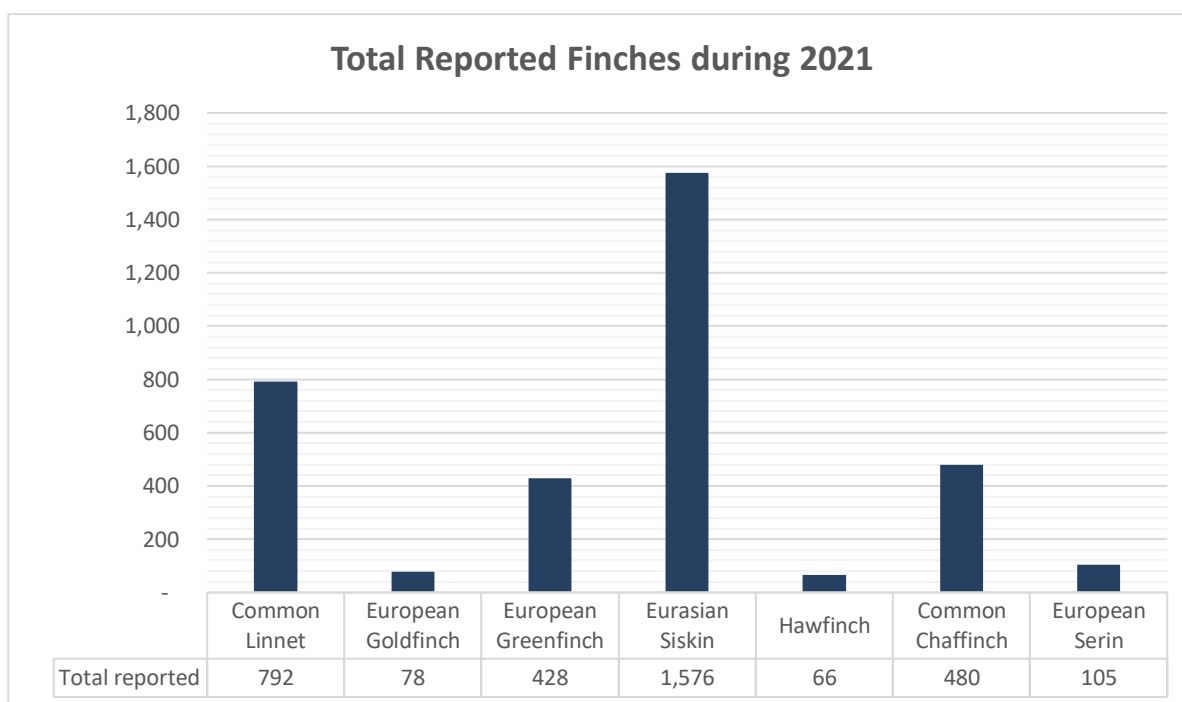


FIGURE 2 - TOTAL NUMBER OF FINCHES REPORTED IN 2021 PER SPECIES

7. FINCHES MIGRATION STUDY

7.1 An independent scientific study was carried out between 15 October 2021 and 15 January 2022, inclusive of both dates, in order to obtain an estimate of migratory patterns of the seven finch species during the research derogation period. The study, carried out by Ecoserv Ltd., was commissioned by the Wild Birds Regulation Unit, with its overall objective to assess the influx or passage of the seven finch species during the three-month migration study period.

7.2 The study was expected to result in the following deliverables:

- Daily datasheets with raw counts for each of the seven finch species; and
- A monitoring report for autumn/winter 2021 finch migration season, which includes:
 - List of monitoring stations which recorded high/low counts.
 - Dates which showed high/low peaks in the migration of each of the seven finch species.

- A daily estimate of the influx of each of the seven finch species for the whole of the Maltese Islands.
- The estimated total influx for these species for the whole of the study period, subject to scientifically justified assumptions.
- A comparison of the influxes recorded during the past studies; and
- The correlation of migration data gathered with the research derogation data for the seven finch species.

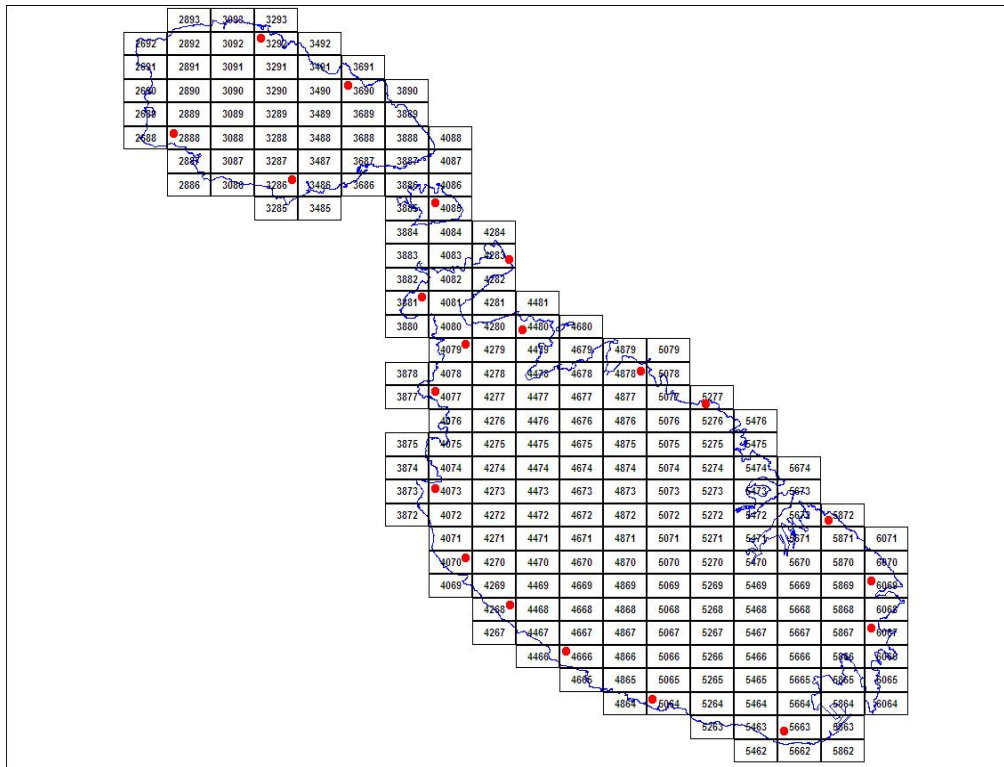
7.3 The geographical scope of the study extended across the three inhabited islands of the Maltese archipelago (Malta, Gozo and Comino), with data gathered during a three-month period from 15 October 2021 until 15 January 2022. Given that the study was mainly intended to quantify the influx/passage of migrating finches, the count stations were located at strategic locations along the coast. A full copy of the survey report is attached in Annex II, with key conclusions summarised below.

7.4 During the survey, two individuals - a specially trained field assistant capable of identifying finch species and an observer who was responsible for data recording in the field - were stationed at each of the total of 21 sites (count stations). During the survey, counts of individuals of the seven species were made at each of six different sites on each day during the monitoring period.

7.5 Each group of six sites was surveyed once every four days, such that a total of 21 sites were surveyed in total over each period of four days. The study site at Comino was included in the six sites surveyed on any one day, such that this site was surveyed on a daily basis. However, when sea transport services to Comino were unavailable due to inclement weather, count surveys were undertaken at an alternative site instead. Counts obtained across this network of observation stations over the survey period are given in the following table.

7.6 Since the survey was mainly aimed at quantifying the influx/passage of migrating individuals, field sites were sited at strategic locations along coastal areas. The location of the sites is shown in Figure 3 below.

FIGURE 3 - LOCATION OF MONITORING SITES



- 7.7 For each species, the number of individuals observed flying within each study site was recorded, while the count area was estimated as the area within the observer's field of view when observing horizontally (c. 250m on each side of the observer) and vertically upwards (as far as the birds were detected by sight). To aid the observers detect the birds, field personnel used a pair of binoculars (magnification: 8 x 21). The different species were identified on the basis of their flight pattern and call. When the field personnel had doubt as to the specific identity of a species, a '?' was placed next to the record on the field data sheet to indicate the uncertainty. Afterwards, during data analysis (see below), comparison was made of records marked with a '?' from a particular site with records from other sites for the same day as corroboration procedure. Uncertain records were allotted to the species which the field personnel determined as most probable with respect to species identity, and which showed agreement with appreciable records from other sites on the same day for that species.
- 7.8 Monitoring for finches was carried out between 09:00 and 14:00 during the first ten days of the study (i.e., up to the date when the daylight-saving hour was removed) and between 08:00 and 13:00 during the rest of the study period. The count data collected for the pre-defined area and count period

at each study site was used to establish the mean number of birds recorded for each day of the survey. At each study site, the observers also recorded the prevalent weather conditions, namely wind direction and strength, and degree of cloud cover.

- 7.9 Using the recorded raw data for each of the seven bird species, estimates were made of the mean daily count and total count for the study period (15 October 2021 to 15 January 2022). Values of standard deviation for the respective mean daily counts were also estimated; standard deviation is a measure of variability among counts recorded from the different sites, that is, a low standard deviation implies that very similar counts were recorded at all six sites surveyed during a particular day, whereas dissimilar values would lead to a high standard deviation. Standard deviation is influenced by sample size (i.e., number of study sites); it tends to increase with a decreased sample size.
- 7.10 An estimate of total influx of the respective bird species was made using the daily counts. Extrapolations were then made to obtain the total number of individuals of each species that migrated over the Maltese Islands on a particular date. However, such an estimate must be treated with utmost caution, given that: (a) migration of finches is not necessarily restricted to that time of the year covered by the 2021 study; (b) the relatively small number of sites used; and (c) the counts were not made daily at each site. Being small birds, finches are easy to miss or present difficulty to identify if they pass beyond a certain distance from the observer, and especially if they do not call while in flight. Furthermore, passage of birds at different localities is extremely variable, with potential large differences in birds passing at two different localities, even if these are separated only by a very small distance.
- 7.11 Another notable limiting factor was that the field survey was stopped in the early afternoon and did not start again before the following morning, hence potentially missing birds that arrive during that time of the day not covered by the 2021 survey, as these would not have been recorded by the field observers. For example, most of the finch species are known to also migrate between dusk and dawn (and during the night); hence individuals migrating during this time would not be detected during the survey. One should also note that finch migration extends beyond the period which was surveyed,

given that autumn/winter migration starts from mid-September onwards and trails off by the end of January. Such finches would not have been included in the 2021 survey.

- 7.12 Since the coastal length surveyed at each site during the 2021 survey is approximately 0.5 km, the mean daily count represents the mean influx of the respective species per 0.5 km coastline. The estimated daily influx was obtained by extrapolating the mean daily values obtained (per 0.5 km) to the total coastline length for the Maltese Islands, which have a perimeter of 271.22 km (Mallia *et al*, 2002)²¹; that is, the estimated daily influx equals the mean daily count multiplied by an extrapolation factor of 271.22/0.5. The values of estimated daily influx were then summed to obtain an estimate of the total influx of the seven finch species (Common Linnet *Linaria cannabina*, Common Chaffinch *Fringilla coelebs*, European Serin *Serinus serinus*, European Goldfinch *Carduelis carduelis*, European Greenfinch *Chloris chloris*, Hawfinch *Coccothraustes coccothraustes* and Eurasian Siskin *Spinus spinus*).
- 7.13 Raw daily counts for **Common Linnet** recorded from the 21 sites during the 2021 study varied between 0 and a maximum of 29, while the mean daily counts ranged between 0 and 11.33 (Table 4). During the 2021 autumn migration, relatively high counts for this species were recorded on some days between 23 October and 20 November 2021. The total counts, i.e. the total number of Linnet, recorded from a given grid location (= study site) during the whole study period (93 days), varied appreciably between the different sites: at the lower end, five individuals were recorded from the sites at grid location 6069, while at the higher end, 74 Linnet individuals were recorded from the site at grid location 4070.
- 7.14 An estimate of total influx of Common Linnet over the Maltese Islands is given below. extrapolation translates to an estimated daily influx ranging between 0 and 6,148 individuals, with a total influx over the survey period (15 October 2021 – 15 January 2022; i.e. 93 days) of 54,425 individuals, i.e., i.e. 585 birds per day.

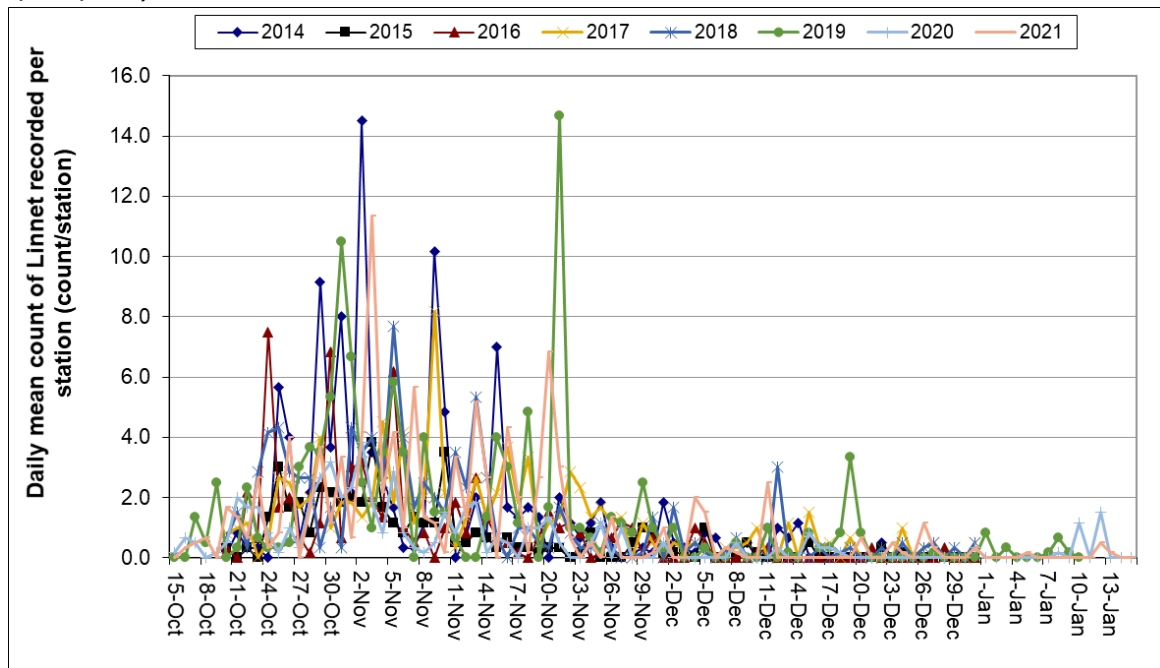
²¹ Note, however, that this estimate includes the perimeter of minor islets and rocks.

TABLE 4 - VALUES OF MEAN ($\pm$ SD) DAILY COUNT AND DAILY TOTAL COUNT RECORDED FROM THE SIX STUDY SITES, TOGETHER WITH TOTAL INFLUX OF MIGRATORY COMMON LINNET

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-21	0.00	$\pm$ 0.00	0	0
16-Oct-21	0.33	$\pm$ 0.82	2	181
17-Oct-21	0.50	$\pm$ 0.84	3	271
18-Oct-21	0.67	$\pm$ 1.21	4	362
19-Oct-21	0.00	$\pm$ 0.00	0	0
20-Oct-21	1.67	$\pm$ 1.37	10	904
21-Oct-21	1.33	$\pm$ 1.63	8	723
22-Oct-21	0.67	$\pm$ 1.63	4	362
23-Oct-21	2.67	$\pm$ 4.68	16	1447
24-Oct-21	0.33	$\pm$ 0.52	2	181
25-Oct-21	0.83	$\pm$ 1.60	5	452
26-Oct-21	4.00	$\pm$ 7.46	24	2170
27-Oct-21	0.00	$\pm$ 0.00	0	0
28-Oct-21	1.67	$\pm$ 2.66	10	904
29-Oct-21	3.67	$\pm$ 7.09	22	1989
30-Oct-21	1.17	$\pm$ 2.04	7	633
31-Oct-21	3.33	$\pm$ 2.88	20	1808
01-Nov-21	0.67	$\pm$ 1.63	4	362
02-Nov-21	4.17	$\pm$ 5.71	25	2260
03-Nov-21	11.33	$\pm$ 10.44	68	6148
04-Nov-21	2.17	$\pm$ 1.47	13	1175
05-Nov-21	4.17	$\pm$ 4.79	25	2260
06-Nov-21	1.00	$\pm$ 1.67	6	542
07-Nov-21	5.67	$\pm$ 6.38	34	3074
08-Nov-21	1.33	$\pm$ 2.42	8	723
09-Nov-21	1.17	$\pm$ 2.86	7	633
10-Nov-21	0.17	$\pm$ 0.41	1	90
11-Nov-21	3.33	$\pm$ 8.16	20	1808
12-Nov-21	1.33	$\pm$ 2.42	8	723
13-Nov-21	5.17	$\pm$ 5.67	31	2803
14-Nov-21	2.67	$\pm$ 3.88	16	1447
15-Nov-21	0.00	$\pm$ 0.00	0	0
16-Nov-21	4.33	$\pm$ 7.81	26	2351
17-Nov-21	2.00	$\pm$ 2.90	12	1085
18-Nov-21	0.17	$\pm$ 0.41	1	90
19-Nov-21	2.67	$\pm$ 4.84	16	1447
20-Nov-21	6.83	$\pm$ 11.53	41	3707
21-Nov-21	3.00	$\pm$ 5.29	18	1627
22-Nov-21	0.67	$\pm$ 1.21	4	362
23-Nov-21	0.00	$\pm$ 0.00	0	0
24-Nov-21	0.50	$\pm$ 0.84	3	271
25-Nov-21	0.00	$\pm$ 0.00	0	0
26-Nov-21	1.33	$\pm$ 2.07	8	723
27-Nov-21	0.00	$\pm$ 0.00	0	0
28-Nov-21	0.00	$\pm$ 0.00	0	0
29-Nov-21	0.00	$\pm$ 0.00	0	0
30-Nov-21	0.17	$\pm$ 0.41	1	90
01-Dec-21	1.00	$\pm$ 1.55	6	542
02-Dec-21	0.00	$\pm$ 0.00	0	0

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
03-Dec-21	0.00	± 0.00	0	0
04-Dec-21	2.00	± 3.35	12	1085
05-Dec-21	1.50	± 3.67	9	814
06-Dec-21	0.00	± 0.00	0	0
07-Dec-21	0.33	± 0.82	2	181
08-Dec-21	0.17	± 0.41	1	90
09-Dec-21	0.00	± 0.00	0	0
10-Dec-21	0.00	± 0.00	0	0
11-Dec-21	2.50	± 6.12	15	1356
12-Dec-21	0.00	± 0.00	0	0
13-Dec-21	0.00	± 0.00	0	0
14-Dec-21	0.00	± 0.00	0	0
15-Dec-21	0.00	± 0.00	0	0
16-Dec-21	0.00	± 0.00	0	0
17-Dec-21	0.00	± 0.00	0	0
18-Dec-21	0.00	± 0.00	0	0
19-Dec-21	0.00	± 0.00	0	0
20-Dec-21	0.67	± 1.63	4	362
21-Dec-21	0.00	± 0.00	0	0
22-Dec-21	0.00	± 0.00	0	0
23-Dec-21	0.50	± 1.22	3	271
24-Dec-21	0.17	± 0.41	1	90
25-Dec-21	0.00	± 0.00	0	0
26-Dec-21	1.17	± 2.86	7	633
27-Dec-21	0.33	± 0.82	2	181
28-Dec-21	0.00	± 0.00	0	0
29-Dec-21	0.00	± 0.00	0	0
30-Dec-21	0.00	± 0.00	0	0
31-Dec-21	0.33	± 0.82	2	181
01-Jan-22	0.00	± 0.00	0	0
02-Jan-22	0.00	± 0.00	0	0
03-Jan-22	0.00	± 0.00	0	0
04-Jan-22	0.00	± 0.00	0	0
05-Jan-22	0.17	± 0.41	1	90
06-Jan-22	0.00	± 0.00	0	0
07-Jan-22	0.00	± 0.00	0	0
08-Jan-22	0.00	± 0.00	0	0
09-Jan-22	0.00	± 0.00	0	0
10-Jan-22	0.00	± 0.00	0	0
11-Jan-22	0.00	± 0.00	0	0
12-Jan-22	0.50	± 1.22	3	271
13-Jan-22	0.17	± 0.41	1	90
14-Jan-22	0.00	± 0.00	0	0
15-Jan-22	0.00	± 0.00	0	0
Total Count / Estimated Influx			602	54,425

FIGURE 4 - DAILY MEAN COUNTS OF COMMON LINNET PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER AND 15 JANUARY DURING THE PRESENT (2021) AND 2020 SURVEYS, BETWEEN 15 OCTOBER 2019 AND 10 JANUARY 2020 DURING THE 2019 SURVEY, AND BETWEEN 20 OCTOBER AND 31 DECEMBER DURING PREVIOUS (2014, 2015, 2016, 2017, 2018) SURVEYS.



