

REPORT ON THE OUTCOME OF THE
AUTUMN 2020 RESEARCH DEROGATION TO
DETERMINE MALTA'S REFERENCE POPULATION OF
THE SEVEN FINCH SPECIES



MARCH 2021

WILD BIRDS REGULATION UNIT

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ENCLOSURES

- Annex I Special Licence for the Autumn 2020 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 2020 and January 2021 (Ecoserv, 2021)

1. INTRODUCTION

1.1 This report provides a full account of the outcome of the derogation allowing an Article 9(1)(b) research derogation to determine Malta's reference population of the seven finch species in Autumn 2020. 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,

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.

- the legal and other management aspects of relevance.

2. LEGAL AND POLICY BASIS FOR THE APPLICATION OF A DEROGATION PERMITTING A RESEARCH DEROGATION TO DETERMINE MALTA'S REFERENCE POPULATION OF THE 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-capture 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 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>

- 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 Ornis 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.
- 2.8 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 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.

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>

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

- 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 *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).

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>.

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.

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>

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.

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 are 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. 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 ring,

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

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 trappers¹⁰. 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.

- 2.17 The Framework Regulations¹¹ and Notice of Derogation¹² ensure 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.

THE SCOPE OF THE NEW REGULATIONS

ANALYSIS

- 2.18 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).

¹⁰ The main reason why ringing by licensed trappers was excluded from the Framework Regulations is because currently Maltese law (Regulation 23 of S.L. 549.42) only allows licensed bird ringers to fit scientific rings. The use of rings that are not recognized by EURING (European Union for Bird Ringing) is not recommended because they are not accepted by EURING and thus would not be accepted for use by EURING members. EURING is the organisation that co-ordinates bird ringing throughout Europe. If Malta had to allow the use of rings not recognised by EURING, it would have likely undermined the scientific rigour of the Derogation Framework.

¹¹ Subsidiary Legislation 549.137, available at: <https://legislation.mt/eli/sl/549.137/eng/pdf>

¹² LN 400/2020, available at: <https://legislation.mt/eli/ln/2020/400/eng/pdf>

2.19 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 “[a]lthough 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.

2.20 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 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

2.21 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

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

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.

- 2.22 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

- 2.23 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

- 2.24 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).

2.25 Given that, when it comes to the trappers, the research programme is limited to controlling birds rather than ringing and controlling the birds, 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

2.26 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.

2.27 The research programme addresses some important issues raised by the Court, the Advocate-General and the Commission in the past. The clap-net system as a selective method is not unreasonable, quite to the contrary, if the reasoning of the Advocate-General and the Commission is to be followed, then the possibility to derogate from Article 8 of the Birds Directive would become merely theoretical.

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 Regulation (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 manner in which 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 Research Derogation to determine Malta's Reference Population of Seven Finch Species) Regulations, 2020¹⁴, 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 specifically aim to gather sufficient scientific information in order for Malta to introduce a derogatory regime in terms of Article

¹⁴ S.L. 549.137, available at: <https://legislation.mt/eli/sl/549.137/eng/pdf>

9(1)(c) of the Birds Directive that complies with the "small numbers"-criterion as interpreted by the Court of Justice in its judgment reference C-557/15, *without prejudice* to full implementation of all concerns raised by the Court therein. In other words, the research programme, once its objectives have been reached, is not meant to alienate from the need to put in place all the necessary measures referred to by the Court if an Article 9(1)(c) derogation is subsequently applied.

- S.L. 549.137 empowers 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 2020, this was issued via LN 400/2020¹⁵. 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.

¹⁵ LN 400/2020, available at: <https://legislation.mt/eli/ln/2020/400/eng/pdf>

- 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;
 - 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 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 as a means 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 harsh 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 allowing a Research Period to determine Malta's Reference Population of Seven Finch Species) Regulations, 2020 (Legal Notice 400 of 2020¹⁶) 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 2020 to 20 December 2020, both dates included.