7.15 Raw daily counts for **Common Chaffinch** recorded from the 21 sites during the 2021 study varied between 0 and a maximum of 30, while the mean daily counts ranged between 0 and 7.0 (Table 5). Slightly higher counts for this species were recorded on some days between 16 October and 5 November. The total counts, i.e. the total number of Chaffinch individuals recorded from a given grid location (= study site) during the whole study period (93 days), varied appreciably between the different sites: at the lower end, only one individual was recorded throughout the survey period from the site at grid location 5872, while at the higher end 90 Chaffinch individuals were recorded from the site at grid location 3292.

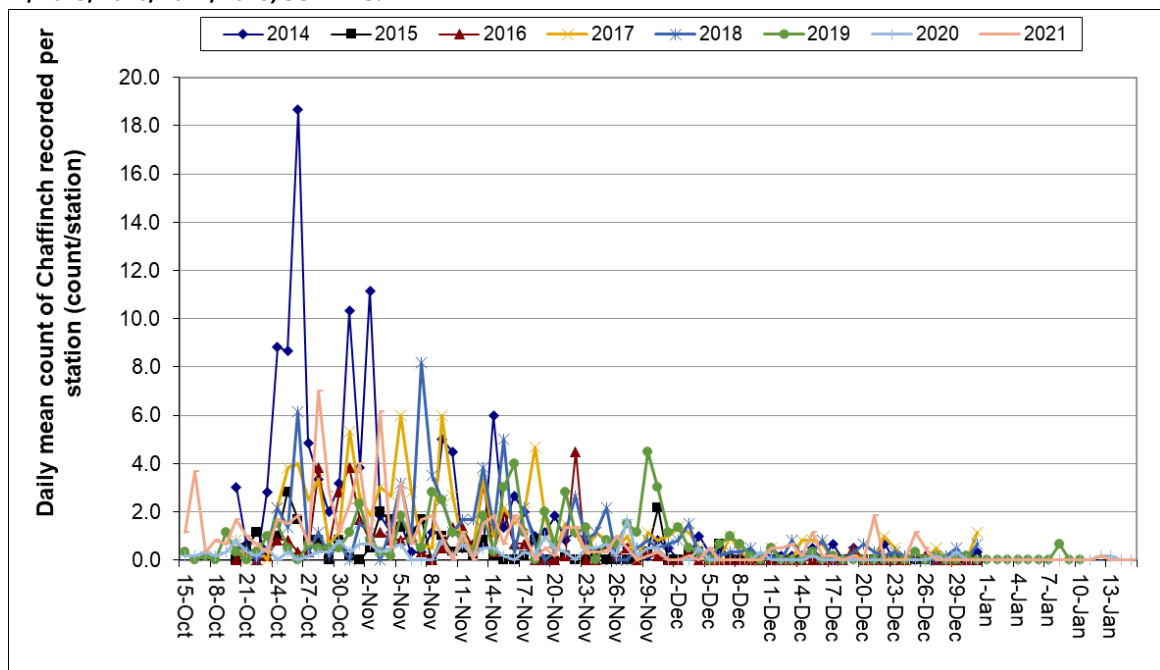
7.16 An estimate of total influx of Common Chaffinch over the Maltese Islands is given in Table 5 below. Based on the mean daily counts (Table 5), extrapolation translates to an estimated daily influx ranging between 0 and 3,797 individuals, with a total influx over the survey period (15 October 2021 – 15 January 2022; i.e. 93 days) of 38,691 individuals, that is, 416 birds per day.

TABLE 5 - VALUES OF MEAN ($\pm$ SD) DAILY COUNT AND DAILY TOTAL COUNT RECORDED FROM THE SIX STUDY SITES, TOGETHER WITH TOTAL INFLUX OF MIGRATORY COMMON CHAFFINCH

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-21	1.17	± 1.94	7	633
16-Oct-21	3.67	± 3.98	22	1989
17-Oct-21	0.33	± 0.52	2	181
18-Oct-21	0.83	± 1.60	5	452
19-Oct-21	0.67	± 1.03	4	362
20-Oct-21	1.67	± 1.97	10	904
21-Oct-21	1.00	± 1.26	6	542
22-Oct-21	0.67	± 1.03	4	362
23-Oct-21	0.33	± 0.82	2	181
24-Oct-21	1.67	± 3.20	10	904
25-Oct-21	1.50	± 1.97	9	814
26-Oct-21	1.83	± 3.13	11	994
27-Oct-21	0.67	± 0.82	4	362
28-Oct-21	7.00	± 10.56	42	3797
29-Oct-21	2.83	± 4.07	17	1537
30-Oct-21	1.17	± 1.94	7	633
31-Oct-21	2.33	± 2.66	14	1266
01-Nov-21	4.00	± 4.05	24	2170
02-Nov-21	0.67	± 1.03	4	362
03-Nov-21	6.17	± 12.01	37	3345
04-Nov-21	0.50	± 0.84	3	271
05-Nov-21	3.17	± 4.54	19	1718
06-Nov-21	0.67	± 0.82	4	362
07-Nov-21	1.67	± 3.20	10	904
08-Nov-21	1.83	± 3.60	11	994
09-Nov-21	1.00	± 1.10	6	542
10-Nov-21	0.00	± 0.00	0	0
11-Nov-21	1.17	± 2.86	7	633
12-Nov-21	0.00	± 0.00	0	0
13-Nov-21	1.50	± 2.81	9	814
14-Nov-21	1.83	± 3.25	11	994
15-Nov-21	0.67	± 1.21	4	362
16-Nov-21	1.83	± 2.40	11	994
17-Nov-21	1.17	± 2.04	7	633
18-Nov-21	0.00	± 0.00	0	0
19-Nov-21	0.50	± 1.22	3	271
20-Nov-21	0.17	± 0.41	1	90
21-Nov-21	1.33	± 1.63	8	723
22-Nov-21	1.33	± 1.97	8	723
23-Nov-21	0.33	± 0.82	2	181
24-Nov-21	0.33	± 0.82	2	181
25-Nov-21	0.33	± 0.82	2	181
26-Nov-21	1.00	± 1.67	6	542
27-Nov-21	0.50	± 1.22	3	271
28-Nov-21	0.00	± 0.00	0	0
29-Nov-21	0.17	± 0.41	1	90
30-Nov-21	0.33	± 0.82	2	181
01-Dec-21	0.00	± 0.00	0	0
02-Dec-21	0.00	± 0.00	0	0

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
03-Dec-21	0.17	± 0.41	1	90
04-Dec-21	0.00	± 0.00	0	0
05-Dec-21	0.50	± 1.22	3	271
06-Dec-21	0.00	± 0.00	0	0
07-Dec-21	0.00	± 0.00	0	0
08-Dec-21	0.00	± 0.00	0	0
09-Dec-21	0.00	± 0.00	0	0
10-Dec-21	0.00	± 0.00	0	0
11-Dec-21	0.50	± 0.55	3	271
12-Dec-21	0.50	± 1.22	3	271
13-Dec-21	0.67	± 1.63	4	362
14-Dec-21	0.17	± 0.41	1	90
15-Dec-21	1.17	± 2.40	7	633
16-Dec-21	0.17	± 0.41	1	90
17-Dec-21	0.17	± 0.41	1	90
18-Dec-21	0.00	± 0.00	0	0
19-Dec-21	0.17	± 0.41	1	90
20-Dec-21	0.00	± 0.00	0	0
21-Dec-21	1.83	± 4.02	11	994
22-Dec-21	0.00	± 0.00	0	0
23-Dec-21	0.00	± 0.00	0	0
24-Dec-21	0.00	± 0.00	0	0
25-Dec-21	1.17	± 1.83	7	633
26-Dec-21	0.50	± 1.22	3	271
27-Dec-21	0.00	± 0.00	0	0
28-Dec-21	0.00	± 0.00	0	0
29-Dec-21	0.00	± 0.00	0	0
30-Dec-21	0.00	± 0.00	0	0
31-Dec-21	0.00	± 0.00	0	0
01-Jan-22	0.00	± 0.00	0	0
02-Jan-22	0.00	± 0.00	0	0
03-Jan-22	0.00	± 0.00	0	0
04-Jan-22	0.00	± 0.00	0	0
05-Jan-22	0.00	± 0.00	0	0
06-Jan-22	0.00	± 0.00	0	0
07-Jan-22	0.00	± 0.00	0	0
08-Jan-22	0.00	± 0.00	0	0
09-Jan-22	0.00	± 0.00	0	0
10-Jan-22	0.00	± 0.00	0	0
11-Jan-22	0.00	± 0.00	0	0
12-Jan-22	0.17	± 0.41	1	90
13-Jan-22	0.00	± 0.00	0	0
14-Jan-22	0.00	± 0.00	0	0
15-Jan-22	0.00	± 0.00	0	0
Total Count / Estimated Influx			428	38,691

FIGURE 5– DAILY MEAN COUNTS OF COMMON CHAFFINCH PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER AND 15 JANUARY DURING THE PRESENT (2021) AND 2020 SURVEYS, BETWEEN 15 OCTOBER 2019 AND 10 JANUARY 2020 DURING THE 2019 SURVEY, AND BETWEEN 20 OCTOBER AND 31 DECEMBER DURING PREVIOUS (2014, 2015, 2016, 2017, 2018) SURVEYS.



7.17 Raw daily counts for **European Greenfinch** recorded from the 21 sites during the 2021 study varied between 0 and a maximum of 15, while the mean daily counts ranged between 0 and 4.50. Low or zero counts for this species were recorded throughout most of the survey period, with higher counts on some days between 5 and 24 November. The total counts, i.e., the total number of Greenfinch individuals recorded from a given grid location (= study site) during the whole study period (93 days), did not vary appreciably between the different sites: at the higher end, 16 Greenfinch individuals were recorded throughout the survey period from the site at grid location 4666, while at the lower end no Greenfinch individuals were recorded from the sites at grid locations 5064 and 6069.

7.18 Values of mean daily counts and total counts of European Greenfinch recorded during the period 15 October 2021 to 15 January 2022 from the 2021 survey are summarised in Table 6. Values of standard deviation associated with the mean daily counts are also provided. Counts of Greenfinch recorded from the 2021 survey, along with ones made during the autumn 2014, 2015, 2016, 2017, 2018 and 2019 surveys, are shown graphically in Figure 6. Overall, count values for Greenfinch from the present (autumn/winter 2021) survey are similar to those recorded during the

autumn 2014, 2017 and 2019 surveys, and higher than those recorded from the autumn 2015, 2016, 2018 and 2020 surveys. Individuals of this species were recorded throughout the survey period in all years, with slightly higher counts between late October and mid-December in the 2014, 2017, 2019 and present (2021) surveys, but only sporadic low counts during the 2015, 2016, 2018 and 2020 surveys.

- 7.19 The estimated total influx of European Greenfinch over the Maltese Islands is given in Table 6. Based on the mean daily counts (Table 6), extrapolation translates to an estimated daily influx ranging between 0 and 2,441 individuals, with a total influx over the survey period (15 October 2021 – 15 January 2022; i.e. 93 days) of 13,286 individuals; that is some 143 birds per day.

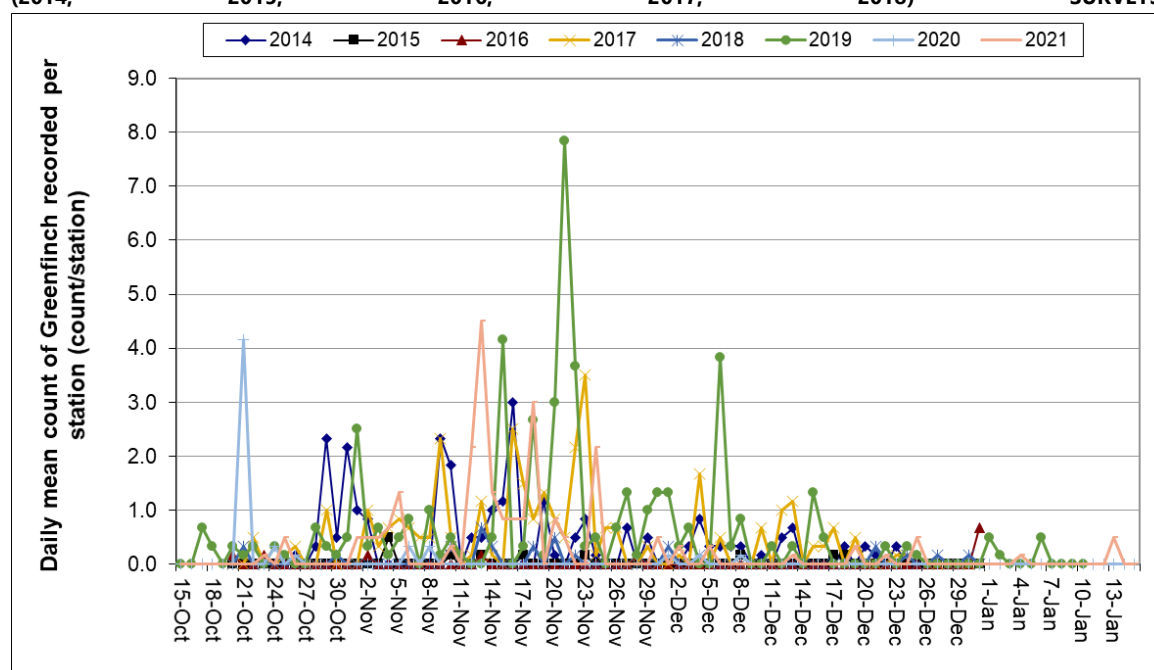
TABLE 6 - VALUES OF MEAN ($\pm$ SD) DAILY COUNT AND DAILY TOTAL COUNT RECORDED FROM THE SIX STUDY SITES, TOGETHER WITH TOTAL INFLUX OF MIGRATORY EUROPEAN GREENFINCH

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-21	0.00	± 0.00	0	0
16-Oct-21	0.00	± 0.00	0	0
17-Oct-21	0.00	± 0.00	0	0
18-Oct-21	0.00	± 0.00	0	0
19-Oct-21	0.00	± 0.00	0	0
20-Oct-21	0.00	± 0.00	0	0
21-Oct-21	0.00	± 0.00	0	0
22-Oct-21	0.00	± 0.00	0	0
23-Oct-21	0.17	± 0.41	1	90
24-Oct-21	0.00	± 0.00	0	0
25-Oct-21	0.50	± 1.22	3	271
26-Oct-21	0.00	± 0.00	0	0
27-Oct-21	0.00	± 0.00	0	0
28-Oct-21	0.00	± 0.00	0	0
29-Oct-21	0.00	± 0.00	0	0
30-Oct-21	0.00	± 0.00	0	0
31-Oct-21	0.00	± 0.00	0	0
01-Nov-21	0.50	± 0.84	3	271
02-Nov-21	0.50	± 0.84	3	271
03-Nov-21	0.50	± 1.22	3	271
04-Nov-21	0.67	± 1.63	4	362
05-Nov-21	1.33	± 2.42	8	723
06-Nov-21	0.00	± 0.00	0	0
07-Nov-21	0.00	± 0.00	0	0
08-Nov-21	0.00	± 0.00	0	0
09-Nov-21	0.00	± 0.00	0	0
10-Nov-21	0.33	± 0.52	2	181
11-Nov-21	0.00	± 0.00	0	0
12-Nov-21	2.17	± 2.04	13	1175

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
13-Nov-21	4.50	± 4.97	27	2441
14-Nov-21	1.33	± 2.07	8	723
15-Nov-21	0.83	± 1.33	5	452
16-Nov-21	0.83	± 1.33	5	452
17-Nov-21	0.83	± 1.33	5	452
18-Nov-21	3.00	± 6.00	18	1627
19-Nov-21	0.00	± 0.00	0	0
20-Nov-21	0.83	± 0.98	5	452
21-Nov-21	0.50	± 1.22	3	271
22-Nov-21	0.00	± 0.00	0	0
23-Nov-21	0.00	± 0.00	0	0
24-Nov-21	2.17	± 2.56	13	1175
25-Nov-21	0.00	± 0.00	0	0
26-Nov-21	0.00	± 0.00	0	0
27-Nov-21	0.00	± 0.00	0	0
28-Nov-21	0.00	± 0.00	0	0
29-Nov-21	0.00	± 0.00	0	0
30-Nov-21	0.50	± 0.84	3	271
01-Dec-21	0.00	± 0.00	0	0
02-Dec-21	0.33	± 0.82	2	181
03-Dec-21	0.00	± 0.00	0	0
04-Dec-21	0.00	± 0.00	0	0
05-Dec-21	0.33	± 0.52	2	181
06-Dec-21	0.00	± 0.00	0	0
07-Dec-21	0.00	± 0.00	0	0
08-Dec-21	0.00	± 0.00	0	0
09-Dec-21	0.00	± 0.00	0	0
10-Dec-21	0.00	± 0.00	0	0
11-Dec-21	0.00	± 0.00	0	0
12-Dec-21	0.00	± 0.00	0	0
13-Dec-21	0.17	± 0.41	1	90
14-Dec-21	0.00	± 0.00	0	0
15-Dec-21	0.00	± 0.00	0	0
16-Dec-21	0.00	± 0.00	0	0
17-Dec-21	0.00	± 0.00	0	0
18-Dec-21	0.00	± 0.00	0	0
19-Dec-21	0.33	± 0.82	2	181
20-Dec-21	0.00	± 0.00	0	0
21-Dec-21	0.00	± 0.00	0	0
22-Dec-21	0.17	± 0.41	1	90
23-Dec-21	0.00	± 0.00	0	0
24-Dec-21	0.00	± 0.00	0	0
25-Dec-21	0.50	± 1.22	3	271
26-Dec-21	0.00	± 0.00	0	0
27-Dec-21	0.00	± 0.00	0	0
28-Dec-21	0.00	± 0.00	0	0
29-Dec-21	0.00	± 0.00	0	0
30-Dec-21	0.00	± 0.00	0	0
31-Dec-21	0.00	± 0.00	0	0
01-Jan-22	0.00	± 0.00	0	0
02-Jan-22	0.00	± 0.00	0	0

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
03-Jan-22	0.00	± 0.00	0	0
04-Jan-22	0.17	± 0.41	1	90
05-Jan-22	0.00	± 0.00	0	0
06-Jan-22	0.00	± 0.00	0	0
07-Jan-22	0.00	± 0.00	0	0
08-Jan-22	0.00	± 0.00	0	0
09-Jan-22	0.00	± 0.00	0	0
10-Jan-22	0.00	± 0.00	0	0
11-Jan-22	0.00	± 0.00	0	0
12-Jan-22	0.00	± 0.00	0	0
13-Jan-22	0.50	± 1.22	3	271
14-Jan-22	0.00	± 0.00	0	0
15-Jan-22	0.00	± 0.00	0	0
Total Count / Estimated Influx			147	13,286

FIGURE 6 – DAILY MEAN COUNTS OF EUROPEAN GREENFINCH PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER AND 15 JANUARY DURING THE PRESENT (2021) AND 2020 SURVEYS, BETWEEN 15 OCTOBER 2019 AND 10 JANUARY 2020 DURING THE 2019 SURVEY, AND BETWEEN 20 OCTOBER AND 31 DECEMBER DURING PREVIOUS (2014, 2015, 2016, 2017, 2018) SURVEYS.



7.20 Raw daily counts for **Eurasian Siskin** recorded from the 21 sites during the 2021 study varied between 0 and a maximum of 40, while the mean daily counts ranged between 0 and 8.50 (Table 7). Slightly higher counts for this species were recorded on some days between 27th October and 24th November. The total counts, i.e. the total number of Siskin individuals recorded from a given grid location (= study site) during the whole study

period (93 days), varied appreciably between the different sites: at the lower end, four Siskin individuals were recorded from the site at grid location 6069, while at the higher end 117 Siskin individuals were recorded from the site at grid location 4085, which was surveyed daily, and 68 individuals were recorded from the site at grid location 4070.

- 7.21 The estimated total influx of Eurasian Siskin over the Maltese Islands is given in Table 7. Based on the mean daily counts (Table 7), extrapolation translates to an estimated daily influx ranging between 0 and 4,611 individuals, with a total influx over the survey period (15 October 2020 – 15 January 2021) of 60,117 individuals; that is some 646 birds per day.