3. DISCUSSION WITHIN MALTA ORNIS COMMITTEE LEADING UP TO APPLICATION OF A RESEARCH DEROGATION IN 2020

3.1 The Malta Ornis Committee discussed the finch research programme during its meeting held on 26 August 2020¹⁷. During the meeting, the Committee discussed the legal and technical aspects related to the enactment of the 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. The draft framework regulations and draft notice of derogation were circulated in advance of the meeting and a summary of the legal advice was read *ad verbatim* during the meeting. Following its deliberations, the Committee recommended the application of an Article 9(1)(b) derogation in 2020.

¹⁶ LN 400 of 2020, available at <https://legislation.mt/eli/ln/2020/400/eng/pdf>

¹⁷ Meeting of the Malta Ornis Committee held on 26 August 2020. Minutes available at: <https://mgoz.gov.mt/en/Pages/WBRU/Ornis-Committee.aspx>

4. ISSUANCE OF AUTUMN 2020 FINCHES RESEARCH LICENCES

- 4.1 Applications for a special finch research licence were received during a 6-day period between 31 August and 5 September 2020, 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 2020 (5-year general licence card) were eligible to apply. Only those who subsequently passed a mandatory written examination 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 In order to apply, eligible persons were requested to submit a completed and signed application form, produce a valid general licence card for 2020 (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 2020.
- 4.5 A total of 3,145 individuals submitted applications for special finch research licence (2,238 in Malta and 907 in Gozo). Of these, 1,062 persons (833 in Malta and 229 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 licenced bird ringers.

- 4.6 Applications were screened against database of criminal records and all applicants were found to be eligible to submit their application.
- 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. Exams were held between the 22nd and 24th September. Re-sits, for those that failed the first exam or failed to attend, were held between the 8th and 10th October. 2,656 applicants passed the first round of exams. 442 applicants passed from the re-sit. 47 applicants failed the resit, did not attend or notified WBRU that they would like to withdraw their application – these 47 individuals were not issued a special licence.
- 4.8 The amount of finches research special licences issued by 20 October stood at 3,098, of which 2,202 licences were issued to applicants residing in Malta and 896 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 2020 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 derogation¹⁸. Coordinates indicating the exact location of the clap-nets eligible for the 2020 research programme were provided to the Malta Police Force via portable PC tablets and published online.

¹⁸ 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>.

4.10 Licensees were only allowed to participate in the research programme from a single clap-net pair, activated from a single hide (the research station). The total number of clap-net pairs for the 2020 finches research derogation stood at 2,420, registered on 3,098 licensees (Table 1). A total of 1,622 registered clap-net pairs were located in Malta whereas 798 clap-net pairs were located in Gozo. Out of these two totals, 1,188 clap-net pairs in Malta and 688 clap-net pairs in Gozo were exclusively used for the finches research programme. The other registered clap-net pairs (434 and 110 respectively) were used for both the finches and Golden Plover and Song Thrush derogations.

TABLE 1 - REGISTERED FINCH RESEARCH STATIONS IN 2020

	<u>Clap-net pairs*</u>	<u>Licensees*</u>
Malta	1,622	2,202
Gozo	798	896
Total	2,420	3,098
* Data refers to licensees in possession of the finches special licence and licensees in possession of both the finches and Golden Plover/Song-Thrush special licences.		

Source: Wild Birds Regulation Unit, 2020

5. RING RECOVERIES

5.1 Licensees were 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 2020 research period, ten licensees reported ten ring recoveries. The Wild Birds Regulation Unit forwarded the data to the National Ringing Scheme for cross-verification with the EURING database. Three rings (Siskin, Estonia; Siskin, Switzerland and a Linnet, Malta) did not match the EURING database. Table 2 lists the ring recoveries confirmed by EURING.