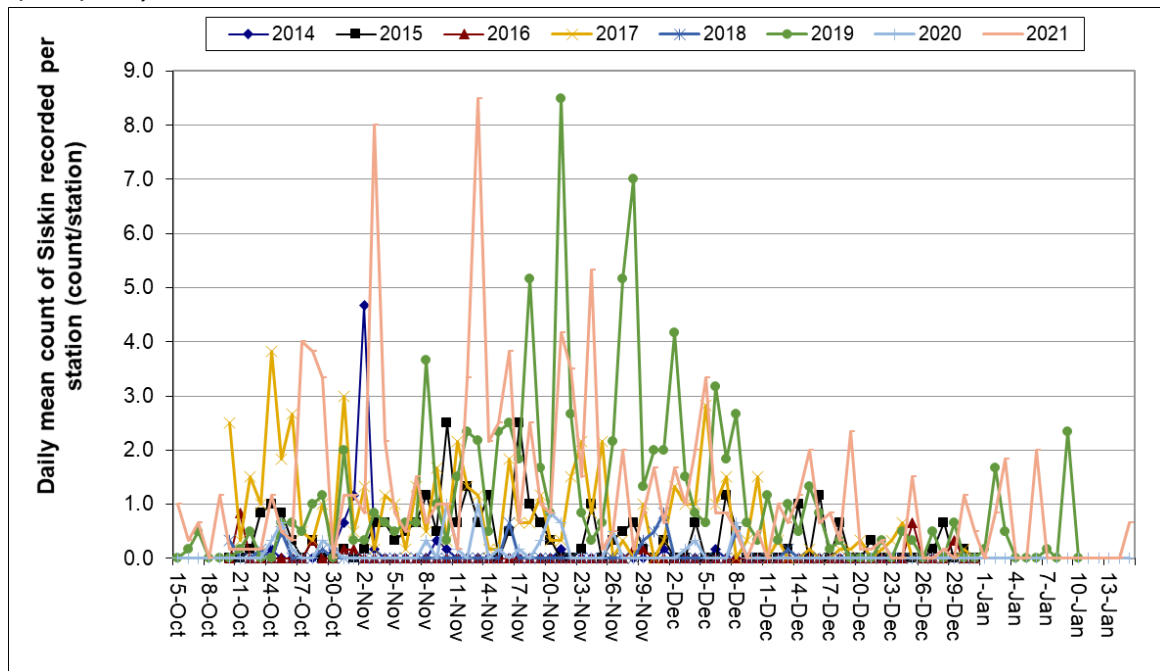
TABLE 7 - VALUES OF MEAN ($\pm$ SD) DAILY COUNT AND DAILY TOTAL COUNT RECORDED FROM THE SIX STUDY SITES, TOGETHER WITH TOTAL INFLUX OF MIGRATORY EURASIAN SISKIN

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-21	1.00	± 1.67	6	542
16-Oct-21	0.33	± 0.82	2	181
17-Oct-21	0.67	± 1.21	4	362
18-Oct-21	0.00	± 0.00	0	0
19-Oct-21	1.17	± 2.04	7	633
20-Oct-21	0.17	± 0.41	1	90
21-Oct-21	0.17	± 0.41	1	90
22-Oct-21	0.17	± 0.41	1	90
23-Oct-21	0.17	± 0.41	1	90
24-Oct-21	1.17	± 2.86	7	633
25-Oct-21	0.50	± 0.84	3	271
26-Oct-21	0.33	± 0.82	2	181
27-Oct-21	4.00	± 3.90	24	2170
28-Oct-21	3.83	± 6.24	23	2079
29-Oct-21	3.33	± 5.20	20	1808
30-Oct-21	0.00	± 0.00	0	0
31-Oct-21	1.17	± 0.98	7	633
01-Nov-21	1.17	± 2.40	7	633
02-Nov-21	0.83	± 1.33	5	452
03-Nov-21	8.00	± 15.81	48	4340
04-Nov-21	2.17	± 3.49	13	1175
05-Nov-21	0.83	± 1.33	5	452
06-Nov-21	0.50	± 1.22	3	271
07-Nov-21	1.50	± 2.35	9	814
08-Nov-21	0.67	± 1.21	4	362
09-Nov-21	1.00	± 1.10	6	542

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
10-Nov-21	1.00	± 1.67	6	542
11-Nov-21	0.17	± 0.41	1	90
12-Nov-21	3.33	± 4.50	20	1808
13-Nov-21	8.50	± 7.97	51	4611
14-Nov-21	2.17	± 1.83	13	1175
15-Nov-21	2.50	± 2.74	15	1356
16-Nov-21	3.83	± 2.99	23	2079
17-Nov-21	0.67	± 1.03	4	362
18-Nov-21	2.50	± 2.07	15	1356
19-Nov-21	1.00	± 2.00	6	542
20-Nov-21	0.83	± 1.17	5	452
21-Nov-21	4.17	± 4.12	25	2260
22-Nov-21	3.50	± 7.64	21	1899
23-Nov-21	1.50	± 1.38	9	814
24-Nov-21	5.33	± 6.62	32	2893
25-Nov-21	0.17	± 0.41	1	90
26-Nov-21	0.50	± 0.84	3	271
27-Nov-21	2.00	± 4.43	12	1085
28-Nov-21	0.17	± 0.41	1	90
29-Nov-21	0.83	± 1.33	5	452
30-Nov-21	1.67	± 2.25	10	904
01-Dec-21	0.67	± 1.03	4	362
02-Dec-21	1.67	± 1.86	10	904
03-Dec-21	1.00	± 2.45	6	542
04-Dec-21	2.00	± 2.61	12	1085
05-Dec-21	3.33	± 3.44	20	1808
06-Dec-21	0.83	± 1.33	5	452
07-Dec-21	0.83	± 1.33	5	452
08-Dec-21	0.50	± 1.22	3	271
09-Dec-21	0.00	± 0.00	0	0
10-Dec-21	0.50	± 1.22	3	271
11-Dec-21	0.00	± 0.00	0	0
12-Dec-21	1.00	± 2.00	6	542
13-Dec-21	0.67	± 1.63	4	362
14-Dec-21	1.17	± 2.04	7	633
15-Dec-21	2.00	± 1.67	12	1085
16-Dec-21	0.67	± 1.63	4	362
17-Dec-21	0.83	± 1.33	5	452
18-Dec-21	0.33	± 0.52	2	181
19-Dec-21	2.33	± 2.25	14	1266
20-Dec-21	0.17	± 0.41	1	90
21-Dec-21	0.17	± 0.41	1	90
22-Dec-21	0.33	± 0.82	2	181

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
23-Dec-21	0.00	± 0.00	0	0
24-Dec-21	0.00	± 0.00	0	0
25-Dec-21	1.50	± 2.51	9	814
26-Dec-21	0.00	± 0.00	0	0
27-Dec-21	0.00	± 0.00	0	0
28-Dec-21	0.17	± 0.41	1	90
29-Dec-21	0.00	± 0.00	0	0
30-Dec-21	1.17	± 2.40	7	633
31-Dec-21	0.50	± 1.22	3	271
01-Jan-22	0.00	± 0.00	0	0
02-Jan-22	0.83	± 2.04	5	452
03-Jan-22	1.83	± 3.25	11	994
04-Jan-22	0.00	± 0.00	0	0
05-Jan-22	0.00	± 0.00	0	0
06-Jan-22	2.00	± 2.76	12	1085
07-Jan-22	0.00	± 0.00	0	0
08-Jan-22	0.00	± 0.00	0	0
09-Jan-22	0.00	± 0.00	0	0
10-Jan-22	0.00	± 0.00	0	0
11-Jan-22	0.00	± 0.00	0	0
12-Jan-22	0.00	± 0.00	0	0
13-Jan-22	0.00	± 0.00	0	0
14-Jan-22	0.00	± 0.00	0	0
15-Jan-22	0.67	± 1.03	4	362
Total Count / Estimated Influx			665	60,117

FIGURE 7 – DAILY MEAN COUNTS OF EURASIAN SISKIN PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER AND 15 JANUARY DURING THE PRESENT (2021) AND 2020 SURVEYS, BETWEEN 15 OCTOBER 2019 AND 10 JANUARY 2020 DURING THE 2019 SURVEY, AND BETWEEN 20 OCTOBER AND 31 DECEMBER DURING PREVIOUS (2014, 2015, 2016, 2017, 2018) SURVEYS.



7.22 Raw daily counts for **European Goldfinch** recorded from the 21 sites during the 2021 study varied between 0 and a maximum of 5, while the mean daily counts ranged between 0 and 0.83 (Table 8). Counts for this species were therefore very low overall: between one and five Goldfinch individuals were recorded in total from each of the sites at grid locations 4073, 5663 and 5277, while no individuals were recorded throughout the survey period from any of the other sites.

7.23 Based on the mean daily counts (Table 8), extrapolation translates to an estimated daily influx ranging between 0 and 452 individuals, with a total influx over the survey period (15 October 2021 – 15 January 2022; i.e. 93 days) of 632 individuals; i.e. some seven (7) birds per day. Counts were only recorded from three sites located in western and north-eastern Malta.

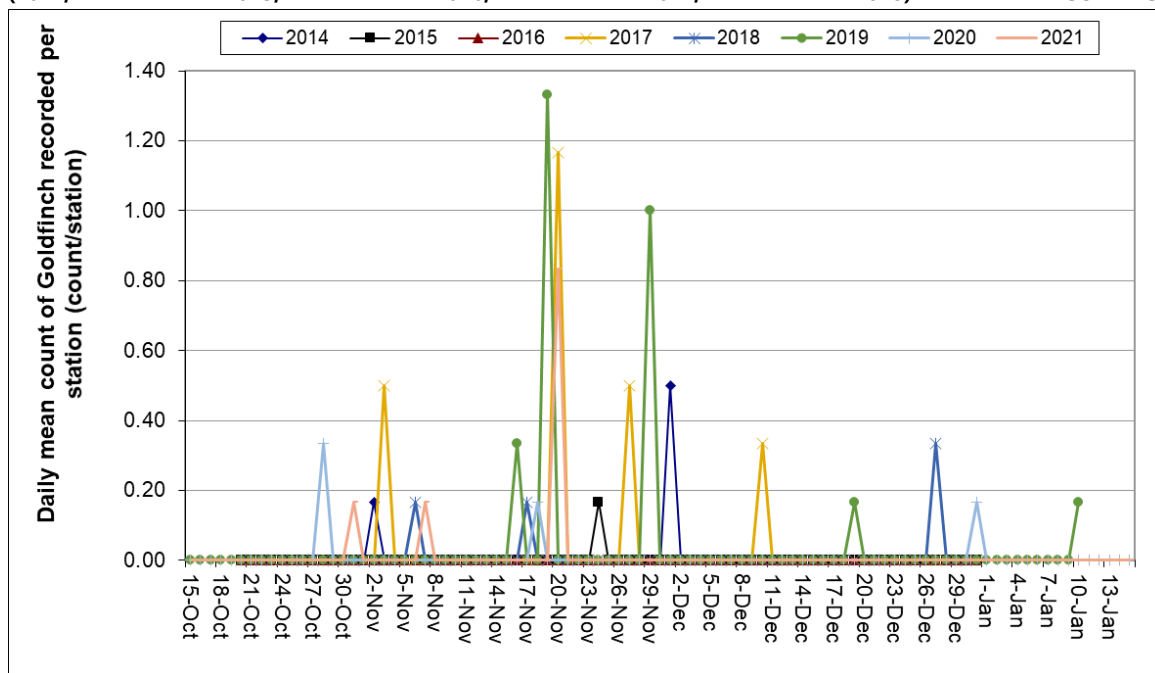
TABLE 8 - VALUES OF MEAN ($\pm$ SD) DAILY COUNT AND DAILY TOTAL COUNT RECORDED FROM THE SIX STUDY SITES, TOGETHER WITH TOTAL INFLUX OF MIGRATORY EUROPEAN GOLDFINCH

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-21	0.00	$\pm$ 0.00	0	0
16-Oct-21	0.00	$\pm$ 0.00	0	0
17-Oct-21	0.00	$\pm$ 0.00	0	0
18-Oct-21	0.00	$\pm$ 0.00	0	0
19-Oct-21	0.00	$\pm$ 0.00	0	0

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
20-Oct-21	0.00	± 0.00	0	0
21-Oct-21	0.00	± 0.00	0	0
22-Oct-21	0.00	± 0.00	0	0
23-Oct-21	0.00	± 0.00	0	0
24-Oct-21	0.00	± 0.00	0	0
25-Oct-21	0.00	± 0.00	0	0
26-Oct-21	0.00	± 0.00	0	0
27-Oct-21	0.00	± 0.00	0	0
28-Oct-21	0.00	± 0.00	0	0
29-Oct-21	0.00	± 0.00	0	0
30-Oct-21	0.00	± 0.00	0	0
31-Oct-21	0.17	± 0.41	1	90
01-Nov-21	0.00	± 0.00	0	0
02-Nov-21	0.00	± 0.00	0	0
03-Nov-21	0.00	± 0.00	0	0
04-Nov-21	0.00	± 0.00	0	0
05-Nov-21	0.00	± 0.00	0	0
06-Nov-21	0.00	± 0.00	0	0
07-Nov-21	0.17	± 0.41	1	90
08-Nov-21	0.00	± 0.00	0	0
09-Nov-21	0.00	± 0.00	0	0
10-Nov-21	0.00	± 0.00	0	0
11-Nov-21	0.00	± 0.00	0	0
12-Nov-21	0.00	± 0.00	0	0
13-Nov-21	0.00	± 0.00	0	0
14-Nov-21	0.00	± 0.00	0	0
15-Nov-21	0.00	± 0.00	0	0
16-Nov-21	0.00	± 0.00	0	0
17-Nov-21	0.00	± 0.00	0	0
18-Nov-21	0.00	± 0.00	0	0
19-Nov-21	0.00	± 0.00	0	0
20-Nov-21	0.83	± 2.04	5	452
21-Nov-21	0.00	± 0.00	0	0
22-Nov-21	0.00	± 0.00	0	0
23-Nov-21	0.00	± 0.00	0	0
24-Nov-21	0.00	± 0.00	0	0
25-Nov-21	0.00	± 0.00	0	0
26-Nov-21	0.00	± 0.00	0	0
27-Nov-21	0.00	± 0.00	0	0
28-Nov-21	0.00	± 0.00	0	0
29-Nov-21	0.00	± 0.00	0	0
30-Nov-21	0.00	± 0.00	0	0
01-Dec-21	0.00	± 0.00	0	0
02-Dec-21	0.00	± 0.00	0	0
03-Dec-21	0.00	± 0.00	0	0
04-Dec-21	0.00	± 0.00	0	0
05-Dec-21	0.00	± 0.00	0	0
06-Dec-21	0.00	± 0.00	0	0
07-Dec-21	0.00	± 0.00	0	0
08-Dec-21	0.00	± 0.00	0	0
09-Dec-21	0.00	± 0.00	0	0

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
10-Dec-21	0.00	± 0.00	0	0
11-Dec-21	0.00	± 0.00	0	0
12-Dec-21	0.00	± 0.00	0	0
13-Dec-21	0.00	± 0.00	0	0
14-Dec-21	0.00	± 0.00	0	0
15-Dec-21	0.00	± 0.00	0	0
16-Dec-21	0.00	± 0.00	0	0
17-Dec-21	0.00	± 0.00	0	0
18-Dec-21	0.00	± 0.00	0	0
19-Dec-21	0.00	± 0.00	0	0
20-Dec-21	0.00	± 0.00	0	0
21-Dec-21	0.00	± 0.00	0	0
22-Dec-21	0.00	± 0.00	0	0
23-Dec-21	0.00	± 0.00	0	0
24-Dec-21	0.00	± 0.00	0	0
25-Dec-21	0.00	± 0.00	0	0
26-Dec-21	0.00	± 0.00	0	0
27-Dec-21	0.00	± 0.00	0	0
28-Dec-21	0.00	± 0.00	0	0
29-Dec-21	0.00	± 0.00	0	0
30-Dec-21	0.00	± 0.00	0	0
31-Dec-21	0.00	± 0.00	0	0
01-Jan-22	0.00	± 0.00	0	0
02-Jan-22	0.00	± 0.00	0	0
03-Jan-22	0.00	± 0.00	0	0
04-Jan-22	0.00	± 0.00	0	0
05-Jan-22	0.00	± 0.00	0	0
06-Jan-22	0.00	± 0.00	0	0
07-Jan-22	0.00	± 0.00	0	0
08-Jan-22	0.00	± 0.00	0	0
09-Jan-22	0.00	± 0.00	0	0
10-Jan-22	0.00	± 0.00	0	0
11-Jan-22	0.00	± 0.00	0	0
12-Jan-22	0.00	± 0.00	0	0
13-Jan-22	0.00	± 0.00	0	0
14-Jan-22	0.00	± 0.00	0	0
15-Jan-22	0.00	± 0.00	0	0
Total Count / Estimated Influx			7	632

FIGURE 8 DAILY MEAN COUNTS OF EUROPEAN GOLDFINCH PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER AND 15 JANUARY DURING THE PRESENT (2021) AND 2020 SURVEYS, BETWEEN 15 OCTOBER 2019 AND 10 JANUARY 2020 DURING THE 2019 SURVEY, AND BETWEEN 20 OCTOBER AND 31 DECEMBER DURING PREVIOUS (2014, 2015, 2016, 2017, 2018) SURVEYS.



7.24 Raw daily counts for **European Serin** recorded from the 21 sites during the 2021 study varied between 0 and a maximum of 11, while the mean daily counts ranged between 0 and 3.33 (Table 9). Low counts for this species were recorded throughout the survey period, with two small peaks on 15th December and 2nd January. The total counts, i.e. the total number of Serin individuals recorded from a given grid location (= study site) during the whole study period (93 days), did not vary appreciably between the different sites: at the lower end, no individuals were recorded throughout the survey period from five of the sites (grid locations 6069, 3268, 5872, 3690 and 5663), while at the higher end, 27 Serin individuals were recorded from the site at grid location 4085, which was surveyed daily, and 14 individuals were recorded from the site at grid location 4283.

7.25 Overall count values for European Serin from the present (autumn/winter 2021) survey are similar to those made in previous years, although a relatively higher peak count for this species was recorded during the 2014 survey. A similar pattern of higher count values made during the period early November to early January is noted between 2014 and 2021, while in 2019 the period of higher counts commenced in late November. Based on the mean daily counts, extrapolation translates to an estimated daily influx

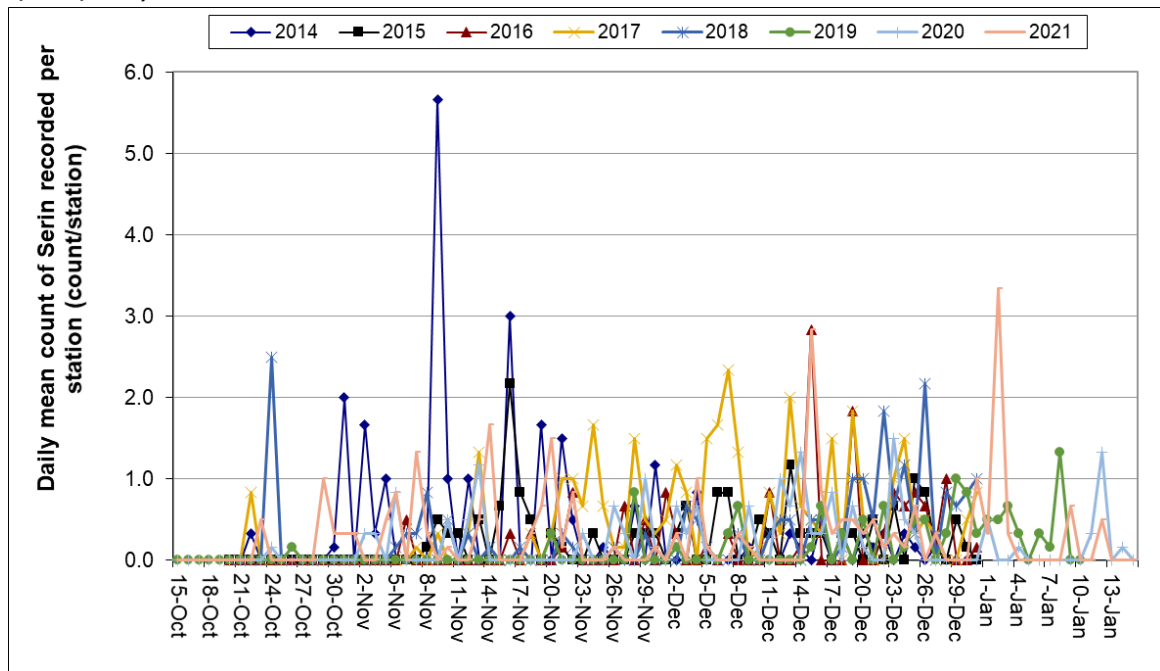
ranging between 0 and 1,808 individuals, with a total influx over the survey period (15 October 2021 – 15 January 2022; i.e. 93 days) of 14,824 individuals; i.e. some 159 birds per day.