TABLE 2 – SCIENTIFIC RINGS RECOVERED IN 2020

Date	Time	Area	Species	Ring Number	Country	Ringed
28/10/2020	10:20	Wardija	Linnet	P291333 BUDAPEST	Hungary	June 2020
03/11/2020	11:00	Dingli	Linnet	P210546 BUDAPEST	Hungary	August 2020
05/11/2020	13:30	Kerċem	Linnet	P210483 BUDAPEST	Hungary	July 2020
06/11/2020	09:30	Għarb	Linnet	K135461 BUDAPEST	Hungary	January 2011
14/11/2020	15:45	Baħrija	Siskin	XV05488 MOSKVA	Russia	September 2017
21/11/2020	10:05	Marsaxlokk	Serin	INFS OZZANO BO ITALY 3J3159	Italy	March 2020
26/11/2020	08:30	Mizieb	Chaffinch	BIRDLIFE MALTA VALLETTA 351826	Malta	October 2020

5.3 Seven rings recovered by licensees through this research were confirmed by EURING: six specimens were ringed abroad (including one from a non-EU Country) and one ringed in Malta. The latter was fitted with a ring by BirdLife Malta prior to its release following seizure by the Maltese authorities. 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: 52 Linnet,

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

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 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.

5.4 Considering that the Court of Justice of the European Union in judgment C-557/15 declared that 52 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 52 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 six

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

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.

6. ACTIVITY DATA (RESEARCH EFFORT)

6.1 Licensees were provided with a calendar survey sheet listing the dates of the research period. Each licensee was asked to submit a completed survey sheet detailing the days during which they took part in the study. Survey sheets were accepted up to 3 weeks from termination of the research period.

6.2 By this deadline, 2,872 survey sheets were returned, which constitutes 92.7% of the total 3,098 licences issued, corresponding to a margin of error of 0.49 at a 95% confidence level. The analysis shows that in 2020, 7.3% (± 0.49) of valid licences were not utilised, meaning that 212 to 243 licensed individuals did not take part in the research despite that they had applied for a special licence. Conversely, 92.65% (± 0.49) licences were utilised at any one time, meaning that 2,855 to 2,886 individuals participated on one or more occasion during the research period. Figure 1 shows the licence activity (research effort) during the 2020 research period.

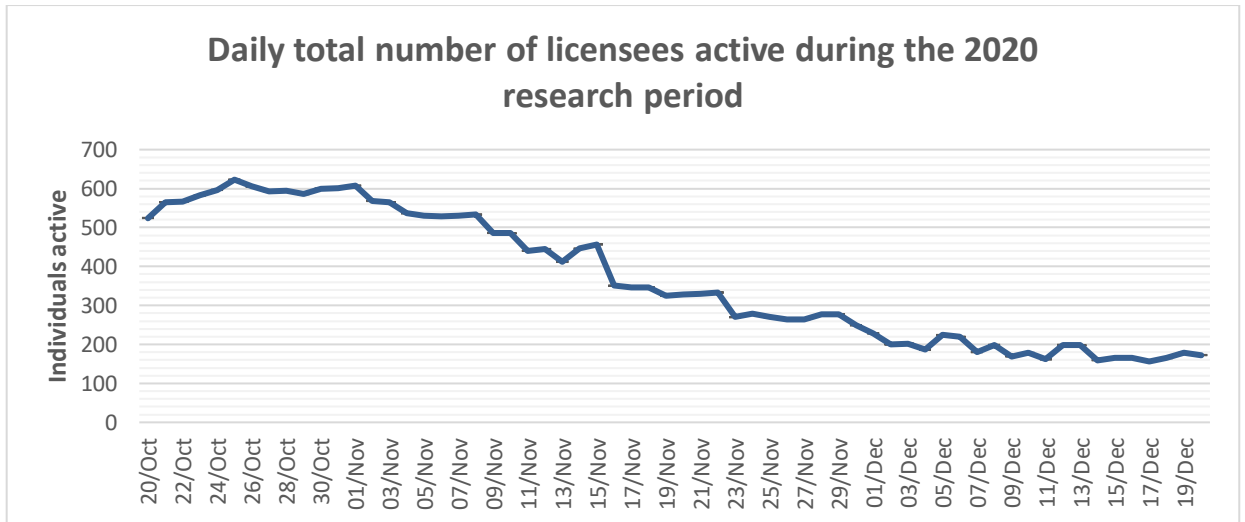


FIGURE 1 - DAILY TOTAL NUMBER OF LICENSEES ACTIVE DURING THE 2020 RESEARCH PERIOD. SOURCE: WILD BIRDS REGULATION UNIT

7. FINCHES MIGRATION STUDY

7.1 An independent scientific study was carried out between 15 October 2020 and 15 January 2021, inclusive of both dates, in order to obtain an estimate of migratory patterns of the seven finch species during the 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 2020 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;

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 2020 until 15 January 2021. 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.