TABLE 9 - VALUES OF MEAN ($\pm$ SD) DAILY COUNT AND DAILY TOTAL COUNT RECORDED FROM THE SIX STUDY SITES, TOGETHER WITH TOTAL INFLUX OF MIGRATORY EUROPEAN SERIN

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-21	0.00	$\pm$ 0.00	0	0
16-Oct-21	0.00	$\pm$ 0.00	0	0
17-Oct-21	0.00	$\pm$ 0.00	0	0
18-Oct-21	0.00	$\pm$ 0.00	0	0
19-Oct-21	0.00	$\pm$ 0.00	0	0
20-Oct-21	0.00	$\pm$ 0.00	0	0
21-Oct-21	0.00	$\pm$ 0.00	0	0
22-Oct-21	0.00	$\pm$ 0.00	0	0
23-Oct-21	0.50	$\pm$ 1.22	3	271
24-Oct-21	0.00	$\pm$ 0.00	0	0
25-Oct-21	0.00	$\pm$ 0.00	0	0
26-Oct-21	0.00	$\pm$ 0.00	0	0
27-Oct-21	0.00	$\pm$ 0.00	0	0
28-Oct-21	0.00	$\pm$ 0.00	0	0
29-Oct-21	1.00	$\pm$ 2.45	6	542
30-Oct-21	0.33	$\pm$ 0.82	2	181
31-Oct-21	0.33	$\pm$ 0.82	2	181
01-Nov-21	0.33	$\pm$ 0.82	2	181
02-Nov-21	0.00	$\pm$ 0.00	0	0
03-Nov-21	0.00	$\pm$ 0.00	0	0
04-Nov-21	0.50	$\pm$ 1.22	3	271
05-Nov-21	0.83	$\pm$ 1.60	5	452
06-Nov-21	0.00	$\pm$ 0.00	0	0
07-Nov-21	1.33	$\pm$ 3.27	8	723
08-Nov-21	0.33	$\pm$ 0.82	2	181
09-Nov-21	0.00	$\pm$ 0.00	0	0
10-Nov-21	0.17	$\pm$ 0.41	1	90
11-Nov-21	0.00	$\pm$ 0.00	0	0
12-Nov-21	0.00	$\pm$ 0.00	0	0
13-Nov-21	0.50	$\pm$ 1.22	3	271
14-Nov-21	1.67	$\pm$ 3.20	10	904
15-Nov-21	0.00	$\pm$ 0.00	0	0
16-Nov-21	0.00	$\pm$ 0.00	0	0
17-Nov-21	0.00	$\pm$ 0.00	0	0
18-Nov-21	0.33	$\pm$ 0.82	2	181
19-Nov-21	0.67	$\pm$ 1.63	4	362
20-Nov-21	1.50	$\pm$ 2.51	9	814
21-Nov-21	0.17	$\pm$ 0.41	1	90
22-Nov-21	0.83	$\pm$ 2.04	5	452
23-Nov-21	0.00	$\pm$ 0.00	0	0
24-Nov-21	0.00	$\pm$ 0.00	0	0
25-Nov-21	0.00	$\pm$ 0.00	0	0
26-Nov-21	0.17	$\pm$ 0.41	1	90
27-Nov-21	0.00	$\pm$ 0.00	0	0

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
28-Nov-21	0.00	± 0.00	0	0
29-Nov-21	0.00	± 0.00	0	0
30-Nov-21	0.17	± 0.41	1	90
01-Dec-21	0.00	± 0.00	0	0
02-Dec-21	0.33	± 0.82	2	181
03-Dec-21	0.00	± 0.00	0	0
04-Dec-21	1.00	± 2.45	6	542
05-Dec-21	0.17	± 0.41	1	90
06-Dec-21	0.00	± 0.00	0	0
07-Dec-21	0.00	± 0.00	0	0
08-Dec-21	0.33	± 0.82	2	181
09-Dec-21	0.17	± 0.41	1	90
10-Dec-21	0.00	± 0.00	0	0
11-Dec-21	0.00	± 0.00	0	0
12-Dec-21	0.00	± 0.00	0	0
13-Dec-21	0.00	± 0.00	0	0
14-Dec-21	0.00	± 0.00	0	0
15-Dec-21	2.83	± 3.66	17	1537
16-Dec-21	0.83	± 1.33	5	452
17-Dec-21	0.33	± 0.82	2	181
18-Dec-21	0.50	± 0.84	3	271
19-Dec-21	0.50	± 1.22	3	271
20-Dec-21	0.33	± 0.82	2	181
21-Dec-21	0.50	± 0.84	3	271
22-Dec-21	0.17	± 0.41	1	90
23-Dec-21	0.33	± 0.82	2	181
24-Dec-21	0.17	± 0.41	1	90
25-Dec-21	0.67	± 1.21	4	362
26-Dec-21	0.00	± 0.00	0	0
27-Dec-21	0.33	± 0.82	2	181
28-Dec-21	0.00	± 0.00	0	0
29-Dec-21	0.00	± 0.00	0	0
30-Dec-21	0.00	± 0.00	0	0
31-Dec-21	1.00	± 1.55	6	542
01-Jan-22	0.33	± 0.82	2	181
02-Jan-22	3.33	± 5.20	20	1808
03-Jan-22	0.33	± 0.82	2	181
04-Jan-22	0.00	± 0.00	0	0
05-Jan-22	0.00	± 0.00	0	0
06-Jan-22	0.00	± 0.00	0	0
07-Jan-22	0.00	± 0.00	0	0
08-Jan-22	0.00	± 0.00	0	0
09-Jan-22	0.67	± 1.63	4	362
10-Jan-22	0.00	± 0.00	0	0
11-Jan-22	0.00	± 0.00	0	0
12-Jan-22	0.50	± 0.84	3	271
13-Jan-22	0.00	± 0.00	0	0
14-Jan-22	0.00	± 0.00	0	0
15-Jan-22	0.00	± 0.00	0	0
Total Count / Estimated Influx			164	14,824

FIGURE 9 – DAILY MEAN COUNTS OF EUROPEAN SERIN PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER AND 15 JANUARY DURING THE PRESENT (2021) AND 2020 SURVEYS, BETWEEN 15 OCTOBER 2019 AND 10 JANUARY 2020 DURING THE 2019 SURVEY, AND BETWEEN 20 OCTOBER AND 31 DECEMBER DURING PREVIOUS (2014, 2015, 2016, 2017, 2018) SURVEYS.



7.26 Raw daily counts for **Hawfinch** recorded from the 21 sites during the 2021 study varied between 0 and a maximum of 4, while the mean daily counts ranged between 0 and 0.67 (Table 10). Counts for this species were therefore low overall: zero counts were recorded from eight of the study sites while between one and five Hawfinch individuals were recorded in total from each of the other sites. It should be noted, however, that the Hawfinch is a shy, elusive bird that seeks the cover of vegetation, particularly thick shrubs and trees, and is particularly difficult to detect while in flight, which could therefore lead to under-sampling.

7.27 The estimated total influx of Hawfinch over the Maltese Islands is given in Table 10. Mean count values for Hawfinch recorded during the present (autumn/winter 2021) are similar to those made in autumn 2014, 2017 and 2019, but higher than those made in autumn 2015, 2016 and 2018 (when very few counts of this species were recorded). The overall temporal trend seen during the autumn 2014, 2017, 2019 and present (2021) surveys is of slightly higher and more frequent count values recorded from late October to end November. Based on the mean daily counts, extrapolation translates to an estimated daily influx ranging between 0 and 362 individuals, with a

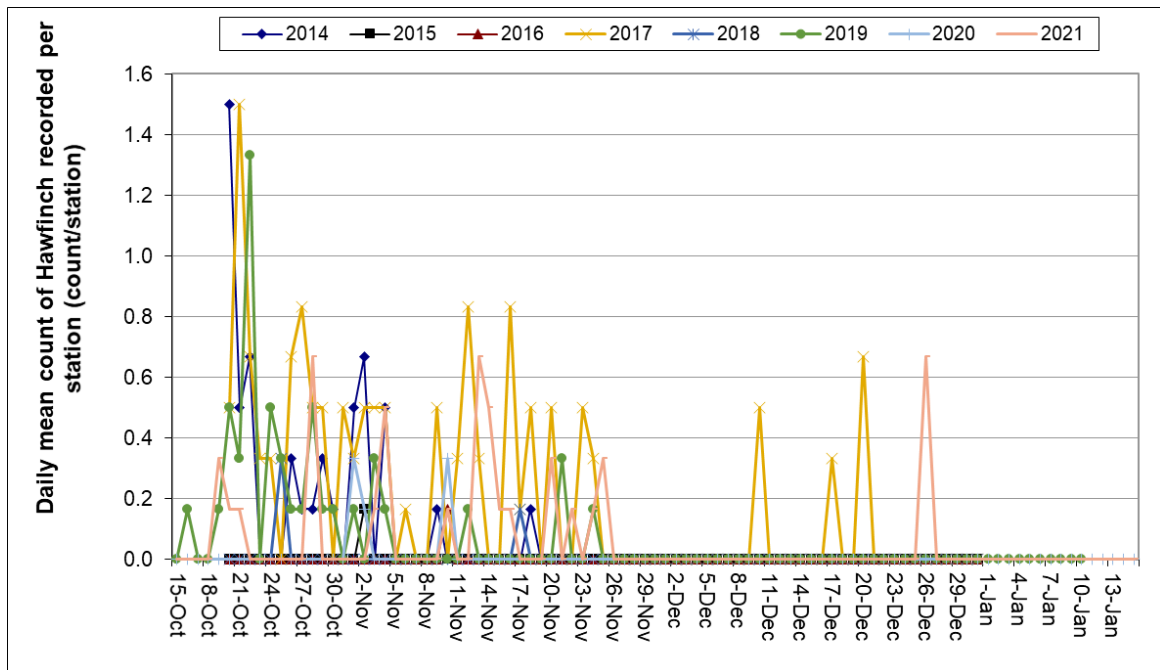
total influx over the survey period (15 October 2021 – 15 January 2022; i.e. 93 days) of 2,891 individuals; i.e. some 31 birds per day.

TABLE 10 - VALUES OF MEAN ($\pm$ SD) DAILY COUNT AND DAILY TOTAL COUNT RECORDED FROM THE SIX STUDY SITES, TOGETHER WITH TOTAL INFLUX OF MIGRATORY HAWFINCH

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-21	0.00	$\pm$ 0.00	0	0
16-Oct-21	0.00	$\pm$ 0.00	0	0
17-Oct-21	0.00	$\pm$ 0.00	0	0
18-Oct-21	0.00	$\pm$ 0.00	0	0
19-Oct-21	0.33	$\pm$ 0.52	2	181
20-Oct-21	0.17	$\pm$ 0.41	1	90
21-Oct-21	0.17	$\pm$ 0.41	1	90
22-Oct-21	0.00	$\pm$ 0.00	0	0
23-Oct-21	0.00	$\pm$ 0.00	0	0
24-Oct-21	0.00	$\pm$ 0.00	0	0
25-Oct-21	0.00	$\pm$ 0.00	0	0
26-Oct-21	0.00	$\pm$ 0.00	0	0
27-Oct-21	0.00	$\pm$ 0.00	0	0
28-Oct-21	0.67	$\pm$ 0.82	4	362
29-Oct-21	0.00	$\pm$ 0.00	0	0
30-Oct-21	0.00	$\pm$ 0.00	0	0
31-Oct-21	0.00	$\pm$ 0.00	0	0
01-Nov-21	0.00	$\pm$ 0.00	0	0
02-Nov-21	0.00	$\pm$ 0.00	0	0
03-Nov-21	0.17	$\pm$ 0.41	1	90
04-Nov-21	0.50	$\pm$ 1.22	3	271
05-Nov-21	0.00	$\pm$ 0.00	0	0
06-Nov-21	0.00	$\pm$ 0.00	0	0
07-Nov-21	0.00	$\pm$ 0.00	0	0
08-Nov-21	0.00	$\pm$ 0.00	0	0
09-Nov-21	0.00	$\pm$ 0.00	0	0
10-Nov-21	0.17	$\pm$ 0.41	1	90
11-Nov-21	0.00	$\pm$ 0.00	0	0
12-Nov-21	0.00	$\pm$ 0.00	0	0
13-Nov-21	0.67	$\pm$ 1.63	4	362
14-Nov-21	0.50	$\pm$ 1.22	3	271
15-Nov-21	0.17	$\pm$ 0.41	1	90
16-Nov-21	0.17	$\pm$ 0.41	1	90
17-Nov-21	0.00	$\pm$ 0.00	0	0
18-Nov-21	0.00	$\pm$ 0.00	0	0
19-Nov-21	0.00	$\pm$ 0.00	0	0
20-Nov-21	0.33	$\pm$ 0.82	2	181
21-Nov-21	0.00	$\pm$ 0.00	0	0
22-Nov-21	0.17	$\pm$ 0.41	1	90
23-Nov-21	0.00	$\pm$ 0.00	0	0
24-Nov-21	0.17	$\pm$ 0.41	1	90
25-Nov-21	0.33	$\pm$ 0.82	2	181
26-Nov-21	0.00	$\pm$ 0.00	0	0
27-Nov-21	0.00	$\pm$ 0.00	0	0
28-Nov-21	0.00	$\pm$ 0.00	0	0

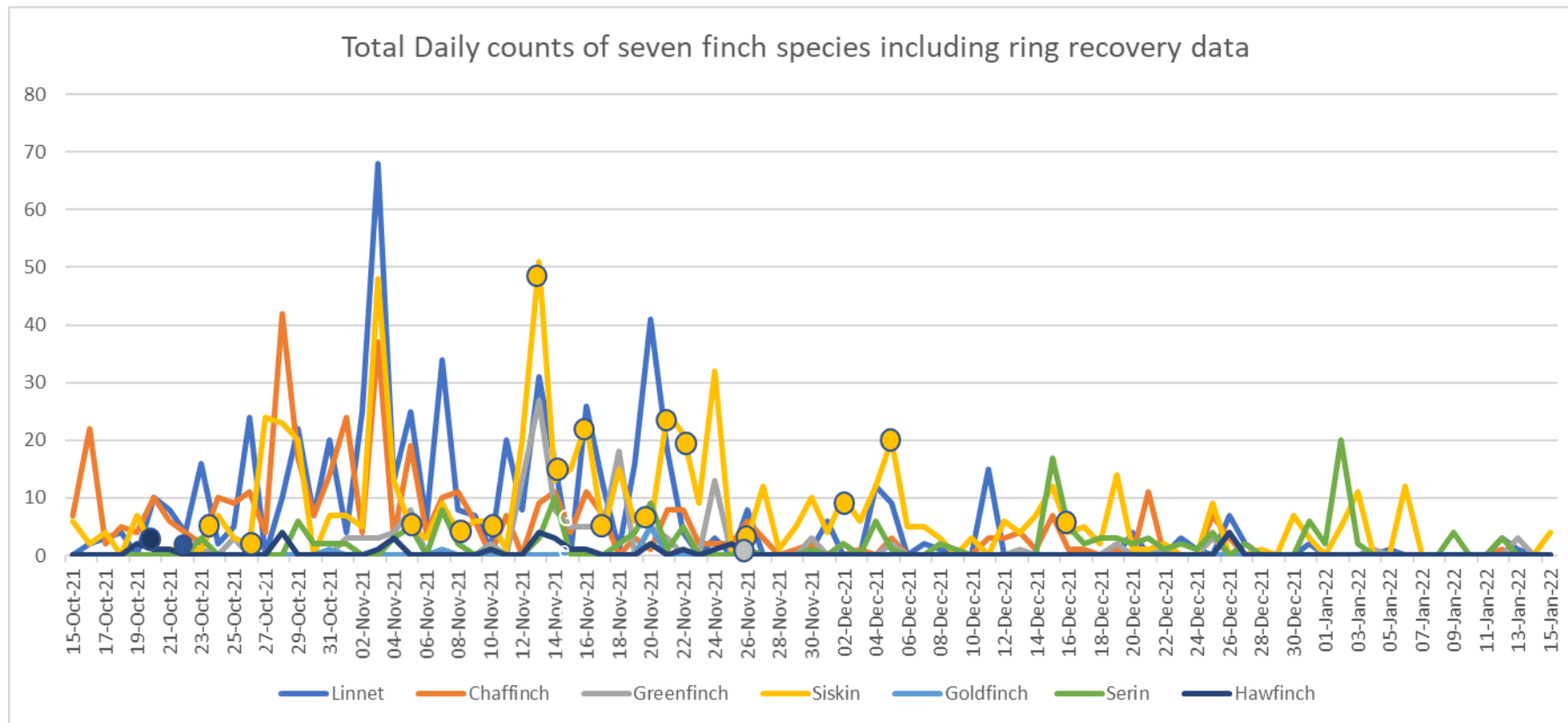
Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
29-Nov-21	0.00	± 0.00	0	0
30-Nov-21	0.00	± 0.00	0	0
01-Dec-21	0.00	± 0.00	0	0
02-Dec-21	0.00	± 0.00	0	0
03-Dec-21	0.00	± 0.00	0	0
04-Dec-21	0.00	± 0.00	0	0
05-Dec-21	0.00	± 0.00	0	0
06-Dec-21	0.00	± 0.00	0	0
07-Dec-21	0.00	± 0.00	0	0
08-Dec-21	0.00	± 0.00	0	0
09-Dec-21	0.00	± 0.00	0	0
10-Dec-21	0.00	± 0.00	0	0
11-Dec-21	0.00	± 0.00	0	0
12-Dec-21	0.00	± 0.00	0	0
13-Dec-21	0.00	± 0.00	0	0
14-Dec-21	0.00	± 0.00	0	0
15-Dec-21	0.00	± 0.00	0	0
16-Dec-21	0.00	± 0.00	0	0
17-Dec-21	0.00	± 0.00	0	0
18-Dec-21	0.00	± 0.00	0	0
19-Dec-21	0.00	± 0.00	0	0
20-Dec-21	0.00	± 0.00	0	0
21-Dec-21	0.00	± 0.00	0	0
22-Dec-21	0.00	± 0.00	0	0
23-Dec-21	0.00	± 0.00	0	0
24-Dec-21	0.00	± 0.00	0	0
25-Dec-21	0.00	± 0.00	0	0
26-Dec-21	0.67	± 1.63	4	362
27-Dec-21	0.00	± 0.00	0	0
28-Dec-21	0.00	± 0.00	0	0
29-Dec-21	0.00	± 0.00	0	0
30-Dec-21	0.00	± 0.00	0	0
31-Dec-21	0.00	± 0.00	0	0
01-Jan-22	0.00	± 0.00	0	0
02-Jan-22	0.00	± 0.00	0	0
03-Jan-22	0.00	± 0.00	0	0
04-Jan-22	0.00	± 0.00	0	0
05-Jan-22	0.00	± 0.00	0	0
06-Jan-22	0.00	± 0.00	0	0
07-Jan-22	0.00	± 0.00	0	0
08-Jan-22	0.00	± 0.00	0	0
09-Jan-22	0.00	± 0.00	0	0
10-Jan-22	0.00	± 0.00	0	0
11-Jan-22	0.00	± 0.00	0	0
12-Jan-22	0.00	± 0.00	0	0
13-Jan-22	0.00	± 0.00	0	0
14-Jan-22	0.00	± 0.00	0	0
15-Jan-22	0.00	± 0.00	0	0
Total Count / Estimated Influx			32	2,891

FIGURE 10 – DAILY MEAN COUNTS OF HAWFINCH PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER AND 15 JANUARY DURING THE PRESENT (2021) AND 2020 SURVEYS, BETWEEN 15 OCTOBER 2019 AND 10 JANUARY 2020 DURING THE 2019 SURVEY, AND BETWEEN 20 OCTOBER AND 31 DECEMBER DURING PREVIOUS (2014, 2015, 2016, 2017, 2018) SURVEYS.



7.28 Figure 11 shows the total daily counts of each of the seven finch species and the days in which a ring recovery was recorded. The dot colour corresponds to the finch species recovered on the specific date. It is to be noted that on the 23 October 2021 and on the 13 and 16 November 2021, two Siskins having a ring were retrieved on each day. Further information on ring recoveries may be found in Section 5.

FIGURE 11 - TOTAL DAILY COUNTS OF THE SEVEN FINCH SPECIES (= SITE) RECORDED BETWEEN 15 OCTOBER 2021 AND 15 JANUARY 2022 ILLUSTRATING (WITH A DOT) THE DAYS IN WHICH A RING RECOVERY WAS RECORDED. THE COLOUR OF THE DOT CORRESPONDS TO THE SPECIES RECOVERED



8. COMPARISON BETWEEN MIGRATORY STUDY DATA AND RESEARCH DEROGATION DATA

- 8.1 A comparative analysis of the results obtained during the migratory study with data obtained from the finch research derogation was undertaken. It should be stated from the outset that the two sets of data were collected for different purposes, using very different methodologies, and therefore the magnitudes of values are not directly comparable. However, the temporal trends can be expected to follow similar patterns, that is periods when higher mean daily counts were recorded during the present survey should broadly correspond to dates when higher numbers of birds were captured and released (and reported in the research derogation data) in the same year. Whether the influx of the bird species follows the same temporal trend from year to year can only be confirmed through a longitudinal study of influx of the different bird species over a period of several years.
- 8.2 Graphical representations of the mean daily counts made during the present (2021) survey and the research derogation counts for the same time period (15 October 2021 – 15 January 2022) in 2021 for each of the seven bird species were prepared to compare temporal trends among the two different data sets. In a graphical plot showing daily counts, a high variation in counts from day to day may overshadow temporal trends over the two-month period. To aid visual interpretation, a second set of analyses was undertaken by computing a moving average using a rolling 5-day period for the time series count data. This has the effect of smoothening out the day-to-day fluctuations and hence making longer-term trends in mean daily counts or daily bag counts more apparent, thus facilitating visual interpretation of temporal trends. Note that the analyses based on a moving average do not replace those based on the raw daily counts. Rather, the graphical representations showing a 5-day moving average should be seen in conjunction with those based on daily counts, which are also presented.
- 8.3 Overall, the highest daily counts for Common Linnet recorded during the 2021 survey were in late October and late November, with counts declining thereafter. The 2021 research derogation data included a period of higher counts in late October to mid-November, with counts declining thereafter. Thus, the general trend observed in the both the mean daily counts made

during the 2021 survey and in the research derogation counts for 2021 is of higher counts from late October to late November (Figure 12 and Figure 13).

FIGURE 12 DAILY RESEARCH DEROGATION COUNT OF COMMON LINNET FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MEAN DAILY COUNTS RECORDED DURING THE PRESENT 2021 MIGRATION SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE Y-AXIS) FOR THE PERIOD 15 OCTOBER 2021 TO 15 JANUARY 2022.

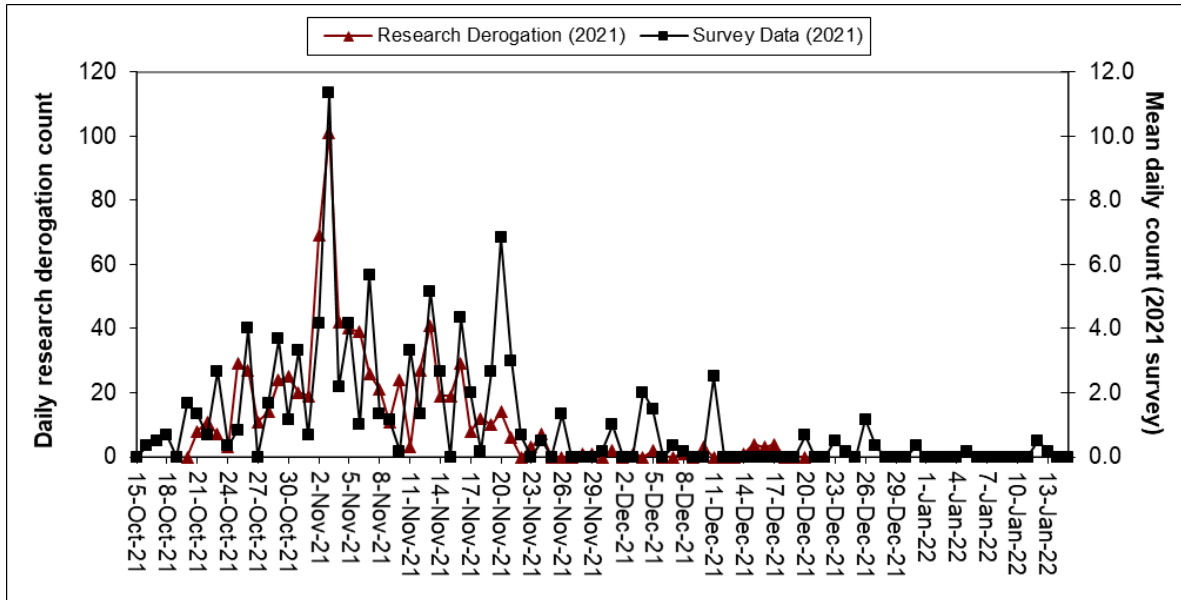
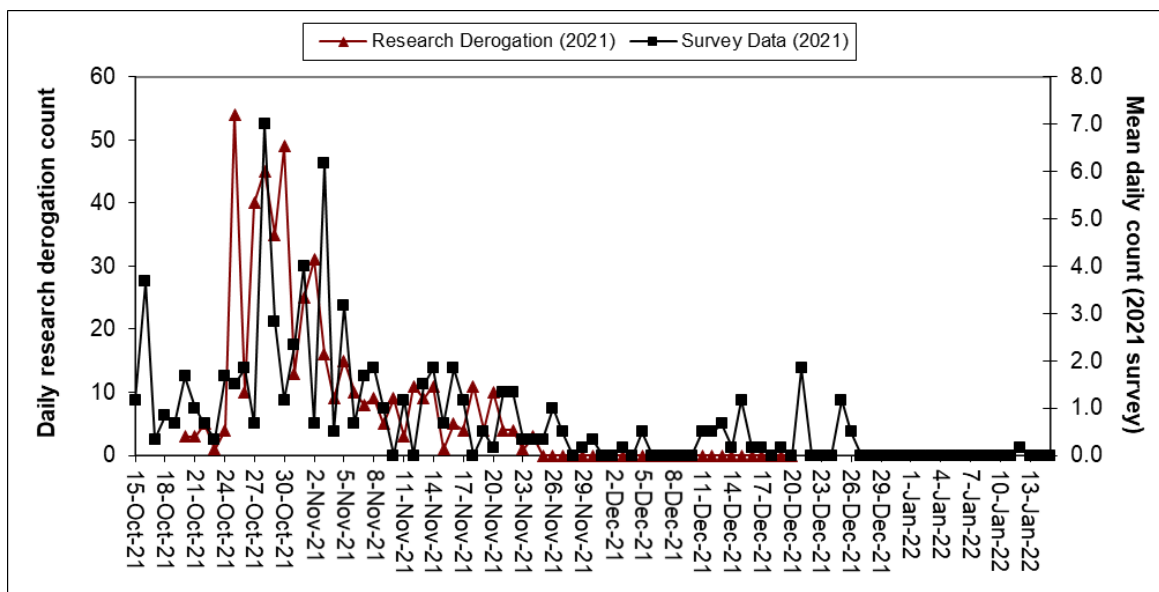


FIGURE 13 MOVING AVERAGE BASED ON A 5-DAY ROLLING TIME PERIOD FOR THE DAILY RESEARCH DEROGATION COUNTS OF COMMON LINNET FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MOVING AVERAGE FOR THE MEAN DAILY COUNTS RECORDED DURING THE 2021 SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE



8.4 Overall, the highest daily counts for the Common Chaffinch recorded during the 2021 survey were made between late October and mid-November, with several days in December being characterised by zero counts. The highest research derogation counts were also reported between late October and mid-November, while zero counts reported throughout December. Thus, the general trend observed in the research derogation counts for 2021 and daily counts recorded during the 2021 survey is of higher counts between late October and mid-November (Figure 14 and Figure 15).

FIGURE 14 DAILY RESEARCH DEROGATION COUNT OF COMMON CHAFFINCH FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MEAN DAILY COUNTS RECORDED DURING THE PRESENT 2021 MIGRATION SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE Y-AXIS) FOR THE PERIOD 15 OCTOBER 2021 TO 15 JANUARY 2022.

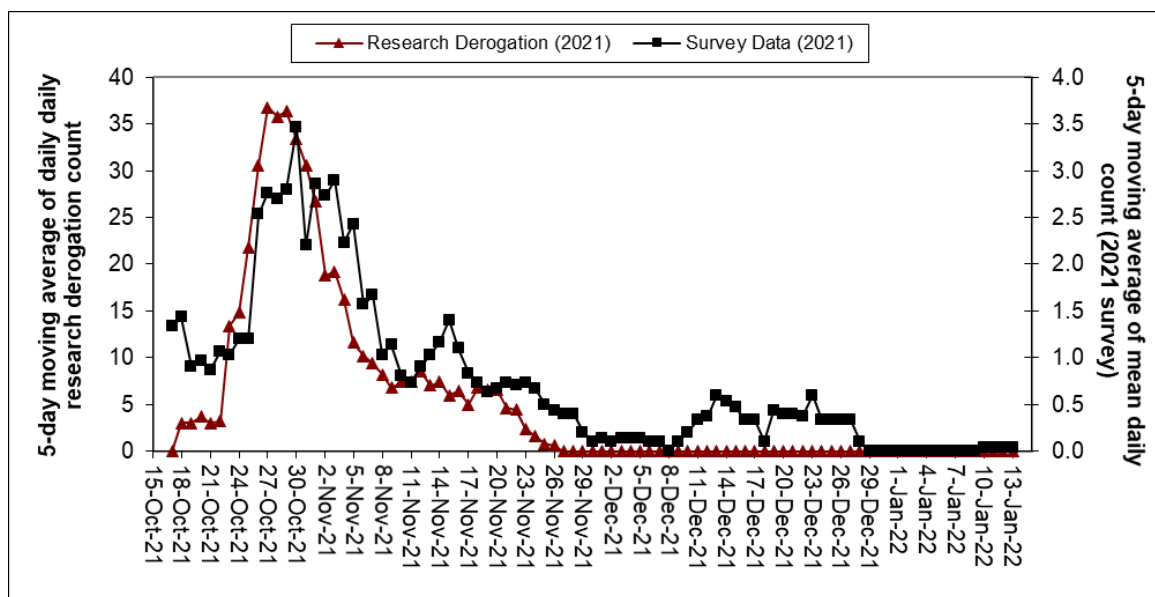
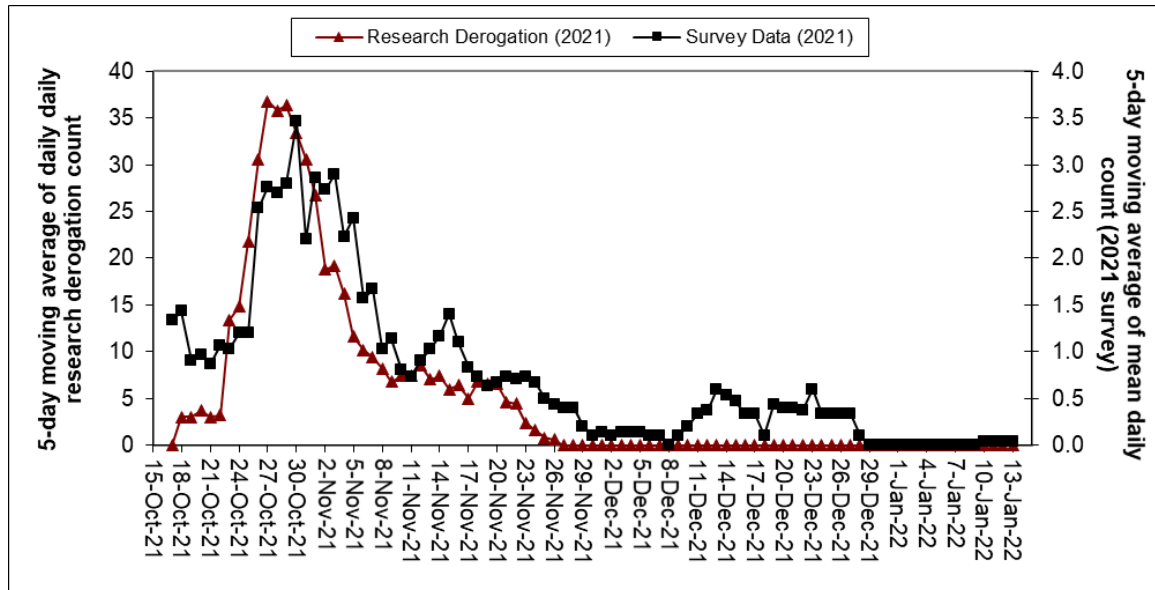


FIGURE 15 MOVING AVERAGE BASED ON A 5-DAY ROLLING TIME PERIOD FOR THE DAILY RESEARCH DEROGATION COUNTS OF COMMON CHAFFINCH FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MOVING AVERAGE FOR THE MEAN DAILY COUNTS RECORDED DURING THE 2021 SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE Y-AXIS) FOR THE PERIOD 15 OCTOBER TO 15 JANUARY.



- 8.5 Overall, the highest daily counts for European Greenfinch recorded during the 2021 survey were made during November, especially in mid-November; much lower counts were recorded during December and several days were characterised by zero counts. The research derogation data showed a very similar trend with counts peaking in mid-November and then declining until the end of the month, with only low or zero counts in December. Therefore, the general trend observed in the research derogation counts for 2021 and daily counts recorded during the 2021 survey is of higher counts in November with a peak in mid-November (Figure 16 and Figure 17).

FIGURE 16 DAILY RESEARCH DEROGATION COUNT OF EUROPEAN GREENFINCH FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MEAN DAILY COUNTS RECORDED DURING THE PRESENT 2021 MIGRATION SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE Y-AXIS) FOR THE PERIOD 15 OCTOBER 2021 TO 15 JANUARY 2022.

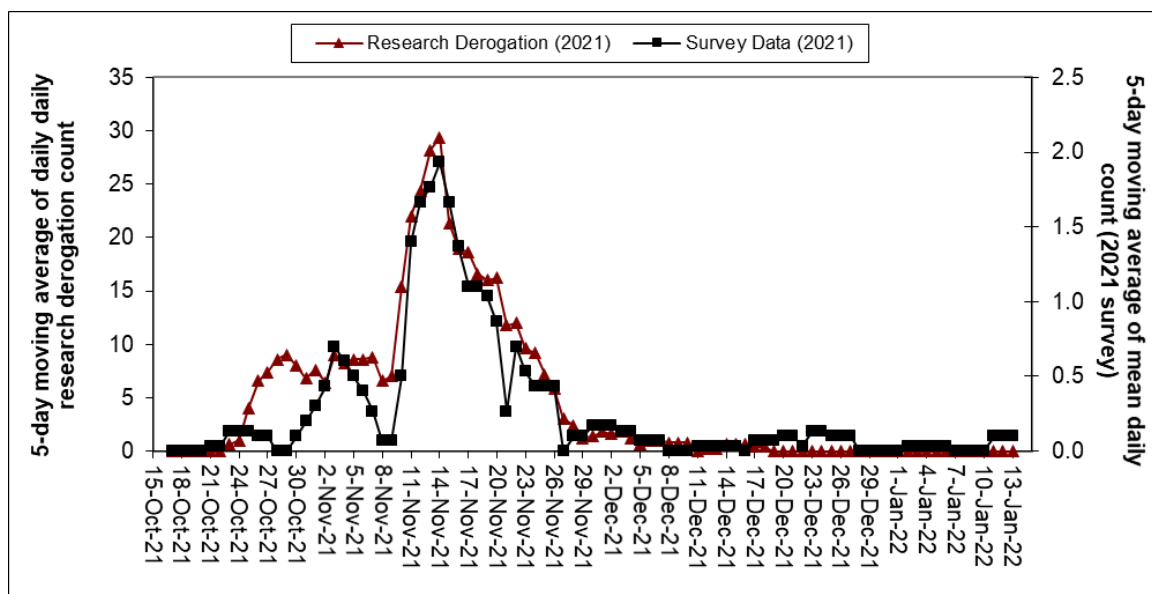
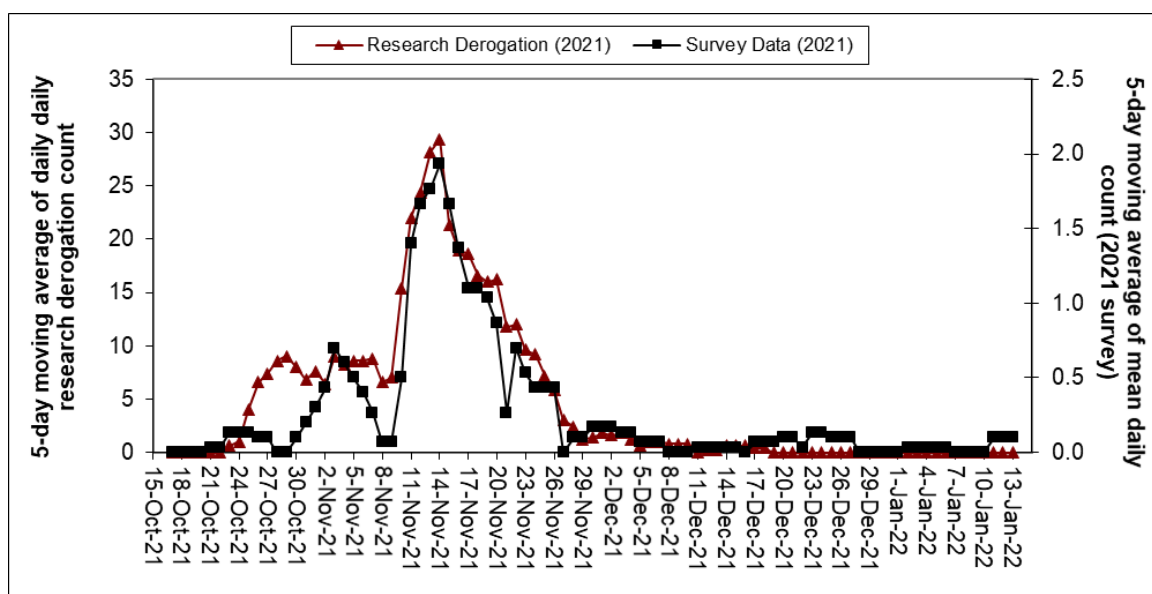


FIGURE 17 MOVING AVERAGE BASED ON A 5-DAY ROLLING TIME PERIOD FOR THE DAILY RESEARCH DEROGATION COUNTS OF EUROPEAN GREENFINCH FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MOVING AVERAGE FOR THE MEAN DAILY COUNTS RECORDED DURING THE 2021 SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE Y-AXIS) FOR THE PERIOD 15 OCTOBER TO 15 JANUARY.



8.6 European Goldfinch individuals were only recorded on three days (31 October, 07 November and 20 November) during the 2021 survey. Inferences on temporal trends in migration rates cannot be drawn based on such limited data. The research derogation data shows sporadic counts from late October to late November (Figure 18 and Figure 19).

FIGURE 18 DAILY RESEARCH DEROGATION COUNT OF EUROPEAN GOLDFINCH FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MEAN DAILY COUNTS RECORDED DURING THE PRESENT 2021 MIGRATION SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE Y-AXIS) FOR THE PERIOD 15 OCTOBER 2021 TO 15 JANUARY 2022.

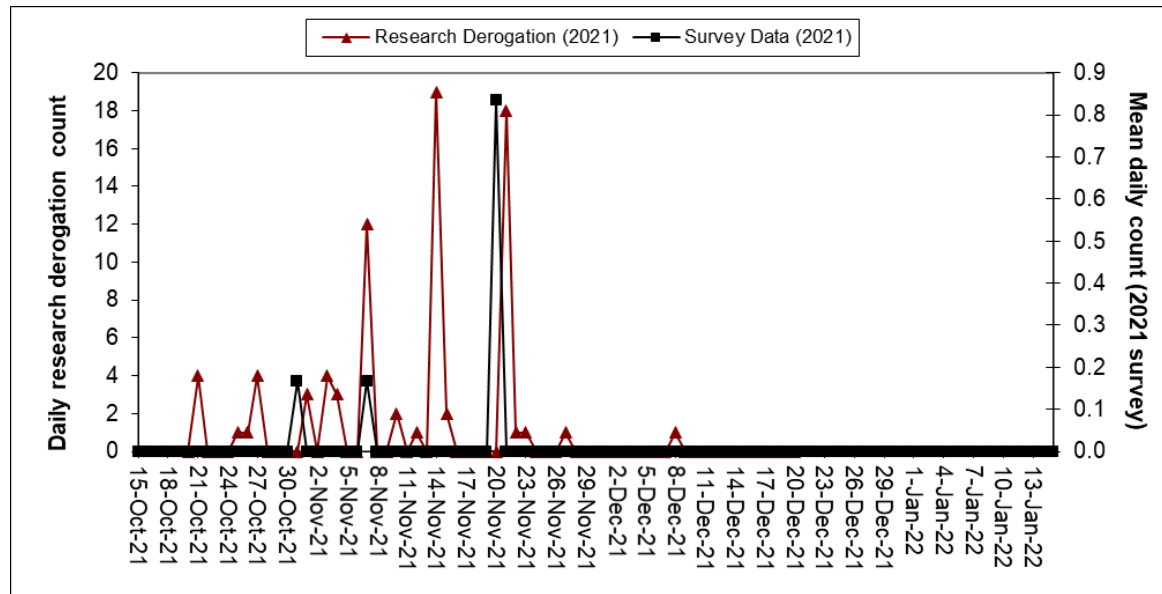
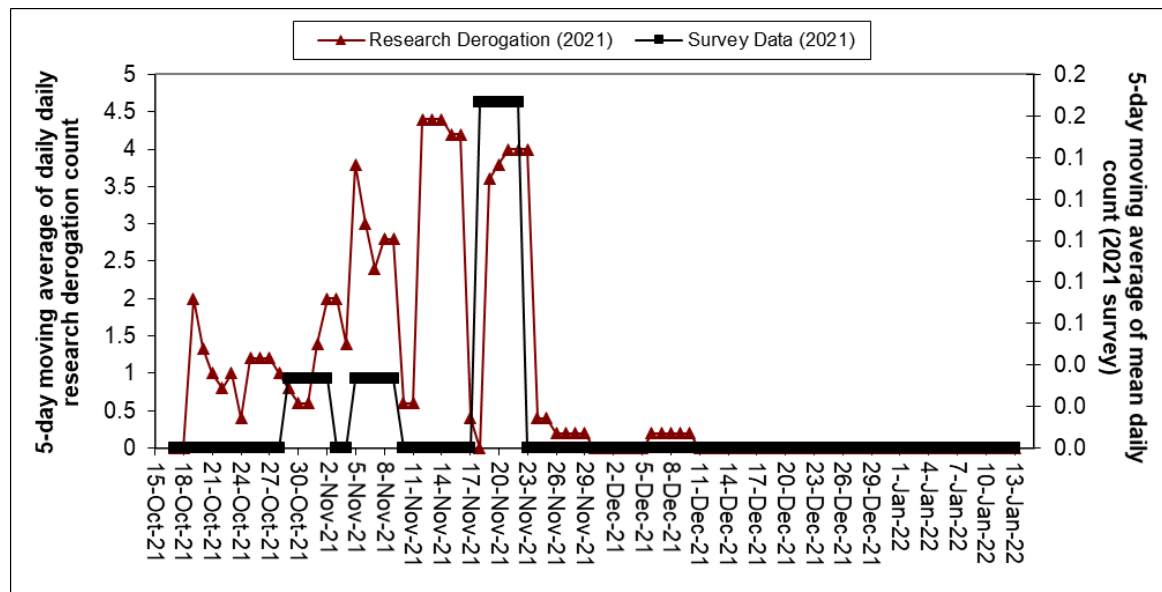


FIGURE 19 MOVING AVERAGE BASED ON A 5-DAY ROLLING TIME PERIOD FOR THE DAILY RESEARCH DEROGATION COUNTS OF EUROPEAN GOLDFINCH FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MOVING AVERAGE FOR THE MEAN DAILY COUNTS RECORDED DURING THE 2021 SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE Y-AXIS) FOR THE PERIOD 15 OCTOBER TO 15 JANUARY.