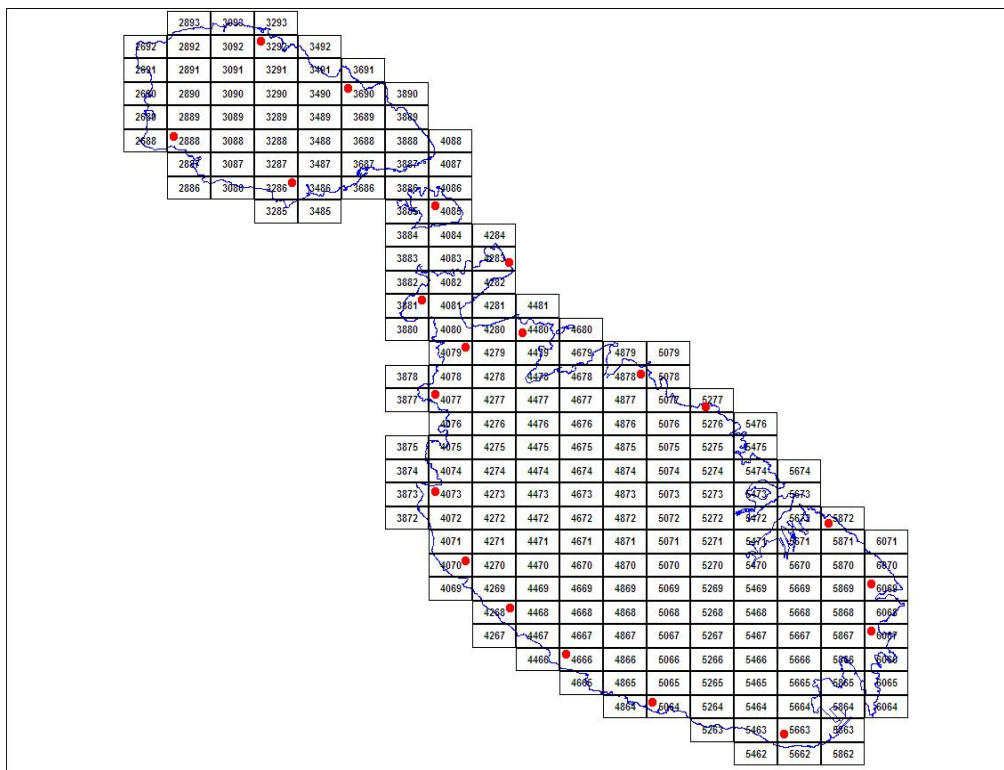
7.4 During the survey, two individuals - a specially trained field assistant capable of identifying finch species and an observer who was responsible for data recording in the field - were stationed at each of the total of 21 sites (count stations). During the survey, counts of individuals of the seven 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. When weather conditions precluded surveys at the Comino site due to unavailability of sea transport services, these were

undertaken in an alternative site close to Comino. 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 2 below.

FIGURE 2 - LOCATION OF MONITORING SITES



Source: Ecoserv, 2021

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 2020 to 15 January 2021). 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 2020 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 2020 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 2020 survey.
- 7.12 Since the coastal length surveyed at each site during the 2020 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 2020 study varied between 0 and a maximum of 15, while the mean daily counts ranged between 0 and 3.80 (Table 3). During the 2020 autumn migration, relatively high counts for this species were recorded on some days between 21st October and 13th November 2020. 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, four individuals were recorded from the sites at grid location 5064, while at the higher end, 57 Linnet individuals were recorded from the site at grid location 4085 (which was surveyed daily) and 25 individuals were recorded from the site at grid location 3292.
- 7.14 An estimate of total influx of Linnet over the Maltese Islands is given below. Based on the mean daily counts, extrapolation translates to an estimated daily influx ranging between 0 and 2,079 individuals, with a total influx over the survey period (15 October 2020 – 15 January 2021) of 28,546 individuals, i.e. 307 birds per day.