8.7 Overall, the daily counts recorded for the European Serin during the 2021 survey were very low during late October, and subsequently increased and remained relatively similar until early January, with peak counts on 15 December and 02 January; however, a period of slightly lower counts was recorded between late November and early December. The 2021 research derogation count data also showed very low counts initially, which increased

in early November, decreased again from late November to mid-December and finally increase again in mid-December. Thus, the general trend observed in both the daily counts recorded during the 2021 survey and in the 2021 research derogation counts is of two periods characterised by slightly higher counts: from early to late November, and in mid-December; the peak count recorded in early January during the 2021 survey is not reflected in the research derogation data since the finch research derogation ended on 20 December (Figure 20 and Figure 21).

FIGURE 20 DAILY RESEARCH DEROGATION COUNT OF EUROPEAN SERIN FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MEAN DAILY COUNTS RECORDED DURING THE PRESENT 2021 MIGRATION SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE Y-AXIS) FOR THE PERIOD 15 OCTOBER 2021 TO 15 JANUARY 2022.

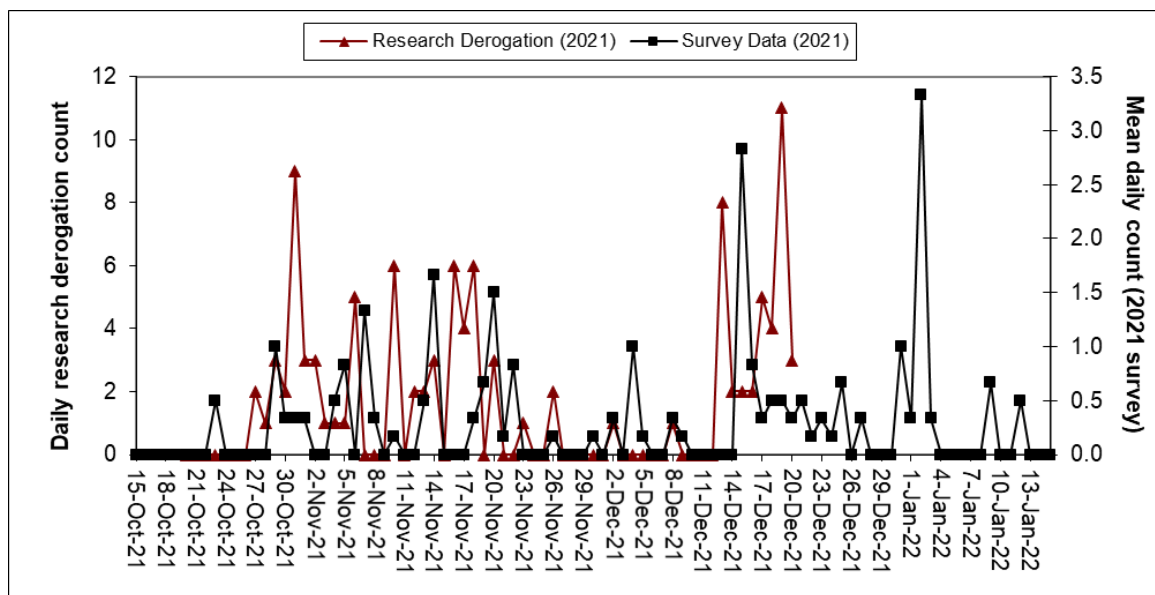
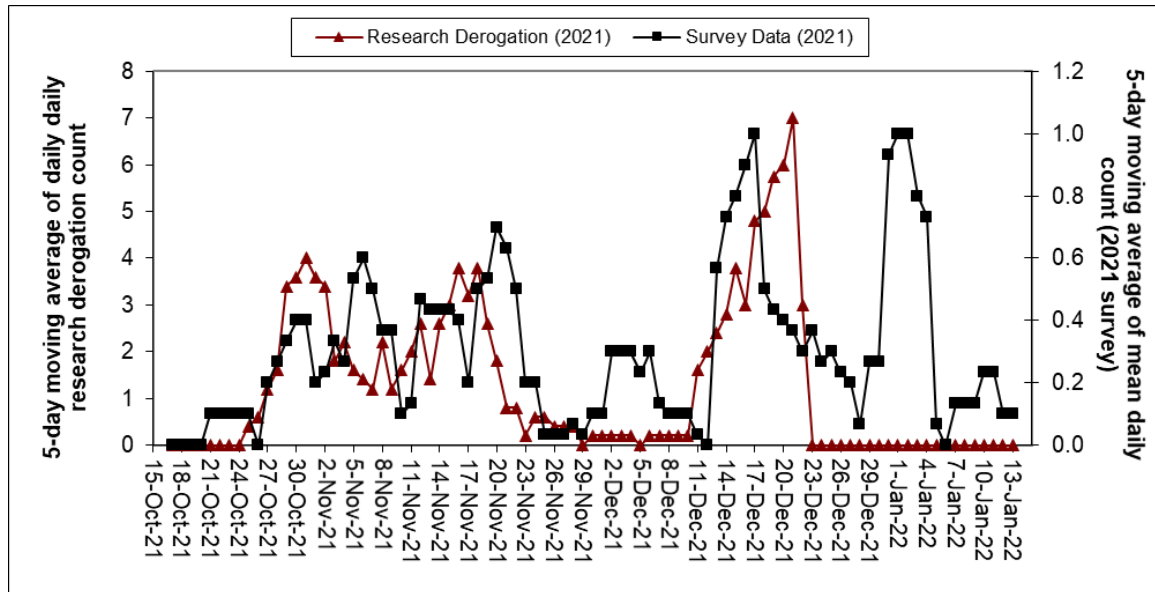


FIGURE 21 MOVING AVERAGE BASED ON A 5-DAY ROLLING TIME PERIOD FOR THE DAILY RESEARCH DEROGATION COUNTS OF EUROPEAN SERIN FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MOVING AVERAGE FOR THE MEAN DAILY COUNTS RECORDED DURING THE 2021 SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE Y-AXIS) FOR THE PERIOD 15 OCTOBER TO 15 JANUARY.



8.8 Overall, the highest daily counts for Hawfinch recorded during the 2021 survey were made between early October and end November, with most of December characterised by zero counts. The research derogation count data showed a similar pattern of higher counts from late October to late November, with most of December characterised by zero counts. Thus, the general trend in the research derogation count data and in the daily counts made during the 2021 survey is of higher counts until end-November, with only sporadic sightings made in December (Figure 22 and Figure 23).

FIGURE 22 DAILY RESEARCH DEROGATION COUNT OF HAWFINCH FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MEAN DAILY COUNTS RECORDED DURING THE PRESENT 2021 MIGRATION SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE Y-AXIS) FOR THE PERIOD 15 OCTOBER 2021 TO 15 JANUARY 2022.

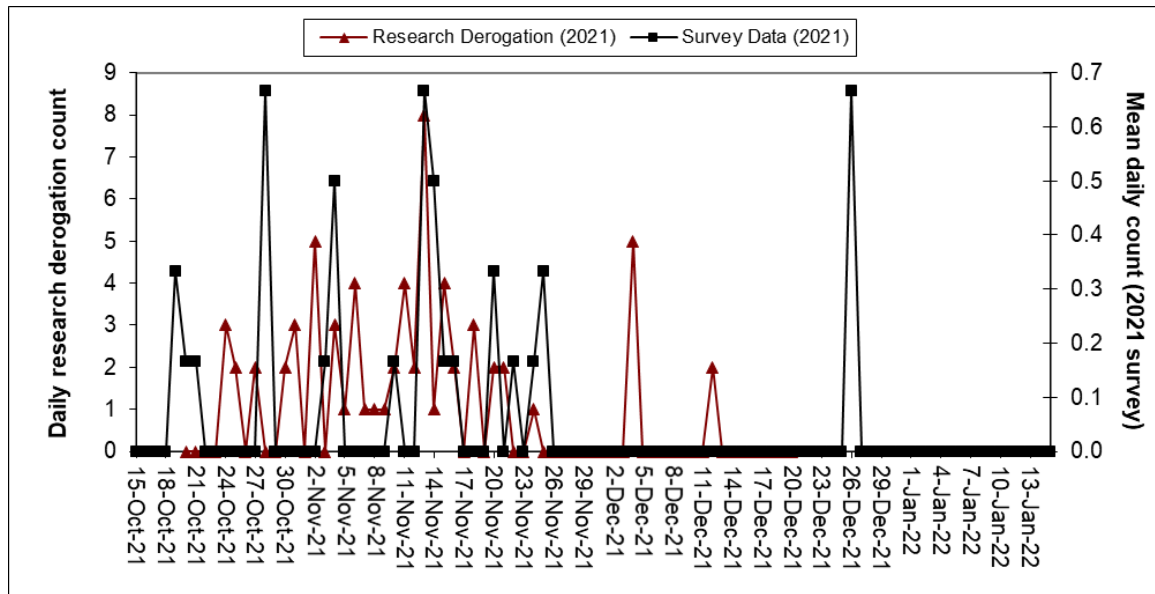
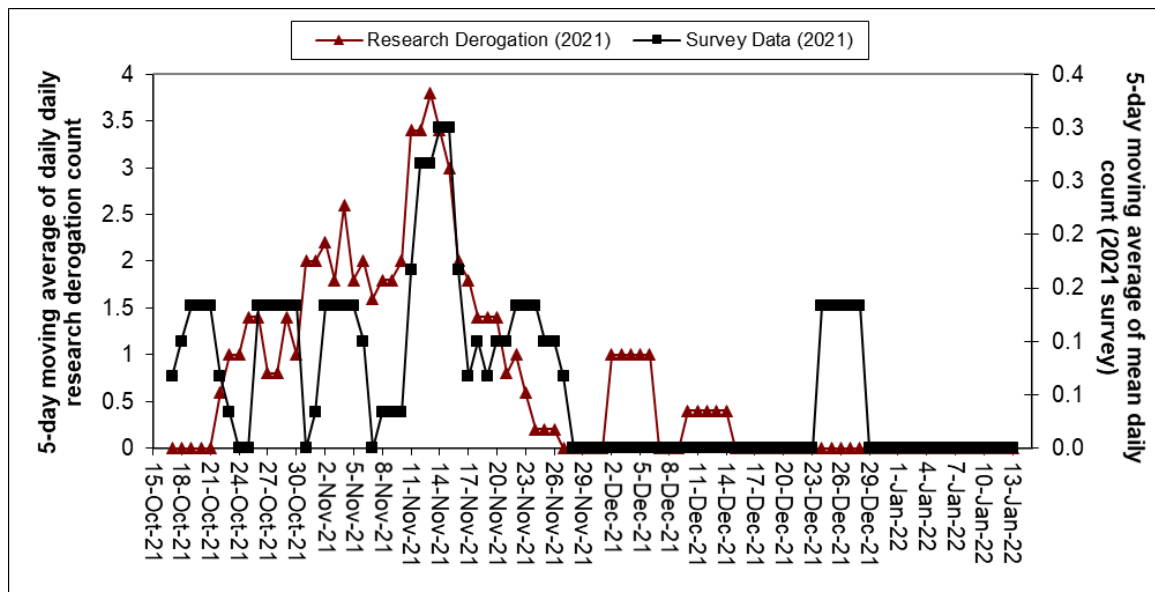


FIGURE 23 MOVING AVERAGE BASED ON A 5-DAY ROLLING TIME PERIOD FOR THE DAILY RESEARCH DEROGATION COUNTS OF HAWFINCH FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MOVING AVERAGE FOR THE MEAN DAILY COUNTS RECORDED DURING THE 2021 SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE Y-AXIS) FOR THE PERIOD 15 OCTOBER TO 15 JANUARY.



8.9 Overall, higher daily counts for Siskin were recorded during the 2021 survey between late October and late November; comparatively lower counts were recorded on most days during December. The research derogation counts data showed a similar trend of higher counts from late October to late November, while research derogation counts in December were very low. Thus, the general trend observed in the research derogation counts for 2021

and daily counts recorded during the 2021 survey is of higher counts between late October and late November, and lower counts in December (Figure 24 and Figure 25).

FIGURE 24 DAILY RESEARCH DEROGATION COUNT OF EURASIAN SISKIN FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MEAN DAILY COUNTS RECORDED DURING THE PRESENT 2021 MIGRATION SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE Y-AXIS) FOR THE PERIOD 15 OCTOBER 2021 TO 15 JANUARY 2022.

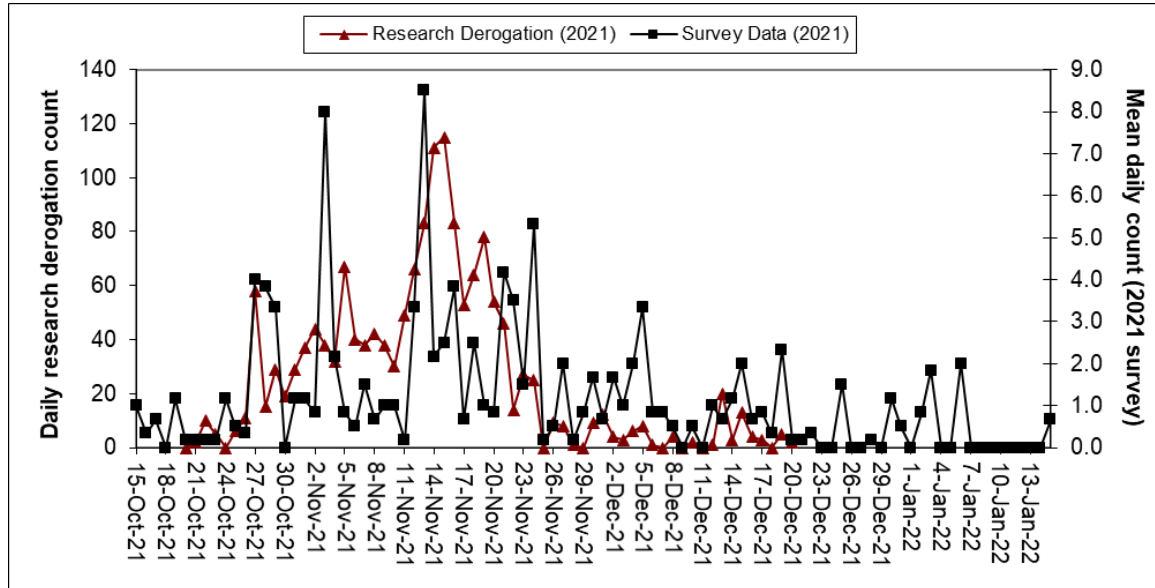
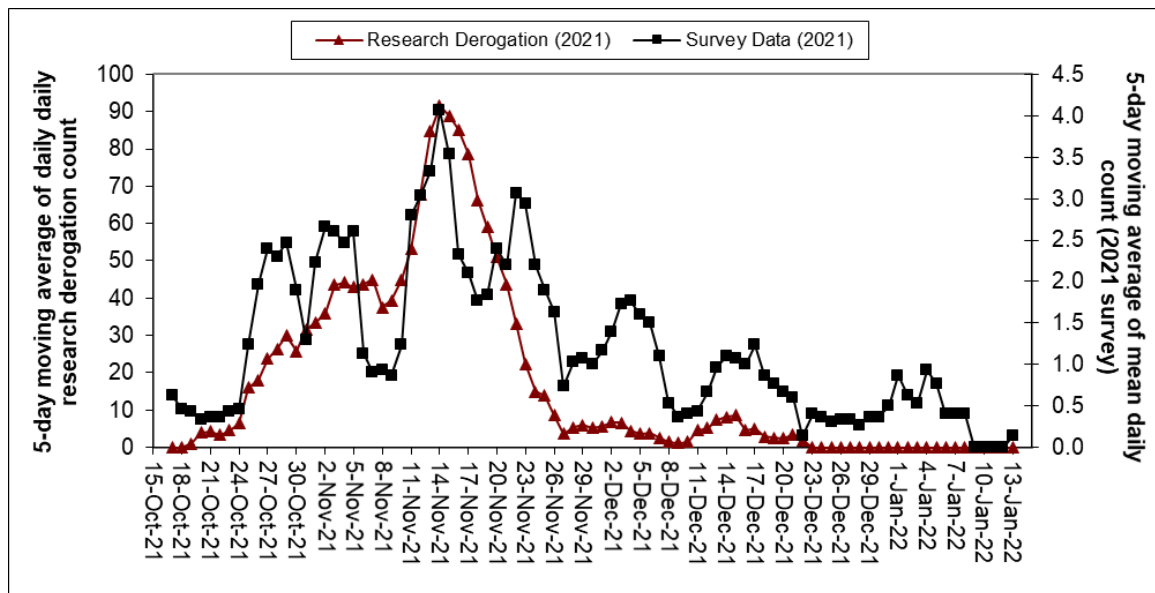


FIGURE 25 MOVING AVERAGE BASED ON A 5-DAY ROLLING TIME PERIOD FOR THE DAILY RESEARCH DEROGATION COUNTS OF EURASIAN SISKIN FOR THE PERIOD 20 OCTOBER TO 20 DECEMBER 2021 (RED LINE; VALUES ON LEFT-SIDE Y-AXIS), TOGETHER WITH THE MOVING AVERAGE FOR THE MEAN DAILY COUNTS RECORDED DURING THE 2021 SURVEY (BLACK LINE; VALUES ON RIGHT-SIDE Y-AXIS) FOR THE PERIOD 15 OCTOBER TO 15 JANUARY.



9. ENFORCEMENT AND STRICT SUPERVISION

- 9.1 Prior to the start of the research period, enforcement officials detailed to carry out patrols and spot-checks received specialised training on enforcement priorities and techniques organised by the Wild Birds Regulation Unit. Around 67 officers²² attended for the training sessions held between the 15th and 18th October 2021 in Malta and Gozo. During these sessions, enforcement officers were given a detailed insight on all the parameters of the derogation as well as clear guidance on procedures to be followed when offences are detected. The attendees were also trained in basic field ornithology and avian ecology, as well as on the relevant regulations and licence conditions, inspection techniques, principles of surveillance as well as counter-poaching operations and wildlife crime detection and prosecution techniques.

Overall deployment and field surveillance

- 9.2 The Conservation of Wild Birds (Framework for Allowing a Derogation to Carry out Scientific Research on Seven Finch Species) Regulations (S.L. 549.145) stipulate that during all hours for which a research period for the relevant species is open, the total number of police officers and/or marshals assigned to carry out spot-checks shall be in the region of fifty (50). Outside these hours, at least four (4) police officers and/or marshals shall be on duty.
- 9.3 The Framework Regulations also specify that, outside these hours, police officers and/or marshals shall continue to carry out spot-checks until at least four (4) weeks following the closure of the research period, with a minimum enforcement deployment of four (4) police officers for every one thousand (1,000) special licences issued.
- 9.4 Regulation 13(7) of the Framework Regulations details a standard operating procedure for enforcement, which requests that in pursuance of their duties under these regulations, the Police, assisted by marshals as may be necessary, shall carry out **daily systematic spot-checks** throughout the research period, in all the regions shown in the Schedule (Figure 26). The Framework Regulations specify that in Gozo, spot-checks in regions 1 and 3

²² The majority of officers deployed attended the training in person whilst those who could not attend were briefed by their superiors who attended the training.

shall be carried out simultaneously with spot-checks in regions 2 and 4 by separate police officers. Similarly in Malta, spot-checks in regions 5, 6 and 8 shall be carried out simultaneously with spot-checks in regions 7,9 and 10 by separate police officers and that spot-checks within each region in Malta and Gozo shall be carried out daily.

14 [S.L. 549.145 CONSERVATION OF WILD BIRDS (FRAMEWORK FOR ALLOWING A DEROGATION TO CARRY OUT SCIENTIFIC RESEARCH ON SEVEN FINCH SPECIES)

SCHEDULE

Subdivision of Malta and Gozo into regions for systematic spot-checks at research stations



FIGURE 26 SUBDIVISION OF MALTA AND GOZO INTO REGIONS FOR SYSTEMATIC SPOT-CHECKS.

9.5 Given that there were 2,904 special licences issued under the terms of the present derogation (2,054 in Malta and 850 in Gozo) and in view of the statutory requirement of 50 officers during permitted hours, 35 officers were required in Malta and 15 officers in Gozo. However, also taking into account that in parallel with the finch research derogation there was also a separate derogation concerning live-capturing of Golden Plover and Song Thrush, for which a further 1,364 special licences were issued (i.e. the total number of licensed persons participating in either one or in both derogations was 3,229²³), the Maltese authorities opted to exceed this requirement to ensure for the strictest supervision possible.

9.6 During the 2021 finches research period (20 October to 20 December), the enforcement authorities deployed a total overall complement of 76 officers to oversee and supervise the parameters of the derogation (Table 11).

²³ 2,904 finch research licences + 1,364 Golden Plover and Song Thrush licences less 1,039 persons in possession of both licence categories = 3,229 licensed live-capturers.

TABLE 11: DEPLOYMENT OF ENFORCEMENT OFFICERS DURING THE AUTUMN 2021 FINCHES RESEARCH PERIOD

Entity	Number of officers	Duties
Environment Protection Unit (EPU) of the Police	20	Field patrols, surveillance, inspections, investigations and prosecution.
District police officers seconded to the EPU	10	
Gozo police	15	
Armed Forces of Malta	10	Field patrols and surveillance
Environmental rangers	15	Patrols in Terrestrial Natura 2000 sites, other protected and scheduled areas and public ODZ sites, reporting illegal activities to Police
Wild Birds Regulation Unit	6	Verification of compliance with registration conditions; assistance to police in prosecution processes, other expert services
Total	76	

9.7 Police (EPU, District and Gozo police) and the Armed Forces of Malta maintained a daily field deployment that ranged between a maximum of 59 officers and a minimum of 44 officers in the field at any point in time from 05:00hrs to 15:00hrs and a maximum of 56 officers and a minimum of 37 officers in the field at any point in time from 15:00hrs to 21:00hrs. This includes all other non-field staff assigned on-duties related to the supervision of the research period but excludes field staff on shift rotation. In addition to this complement, the 15 Environmental rangers were deployed on a twelve-hour shift from 06:30hrs to 18:30hrs on patrols in Terrestrial Natura 2000 sites, other protected and scheduled areas and public ODZ sites, whilst WBRU officers were active daily from 07:15hrs to 16:00hrs as well as on-call during other hours. These officers reported illegal activities directly to Police.

9.8 During the derogation period, the Police Force and the Armed Forces of Malta carried out 3,111 spot-checks (2,463 in Malta and 648 in Gozo) on individual licensees. Table 12 lists the number of officers deployed, number of spot-checks on individual live-capturers per region, infringements related to this derogation and persons charged.

TABLE 12 DAILY ENFORCEMENT STATISTICS DURING FINCHES RESEARCH PERIOD

Date	Number of officers deployed 0500hrs-1500hrs (EPU / District / AFM)		Number of officers deployed 1500hrs-2100hrs (EPU / District / AFM)		Number of spot-checks on individual per region										Offences detected (number of cases and nature of offence)		Number of persons charged, and action taken	
	Malta	Gozo	Malta	Gozo	Malta Region 5	Malta Region 6	Malta Region 7	Malta Region 8	Malta Region 9	Malta Region 10	Gozo Region 1	Gozo Region 2	Gozo Region 3	Gozo Region 4	Malta	Gozo	Malta	Gozo
20/10/2021	35	12	32	9	7	1	5	7	19	4	15	1	1	1		1 Trapping on an unregistered site ²⁴		
21/10/2021	37	9	33	9	1	1	25	2	4	5	4	1	13	5				
22/10/2021	38	9	35	9	14	1	13	1	11	4	3	3	1	1	1 Trapping using unmarked or incorrectly marked decoys ²⁵ 4 Trapping on unregistered sites ²⁶	2 Trapping on unregistered sites ²⁷	1 Court action	
23/10/2021	35	9	31	9	3	1	4	9	9	1	5	5	11	12	1 Illegal trapping of finches ²⁸ 1 Use of illegal means ²⁹	1 Unattended trapping site ³⁰ 1 Trapping on an unregistered site ³¹		1 Court action
24/10/2021	38	11	35	11	5	1	21	9	11	1	5	7	4	7	3 Trapping on unregistered sites ³²		5 Court action	

²⁴ Case refers to the discovery of an unregistered and unattended trapping site in Għarb, Gozo. The police seized all trapping paraphernalia and finches, however no further legal action could be taken since the individual remained unknown to the police.

²⁵ Case refers to an individual making use of finch decoys not fitted with a ring in Għaxaq. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

²⁶ Cases refer to three unregistered and unattended trapping sites found in the limits of Madliena, Għarghur and Msida. Police seized all trapping paraphernalia and finches however no further legal action could be taken since the individuals remained unknown to the police.

²⁷ Cases refer to two unregistered and unattended trapping sites in Qala, Gozo. Police seized all trapping paraphernalia however no further legal action could be taken since the individuals remained unknown to the police.

²⁸ Case refers to an active unregistered trapping site targeting finches in Mellieħa. Police seized all trapping paraphernalia however no further legal action could be taken since the individual fled the scene and remained unknown to the police.

²⁹ Case refers to an abandoned mist net found in Mellieħa. Police dismantled and seized the mist net however no further legal action could be taken since the individual remained unknown to the police.

³⁰ Case refers to an unattended trapping site in Xaghra, Gozo. Police seized all trapping paraphernalia and initiated legal action against the individual.

³¹ Case refers to the discovery of an unregistered and unattended trapping site in Xaghra, Gozo. The police seized all trapping paraphernalia however no further legal action could be taken since the individual remained unknown to the police.

³² Cases refer to two individuals found trapping on unregistered sites and another person found participating in the finches research using the site he had registered for the live-capturing of Song Thrush. Police confiscated all trapping paraphernalia and finches and initiated legal action against the individuals.

Date	Number of officers deployed 0500hrs-1500hrs (EPU / District / AFM)		Number of officers deployed 1500hrs-2100hrs (EPU / District / AFM)		Number of spot-checks on individual per region										Offences detected (number of cases and nature of offence)		Number of persons charged, and action taken	
	Malta	Gozo	Malta	Gozo	Malta Region 5	Malta Region 6	Malta Region 7	Malta Region 8	Malta Region 9	Malta Region 10	Gozo Region 1	Gozo Region 2	Gozo Region 3	Gozo Region 4	Malta	Gozo	Malta	Gozo
															1 Trapping without a licence ³³ 1 Illegal possession of finches without required rings ³⁴			
25/10/2021	37	9	30	10	6	1	5	25	1	1	7	1	2	3	1 Trapping using unmarked or incorrectly marked decoys ³⁵	1 Trapping on an unregistered site ³⁶	1 Court action	
26/10/2021	33	12	30	13	5	1	8	11	15	1	6	1	2	4	1 Trapping without a licence ³⁷ 1 Illegal trapping of finches ³⁸ 3 Trapping on unregistered sites ³⁹		2 Court action	
27/10/2021	35	11	30	11	1	1	12	1	16	1	2	2	1	1	2 Unattended trapping sites ⁴⁰		5 Court action	

³³ Case refers to an individual found trapping without a special licence in Żabbar. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

³⁴ Case refers to an individual found in possession of finches which were fitted with fake single-use rings whilst participating in the research derogation. The police confiscated all trapping paraphernalia and finches and initiated legal action against him.

³⁵ Case refers to an individual making use of finch decoys not fitted with a ring in Buskett. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

³⁶ Case refers to the discovery of an unregistered and unattended trapping site in Żebbuġ, Gozo. The police seized all trapping paraphernalia and finches, however no further legal action could be taken since the individual remained unknown to the police.

³⁷ Case refers to an individual caught trapping without a special licence in Xgħajra. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

³⁸ Case refers to an individual who was caught trapping illegally and in possession of finches. The police confiscated all trapping paraphernalia and finches and initiated legal action against him.

³⁹ Cases refer to three active unattended and unregistered trapping sites. Police seized all trapping paraphernalia however no further legal action could be taken since the individuals remained unknown to the police.

⁴⁰ Cases refer to two unattended trapping sites in Bormla and Dingli. The police confiscated all trapping paraphernalia and initiated legal action against both individuals.

Date	Number of officers deployed 0500hrs-1500hrs (EPU / District / AFM)		Number of officers deployed 1500hrs-2100hrs (EPU / District / AFM)		Number of spot-checks on individual per region										Offences detected (number of cases and nature of offence)		Number of persons charged, and action taken	
	Malta	Gozo	Malta	Gozo	Malta Region 5	Malta Region 6	Malta Region 7	Malta Region 8	Malta Region 9	Malta Region 10	Gozo Region 1	Gozo Region 2	Gozo Region 3	Gozo Region 4	Malta	Gozo	Malta	Gozo
															1 Trapping on an unregistered site ⁴¹ 1 Illegal possession of finches without required rings ⁴² 1 Trapping without a licence ⁴³			
28/10/2021	35	10	33	10	1	2	1	3	11	15	4	1	15	6	1 Trapping on an unregistered site ⁴⁴ 2 Trapping without a licence ⁴⁵ 1 Trapping using illegal means ⁴⁶		3 Court action	
29/10/2021	36	13	34	13	6	1	11	2	5	3	5	1	11	7	2 Trapping on unregistered sites ⁴⁷		1 Court action	
30/10/2021	35	9	32	5	4	2	7	1	19	3	1	2	1	5	1 Unattended trapping site ⁴⁸	1 Trapping without a licence ⁴⁹	1 Court action	1 Court action

⁴¹ Case refers to an individual caught making use of an unregistered trapping site in Marsaskala. The police confiscated all trapping paraphernalia and initiated legal action against him.

⁴² Case refers to an individual found participating in the finches research in Selmun using decoys which were fitted with fake single-use rings. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

⁴³ Case refers to an individual who allowed an unlicensed person to operate his research station. The police confiscated all trapping paraphernalia and finches and initiated legal action against him.

⁴⁴ Case refers to an unregistered and unattended trapping site in Dingli. The police seized all trapping paraphernalia however no further legal action could be taken since the individual remained unknown to the police.

⁴⁵ Cases refer to two individuals found trapping without a special licence in Birgu and Birżebbuġa. The police confiscated all trapping paraphernalia and initiated legal action against the individuals.

⁴⁶ Case refers to an individual making use of two clap-net pairs whilst participating in the research derogation. The police confiscated all trapping paraphernalia and initiated legal action against him.

⁴⁷ The first case refers to an unattended and unregistered trapping site in Mġarr where police seized all trapping paraphernalia, however no further legal action could be taken since the individual remained unknown to the police. The second case refers to an unregistered site in Bidnija where police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

⁴⁸ Case refers to an individual that left his trapping site unattended. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁴⁹ Case refers to an individual found trapping without a special licence in Qala, Gozo. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

Date	Number of officers deployed 0500hrs-1500hrs (EPU / District / AFM)		Number of officers deployed 1500hrs-2100hrs (EPU / District / AFM)		Number of spot-checks on individual per region										Offences detected (number of cases and nature of offence)		Number of persons charged, and action taken	
	Malta	Gozo	Malta	Gozo	Malta Region 5	Malta Region 6	Malta Region 7	Malta Region 8	Malta Region 9	Malta Region 10	Gozo Region 1	Gozo Region 2	Gozo Region 3	Gozo Region 4	Malta	Gozo	Malta	Gozo
																1 Trapping on an unregistered site ⁵⁰		
31/10/2021	38	14	35	14	3	7	11	3	11	16	7	4	4	1	2 Trapping without a licence ⁵¹ 1 Illegal possession of finches without required rings ⁵² 2 Trapping on unregistered sites ⁵³	1 Trapping on an unregistered site ⁵⁴	4 Court action	
01/11/2021	35	13	30	13	5	3	11	3	5	6	8	3	6	1	2 Use of illegal means ⁵⁵ 1 Trapping using unmarked or incorrectly marked decoys ⁵⁶ 4 Trapping on unregistered sites ⁵⁷		4 Court action	

⁵⁰ Case refers to an unregistered and unattended trapping site in Xagħra, Gozo. The police seized all trapping paraphernalia however no further legal action could be taken since the individual remained unknown to the police.

⁵¹ Cases refer to two individuals found trapping without a special licence in Rabat and Mgarr. The police confiscated all trapping paraphernalia and initiated legal action against both individuals.

⁵² Case refers to an individual found in possession of finches which were not fitted with the appropriate rings required by the research derogation. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

⁵³ The first case refers to an individual found participating in the finches research using a site which was registered for the live-capturing of Song Thrush—the police confiscated all trapping paraphernalia and initiated legal action against the individual. The other case refers to the discovery of an unregistered and unattended trapping site in Dingli where police seized all trapping paraphernalia, but no further legal action could be taken since the individual remained unknown to the police.

⁵⁴ Case refers to the discovery of an unregistered and unattended trapping site in Għasri, Gozo. Police seized all trapping paraphernalia however no further legal action could be taken since the individuals remained unknown to the police.

⁵⁵ Cases refer to two individuals making use of two pairs of clap nets whilst participating in the finches research derogation. The police confiscated all trapping paraphernalia and initiated legal action against the individuals.

⁵⁶ Case refers to an individual making use of finch decoys which were fitted with fake single-use rings whilst participating in the research derogation in Marsaskala. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

⁵⁷ Cases refer to three unattended active unregistered trapping sites of unknown owner where police seized all trapping paraphernalia, but no further legal action could be taken since the perpetrators remained unknown to the police, and a case of trapping on unregistered site by a known individual where police confiscated all trapping paraphernalia and initiated legal action against him.

Date	Number of officers deployed 0500hrs-1500hrs (EPU / District / AFM)		Number of officers deployed 1500hrs-2100hrs (EPU / District / AFM)		Number of spot-checks on individual per region										Offences detected (number of cases and nature of offence)		Number of persons charged, and action taken	
	Malta	Gozo	Malta	Gozo	Malta Region 5	Malta Region 6	Malta Region 7	Malta Region 8	Malta Region 9	Malta Region 10	Gozo Region 1	Gozo Region 2	Gozo Region 3	Gozo Region 4	Malta	Gozo	Malta	Gozo
02/11/2021	35	13	31	13	9	7	9	6	2	2	4	3	1	1	1 Trapping without a licence ⁵⁸		1 Court action	
03/11/2021	36	11	34	12	5	3	8	4	6	7	1	1	1	4	4 Trapping using unmarked or incorrectly marked decoys ⁵⁹ 1 Trapping on an unregistered site ⁶⁰	1 Trapping on an unregistered site ⁶¹	5 Court action	1 Court action
04/11/2021	37	12	34	12	7	9	2	5	12	11	8	1	4	1	1 Trapping using unmarked or incorrectly marked decoys ⁶² 2 Trapping on unregistered sites ⁶³	1 Trapping on an unregistered site ⁶⁴	2 Court action	
05/11/2021	35	11	30	11	9	12	9	4	11	9	7	6	6	1	1 Trapping without a licence ⁶⁵		5 Court action	

⁵⁸ Case refers to an individual trapping without a special licence in Żurrieq. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

⁵⁹ Cases refer to three individuals making use of finch decoys not fitted with a ring in Paola and Siġġiewi. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individuals. The other Case refers to an individual using finches which were fitted with fake single-use rings whilst participating in the research derogation in Birzebbuga. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁶⁰ Case refers to an individual found trapping on an unregistered site in Rabat. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁶¹ Case refers to an individual found trapping on an unregistered site in Ta' Kerċem, Gozo. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

⁶² Case refers to an individual using finch decoys which were fitted with fake rings whilst participating in the research derogation in Birzebbuga. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

⁶³ Cases refer to an individual found trapping on an unregistered site in Rabat where police confiscated all trapping paraphernalia and initiated legal action against the individual and a case of an unregistered trapping site also in Rabat where police seized all trapping paraphernalia but could not take further action since the individual remained unknown to the police.

⁶⁴ Case refers to the discovery of an unregistered and unattended trapping site in Xagħra, Gozo. Police seized all trapping paraphernalia however no further legal action could be taken since the individual remained unknown to the police.

⁶⁵ Case refers to an individual found trapping without a special licence in Marsaskala. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

Date	Number of officers deployed 0500hrs-1500hrs (EPU / District / AFM)		Number of officers deployed 1500hrs-2100hrs (EPU / District / AFM)		Number of spot-checks on individual per region										Offences detected (number of cases and nature of offence)		Number of persons charged, and action taken	
	Malta	Gozo	Malta	Gozo	Malta Region 5	Malta Region 6	Malta Region 7	Malta Region 8	Malta Region 9	Malta Region 10	Gozo Region 1	Gozo Region 2	Gozo Region 3	Gozo Region 4	Malta	Gozo	Malta	Gozo
															2 Trapping on unregistered sites ⁶⁶ 1 Unattended trapping site ⁶⁷ 1 Use of illegal means ⁶⁸			
06/11/2021	37	13	33	11	15	9	14	1	17	5	1	1	5	1	1 Use of illegal means ⁶⁹ 1 Trapping on an unregistered site ⁷⁰ 1 Unattended trapping site ⁷¹	4 Trapping on unregistered sites ⁷²	2 Court action	
07/11/2021	35	13	30	13	11	3	19	6	9	17	1	1	2	1	3 Trapping on unregistered sites ⁷³ 2 Unattended trapping sites ⁷⁴ 1 Trapping using unmarked or		6 Court action	

⁶⁶ Cases refer to an individual who was found trapping on an unregistered site in Siggiewi and an individual who was found trapping finches on a site registered for the live-capturing of Song Thrush in Marsaskala. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individuals.

⁶⁷ Case refers to an individual who left his clap-nets active and unattended in Buskett. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁶⁸ Case refers to an individual making use of a portable cage trap to trap Robins in Santa Luċija. The police confiscated the cage trap and a European Robin (*Erithacus rubecula*) and initiated legal action against the individual.

⁶⁹ Case refers to an individual making use of two pairs of clap-nets whilst participating in the finch research derogation. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁷⁰ Case refers to an unattended active unregistered trapping site in Luqa. Police seized all trapping paraphernalia however no further legal action could be taken since the individual remained unknown to the police.

⁷¹ Case refers to an unattended trapping site in Siggiewi where the police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁷² Cases refer to the discovery of four unregistered and unattended trapping sites in Żebbuġ, Gozo. Police seized all trapping paraphernalia however no further legal action could be taken since the individuals remained unknown to the police.

⁷³ Cases refer to trapping on unregistered sites in Siggiewi and Mizieb with the latter also found to be using a mist-net. The third case consisted in the use of a trapping site registered for the live capturing of Song Thrush to trap finches in Marsaxlokk. In all cases, the police confiscated all trapping paraphernalia and initiated legal action against the individuals.

⁷⁴ Cases refer to two individuals one in Buskett and another one in Birżebbuġa who left their clap-nets active and unattended. The police confiscated all trapping paraphernalia and initiated legal action against the individuals.

Date	Number of officers deployed 0500hrs-1500hrs (EPU / District / AFM)		Number of officers deployed 1500hrs-2100hrs (EPU / District / AFM)		Number of spot-checks on individual per region										Offences detected (number of cases and nature of offence)		Number of persons charged, and action taken	
	Malta	Gozo	Malta	Gozo	Malta Region 5	Malta Region 6	Malta Region 7	Malta Region 8	Malta Region 9	Malta Region 10	Gozo Region 1	Gozo Region 2	Gozo Region 3	Gozo Region 4	Malta	Gozo	Malta	Gozo
															incorrectly marked decoys ⁷⁵			
08/11/2021	35	12	30	12	7	5	9	6	3	3	7	5	4	4	1 Unattended trapping site ⁷⁶		1 Court action	
09/11/2021	36	12	33	12	9	3	4	11	15	8	7	5	4	1	1 Trapping without a licence ⁷⁷ 1 Trapping on an unregistered site ⁷⁸		2 Court action	
10/11/2021	36	13	32	13	8	1	11	8	5	7	1	1	11	4				
11/11/2021	36	11	34	11	9	2	4	12	3	19	1	4	1	4				
12/11/2021	40	14	36	14	4	2	9	7	9	11	6	1	2	1	1 Trapping using unmarked or incorrectly marked decoys ⁷⁹ 1 Trapping on an unregistered site ⁸⁰		1 Court action	

⁷⁵ Case refers to an individual making use of finch decoys not fitted with a ring in Birżebbuġa. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁷⁶ Case refers to an individual who left his clap-nets active and unattended in Marsaxlokk. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁷⁷ Case refers to an individual found trapping without a special licence in Siġġiewi. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

⁷⁸ Case refers to an individual found trapping on an unregistered site in Mellieħa using finches which were not fitted with the appropriate rings required by the research derogation. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

⁷⁹ Case refers to an individual making use of finch decoys not fitted with a ring in Żurrieq. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

⁸⁰ Case refers to an unattended active unregistered trapping site in Ġhajn Tuffieħa. Police seized all trapping paraphernalia however no further legal action could be taken since the individuals remained unknown to the police.

Date	Number of officers deployed 0500hrs-1500hrs (EPU / District / AFM)		Number of officers deployed 1500hrs-2100hrs (EPU / District / AFM)		Number of spot-checks on individual per region										Offences detected (number of cases and nature of offence)		Number of persons charged, and action taken	
	Malta	Gozo	Malta	Gozo	Malta Region 5	Malta Region 6	Malta Region 7	Malta Region 8	Malta Region 9	Malta Region 10	Gozo Region 1	Gozo Region 2	Gozo Region 3	Gozo Region 4	Malta	Gozo	Malta	Gozo
13/11/2021	36	10	34	10	9	3	9	7	8	9	7	1	3	3	1 Trapping without a licence ⁸¹ 3 Unattended trapping sites ⁸² 1 Use of illegal means ⁸³		5 Court action	
14/11/2021	39	14	35	14	5	3	8	11	7	15	1	1	21	12	2 Trapping on unregistered sites ⁸⁴ 2 Unattended trapping sites ⁸⁵		3 Court action	
15/11/2021	35	12	33	11	7	2	7	13	9	2	2	2	2	2	1 Trapping using unmarked or incorrectly marked decoys ⁸⁶	6 Trapping on unregistered sites ⁸⁷	1 Court action	1 Court Action
16/11/2021	39	12	34	12	9	1	12	2	4	9	1	3	1	2				
17/11/2021	40	16	38	1620	11	2	8	4	6	12	5	2	4	5	1 Unattended trapping site ⁸⁸	1 Unregistered trapping site ⁸⁹	1 Court action	

⁸¹ Case refers to an individual caught trapping without a special licence at Majjistral Park. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁸² Cases refer to three individuals who left their clap-nets active and unattended at Majjistral Park. The police confiscated all trapping paraphernalia and initiated legal action against the individuals.

⁸³ Case refers to an individual caught making use of two clap-net pairs whilst participating in the finches research derogation in Bormla. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁸⁴ The first case refers to an individual found trapping on an unregistered site in Delimara where the police confiscated all trapping paraphernalia and initiated legal action against the individual. The other case refers to the discovery of an unattended and unregistered trapping site in Bahrija where police seized all trapping paraphernalia however no further legal action could be taken since the individuals remained unknown to the police.

⁸⁵ Cases refer to two individuals that left their clap-nets active and unattended at Majjistral Park. The police confiscated all trapping paraphernalia and initiated legal action against the individuals.

⁸⁶ Case refers to an individual making use of finch decoys not fitted with a ring in Birżebbuġa. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

⁸⁷ Cases refer to the discovery of five unregistered and unattended trapping sites, three in Żebbuġ, one in Xewkija and one in Nadur, Gozo where the police seized all trapping paraphernalia, however no further legal action could be taken since the individuals remained unknown to the police. Regarding the sixth case, an individual was found making use of a trapping site which was not registered on his name in 2021—the police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁸⁸ Case refers to an active and unattended trapping site in Majjistral Park. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁸⁹ Case refers to the discovery of an unregistered and unattended trapping site in Għasri, Gozo. Police seized all trapping paraphernalia however no further legal action could be taken since the individual remained unknown to the police.

Date	Number of officers deployed 0500hrs-1500hrs (EPU / District / AFM)		Number of officers deployed 1500hrs-2100hrs (EPU / District / AFM)		Number of spot-checks on individual per region										Offences detected (number of cases and nature of offence)		Number of persons charged, and action taken	
	Malta	Gozo	Malta	Gozo	Malta Region 5	Malta Region 6	Malta Region 7	Malta Region 8	Malta Region 9	Malta Region 10	Gozo Region 1	Gozo Region 2	Gozo Region 3	Gozo Region 4	Malta	Gozo	Malta	Gozo
18/11/2021	38	16	36	16	8	3	9	1	11	8	5	11	1	1	1 Trapping without a licence ⁹⁰ 1 Unattended trapping sites ⁹¹ 1 Trapping on an unregistered site ⁹² 2 Use of illegal means ⁹³		4 Court action	
19/11/2021	38	13	35	13	7	4	12	3	7	9	4	1	2	1				
20/11/2021	37	11	35	11	5	4	9	9	9	9	4	1	2	1	1 Illegal possession of finches without required rings ⁹⁴ 1 Trapping from an unregistered site ⁹⁵		2 Court action	
21/11/2021	40	15	36	15	4	2	15	11	7	7	3	1	1	3	1 Illegal trapping of finches ⁹⁶		1 Court action	

⁹⁰ Case refers to an individual caught trapping without a special licence in the limits of Paola. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁹¹ Case refers to an active and unattended trapping site in Kalkara. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁹² Case refers to an unattended, active and unregistered trapping site in Mgarr. Police seized all trapping paraphernalia however no further legal action could be taken since the individual remained unknown to the police.

⁹³ Cases refer to two individuals found using three pairs of clap-nets from one station whilst participating in the finch research derogation in Buskett and Hagar Qim. The police confiscated all trapping paraphernalia and initiated legal action against both individuals.

⁹⁴ Case refers to an individual found in possession of finches which were fitted with fake single-use rings whilst participating in the research derogation in Qrendi. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

⁹⁵ Case refers to an individual making use of an unregistered trapping site in Żebbuġ. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

⁹⁶ Case refers to an individual caught illegally trapping finches using two clap-net pairs from one station and a cage trap in Żurrieq. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

Date	Number of officers deployed 0500hrs-1500hrs (EPU / District / AFM)		Number of officers deployed 1500hrs-2100hrs (EPU / District / AFM)		Number of spot-checks on individual per region										Offences detected (number of cases and nature of offence)		Number of persons charged, and action taken	
	Malta	Gozo	Malta	Gozo	Malta Region 5	Malta Region 6	Malta Region 7	Malta Region 8	Malta Region 9	Malta Region 10	Gozo Region 1	Gozo Region 2	Gozo Region 3	Gozo Region 4	Malta	Gozo	Malta	Gozo
22/11/2021	37	16	35	16	3	1	11	5	12	8	3	1	4	1				
23/11/2021	39	14	35	14	6	3	3	4	6	4	1	1	1	2				
24/11/2021	37	13	34	13	5	9	7	2	7	8	1	1	1	5				
25/11/2021	39	14	35	14	1	1	1	19	1	4	1	1	1	1				
26/11/2021	38	10	35	10	2	1	7	11	3	6	2	2	1	1	1 Trapping without licence ⁹⁷	1 Unregistered trapping site ⁹⁸	1 Court action	
27/11/2021	40	13	38	13	3	1	9	4	5	13	2	1	1	1	1 Trapping without licence ⁹⁹		1 Court action	
28/11/2021	42	16	38	16	3	2	5	2	7	7	1	1	1	1				
29/11/2021	39	14	37	14	1	1	3	1	1	2	1	9	1	1				
30/11/2021	40	11	36	11	2	1	6	2	9	5	1	1	3	1				

⁹⁷ Case refers to an individual found trapping without a special licence in Ghaxaq. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

⁹⁸ Case refers to an unregistered and unattended trapping site in Ghajnsielem, Gozo. Police seized all trapping paraphernalia, however no further legal action could be taken since the individual remained unknown to the police.

⁹⁹ Case refers to an individual found trapping without a special licence in Marsaskala. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

Date	Number of officers deployed 0500hrs-1500hrs (EPU / District / AFM)		Number of officers deployed 1500hrs-2100hrs (EPU / District / AFM)		Number of spot-checks on individual per region										Offences detected (number of cases and nature of offence)		Number of persons charged, and action taken	
	Malta	Gozo	Malta	Gozo	Malta Region 5	Malta Region 6	Malta Region 7	Malta Region 8	Malta Region 9	Malta Region 10	Gozo Region 1	Gozo Region 2	Gozo Region 3	Gozo Region 4	Malta	Gozo	Malta	Gozo
01/12/2021	39	14	37	14	8	3	9	1	11	8	1	1	1	1	1 Unattended trapping site ¹⁰⁰	2 Unregistered trapping sites ¹⁰¹	1 Court action	
02/12/2021	39	10	36	10	5	3	8	4	6	7	3	1	4	1	2 Unattended trapping sites ¹⁰²	1 Unregistered trapping site ¹⁰³	2 Court action	
03/12/2021	40	9	38	9	3	1	21	15	11	5	1	5	1	2	1 Trapping using unmarked or incorrectly marked decoys ¹⁰⁴		1 Court action	
04/12/2021	40	13	38	12	6	2	12	9	5	7	1	1	1	1				
05/12/2021	38	16	35	16	7	8	3	11	8	6	1	1	1	1				
06/12/2021	40	14	36	14	2	4	11	3	3	2	2	1	1	1				
07/12/2021	39	14	36	14	4	3	2	2	9	7	2	2	1	1				
08/12/2021	41	17	38	17	8	2	13	15	21	19	1	1	1	1				

¹⁰⁰ Case refers to an individual that left his clap-nets active and unattended in Ħaż-Zebbuġ. The police confiscated all trapping paraphernalia and initiated legal action against the individual.

¹⁰¹ Cases refer to two unregistered and unattended trapping sites in Qala, Gozo. Police seized all trapping paraphernalia however no further legal action could be taken since the individuals remained unknown to the police.

¹⁰² Cases refer to two individuals who left their trapping sites active and unattended in Rabat and Ħal-Far respectively. The police confiscated all trapping paraphernalia and initiated legal action against the individuals.

¹⁰³ Case refers to an unregistered and unattended trapping site in Qala, Gozo. Police seized all trapping paraphernalia however no further legal action could be taken since the individual remained unknown to the police.

¹⁰⁴ Case refers to an individual making use of finch decoys which were fitted with fake single-use rings whilst participating in the research derogation in Attard. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

Date	Number of officers deployed 0500hrs-1500hrs (EPU / District / AFM)		Number of officers deployed 1500hrs-2100hrs (EPU / District / AFM)		Number of spot-checks on individual per region										Offences detected (number of cases and nature of offence)		Number of persons charged, and action taken	
	Malta	Gozo	Malta	Gozo	Malta Region 5	Malta Region 6	Malta Region 7	Malta Region 8	Malta Region 9	Malta Region 10	Gozo Region 1	Gozo Region 2	Gozo Region 3	Gozo Region 4	Malta	Gozo	Malta	Gozo
09/12/2021	40	12	37	12	6	4	9	3	4	8	1	1	1	1				
10/12/2021	40	10	38	10	11	2	8	7	13	4	1	1	1	3				
11/12/2021	39	12	37	12	3	1	7	1	8	3	1	1	1	1				
12/12/2021	38	11	34	11	4	9	3	17	9	9	1	1	1	1				
13/12/2021	41	16	39	16	6	11	12	3	7	15	1	1	1	1				
14/12/2021	38	9	36	9	5	4	6	2	4	9	1	1	1	1				
15/12/2021	38	16	37	15	3	4	9	4	6	6	4	1	1	1				
16/12/2021	38	11	35	11	7	2	11	9	2	1	1	1	1	1				
17/12/2021	39	11	36	11	4	1	11	15	9	4	1	1	1	1				

Date	Number of officers deployed 0500hrs-1500hrs (EPU / District / AFM)		Number of officers deployed 1500hrs-2100hrs (EPU / District / AFM)		Number of spot-checks on individual per region										Offences detected (number of cases and nature of offence)		Number of persons charged, and action taken	
	Malta	Gozo	Malta	Gozo	Malta Region 5	Malta Region 6	Malta Region 7	Malta Region 8	Malta Region 9	Malta Region 10	Gozo Region 1	Gozo Region 2	Gozo Region 3	Gozo Region 4	Malta	Gozo	Malta	Gozo
18/12/2021	40	12	37	12	9	2	3	8	12	9	1	1	3	1	1 Trapping without a licence ¹⁰⁵		1 Court action	
19/12/2021	40	19	37	19	6	9	4	7	9	3	1	1	1	1				
20/12/2021	39	14	37	14	7	11	5	7	11	9	1	1	1	1				
	Average				Total													
	38	13	34	12	359	209	540	401	516	438	188	127	189	144	96 ¹⁰⁶	26 ¹⁰⁷	76 ¹⁰⁸	4 ¹⁰⁹

¹⁰⁵ Case refers to an individual caught trapping without a special licence in Żurrieq. The police confiscated all trapping paraphernalia and finches and initiated legal action against the individual.

¹⁰⁶ 20 cases of unknown individuals, 76 cases of known individuals.

¹⁰⁷ 22 cases of unknown individuals, 4 cases of known individuals.

¹⁰⁸All court actions.

¹⁰⁹All court actions.

9.9 During patrols and spot-checks, the Malta Police Force ensured strict supervision of the derogation throughout the research period. Field inspectors were responsible for monitoring compliance with the special licence conditions and with all applicable legal requirements, namely:

- verifying that the licensees were in possession of all requisite documents.
- verifying that the birds are being immediately released following control (through covert observations and spot-checks on individual licensees).
- ensuring compliance with date and time restrictions.
- ensuring that no species other than those that could be controlled under the finch research licence were being targeted.
- verifying that the licensee's research station tallied with the one that was approved for that purpose by the Wild Birds Regulation Unit (i.e., visible on the portable GIS tablets and registered on the licensee) and that it contained not more than a pair of horizontal clap-nets from a hide with each net having an area not larger than thirty-eight square metres, as well as verification that the mesh size was not less than 18mm x 18mm.
- inspecting live-decoys present on site; and
- compliance with the provisions of the Conservation of Wild Birds Regulations (S.L.549.42) and other applicable legislation.

9.10 In order to facilitate the conduct of their duties, enforcement officers had 18 vehicles at their disposal. All vehicles were equipped with radio communication facilities to enable contact with police officers from other sections/districts, and to allow continuous liaison and coordination with the police headquarters. Police officers were also equipped with binoculars to facilitate their investigations.

- 9.11 Patrolling officers were also provided with portable tablet computers with mobile internet for access to enforcement web-based GIS, a pre-installed GIS as back-up in case mobile internet access was not possible in any specific location, as well as GPS link capability and geo-tagging photography capability. During inspections, police officers made extensive use of these devices, which have proven to be a very effective way of instantly verifying regulatory information pertaining to each licensee's permitted location. The GIS component included the corresponding clap-nets that were registered on each licensee (or groups of licensees in case of shared clap-nets) for 2021. This facilitated the immediate identification of any person not in possession of the requisite licence or whether the licensee is practising research on an authorised clap-net pair.
- 9.12 During the research period, the Wild Birds Regulation Unit provided the police with technical support, confirmation of licences, details on research stations, technical assistance regarding inspection of seized birds, technical guidance in relation to enforcement of cases and legal assistance as required.

Infringements detected

- 9.13 During the patrols and spot-checks carried out by police throughout the finch research derogation period, a total of 122 infringements related to this derogation were detected (Table 12). Court action was taken against 80 individuals, being two for the illegal trapping of finches, 16 for trapping without a special licence, 19 cases of unattended research station, and 19 cases of trapping on unregistered sites, four cases pertaining to illegal possession of finches without adequate rings, 12 persons for the possession of unmarked or incorrectly marked decoys and eight cases regarding the use of illegal means whilst trapping. No legal action could be taken in relation to the other 42 illegalities since the persons involved could not be identified and charged. The nature of all disclosed infringements during the derogation period is outlined in Table 13 below.

TABLE 13 OFFENCES DISCLOSED DURING THE FINCHES RESEARCH PERIOD

	2021		
	(20.10.21-20.12.21)		
	Cases in Malta	Cases in Gozo	Total number of cases
Illegal trapping of finches	2	0	2
Use of illegal means (e.g., cage traps; artificial light; vertical nets; decoys of protected birds)	9	0	9
Trapping using nets of prohibited mesh size	0	0	0
Trapping during prohibited hours	0	0	0
Trapping within bird sanctuaries	0	0	0
Trapping on unregistered sites	36	24	60
Trapping using unmarked or incorrectly marked decoys	12	0	12
Trapping without licence	15	1	16
Unattended Trapping site	18	1	19
Illegal possession of finches without required rings	4	0	4
Total	96	26	122
Number of persons apprehended	76	4	80

9.14 The following table lists birds confiscated by police during the autumn 2021 finch research period. All confiscated birds were checked and birds that were legally possessed under the terms of the derogation (such as finches fitted with genuine R16U rings) were returned to the owner, the rest were seized. Legal action has been initiated in all cases where the culprit has been identified and charged, as already detailed above. The below table also includes birds which were seized by police during inspections of private aviaries.

TABLE 14 BIRDS SEIZED DURING THE AUTUMN 2021 FINCH RESEARCH DEROGATION

Species	Number of birds confiscated by the authorities		Number of birds found compliant with the derogation	Number of birds in violation of the finches research derogation
	Malta	Gozo		
Common Linnet <i>Linaria cannabina</i>	226	13	5	234

Common Chaffinch <i>Fringilla coelebs</i>	247	23	2	268
European Greenfinch <i>Chloris chloris</i>	232	2	3	231
Eurasian Siskin <i>Spinus spinus</i>	321	12	2	331
European Goldfinch <i>Carduelis carduelis</i>	22	0	0	22
European Serin <i>Serinus serinus</i>	45	1		46
Hawfinch <i>Coccothraustes coccothraustes</i>	103	0	16	87
European Robin <i>Erithacus rubecula</i>	3	0	0	3
Brambling <i>Fringilla montifringilla</i>	5	0	0	5
Eurasian Blackcap <i>Sylvia atricapilla</i>	1	0	0	1
Dunnock <i>Prunella modularis</i>	1	0	0	1
Finch sp.	0	30 ¹¹⁰	0	30
Subtotal	1,206	81	28	1,259
Total	1,287			

9.15 In addition, before the opening of the finch research period (from 1 September 2021), police found 21 illegal trapping-related infringements, 17 in Malta and four in Gozo. The cases in Malta consisted of four unattended trapping sites of unknown culprits and 13 cases of individuals caught illegally trapping for finches. Police seized all trapping paraphernalia including nets, pre-recorded bird callers and various finches and initiated legal action against them. The four cases in Gozo include two incidences of illegal trapping of finches where police seized all trapping paraphernalia and initiated legal action against one individual since the other culprit remained unknown to the police, and another two unattended trapping sites of unknown culprit.

9.16 Following closure of the finch research period, in Malta, police found an unattended trapping site and two cases of illegal trapping and possession of finches of which one included the possession of wagtails and a European Robin (*Erithacus rubecula*). Additionally, one of the culprits was also caught using a mist-net and a cage trap. The police confiscated all trapping paraphernalia, confiscated the birds, and initiated legal action against both culprits. During the same period, in Gozo, police found an unattended trapping site of unknown owner which led to the seizure of all trapping paraphernalia, but the culprit remained unknown to the police.

¹¹⁰ These finches were immediately released on site by Gozo Police due to not having any rings. Although the total number of specimens released was recorded, taxonomic details were not documented.

10. CONCLUSIONS

- 10.1 The application of an Article 9(1)(b) research derogation to determine Malta's reference population of the seven finch species was preceded by a series of in-depth analyses that considered all relevant legal and technical aspects.
- 10.2 As a result of these processes, the decision to apply a research derogation was made with full confidence that the following critical prerequisites will be met, without reservation:
- the methodology and objectives will enable a proper assessment of Malta's reference population of the seven finch species by collecting ring recoveries data based on quantitative sampling to limit to a minimum the possible variables, thus ensuring that a wide spectrum of data for analysis is provided.
 - the derogation satisfies all the parameters of the Birds Directive, and, in particular, fulfils (exceeds) all the criteria stipulated in Article 9 of the Directive for research derogations, not least the absence of another satisfactory solution to achieve the required objectives; and
 - the actual implementation of the derogation on the ground ensures that the relevant legal parameters are respected in the field through an elaborate and robust enforcement regime and systematic spot-checks.
- 10.3 The Maltese authorities have subsequently ensured that the above prerequisites were met. After ascertaining that there is no other satisfactory solution other than the application of this strictly controlled research derogation, the authorities put in place a robust regulatory regime that ensured that this scientific study would shed more light on the origin of the seven finch species migrating over the Maltese Islands.
- 10.4 Supervision on the ground was ensured through deployment of appropriately trained and suitably equipped field officers that have exponentially increased the intensity of field inspections in comparison with similar derogations during the previous three years. The use of latest state-of-the-art technology (GIS, GPS and portable tablet PCs) has

resulted in a greater efficiency of the overall supervision process. This was aided further by very high levels of legal deterrents against wildlife crime in force since 2014, regulatory rigour (e.g., pre-screening, registration and digitalization of all site plans), and ongoing efforts at promoting education and regulatory awareness.

- 10.5 During the two-month research period (20 October 2021 – 20 December 2021), fifteen rings recovered by licensees through this research were confirmed by EURING (nine specimens ringed abroad; 6 ringed in Malta). Comparatively, finch ring recoveries using the mist-net system used for bird ringing obtained far fewer results over a much longer period (since 1920s). The number of finches successfully 'controlled' through this research derogation confirms that the current data gap can be effectively filled by the use of the traditional clap-net system and the involvement of persons with vast experience in the operation of such methods. The results obtained during the two-month research period further confirms that the mist-net system used by bird-ringers is not a satisfactory solution for the collation of data to assess Malta's reference population of the seven finch species.
- 10.6 Considering that the Court of Justice of the European Union in judgment C-557/15 declared that 53 ring recoveries for Common Linnet do not provide scientific certainty on the reference population of this species, it follows that for all the seven finch species, scientific certainty can only be obtained if the total number of ring recoveries from other EU Member States exceeds 53 per species. The Maltese authorities believe that scientific certainty can be achieved when the sample size is in the region of 70 ring recoveries for each species if and only if additional ring recoveries beyond the 60 threshold do not provide insight into new regions not previously recorded. In other words, data saturation may be reached at a threshold of 60 ring recoveries per species. The additional fifteen foreign ring recoveries recorded during the 2020 research period are still deemed insufficient in this regard. Thus, in line with the Court judgment, additional ring recoveries are still required before scientific assessment of Malta's reference populations of the seven finch species can be initiated.