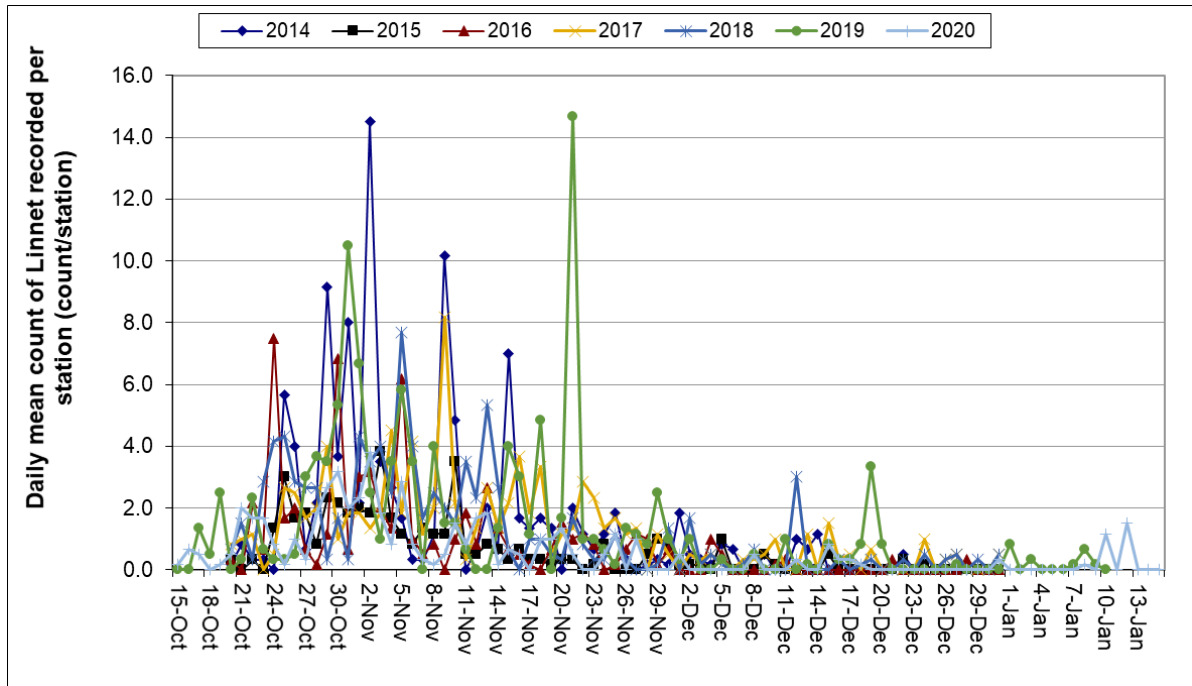
²¹ Note, however, that this estimate includes the perimeter of minor islets and rocks.

TABLE 3 - VALUES OF MEAN (\pm SD) DAILY COUNT AND DAILY TOTAL COUNT RECORDED FROM THE SIX STUDY SITES, TOGETHER WITH TOTAL INFLUX OF MIGRATORY LINNET (ECOSERV, 2021)

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-20	0.17	\pm 0.41	1	90
16-Oct-20	0.67	\pm 1.03	4	362
17-Oct-20	0.50	\pm 0.84	3	271
18-Oct-20	0.00	\pm 0.00	0	0
19-Oct-20	0.17	\pm 0.41	1	90
20-Oct-20	0.50	\pm 0.84	3	271
21-Oct-20	2.00	\pm 2.45	12	1085
22-Oct-20	1.67	\pm 2.34	10	904
23-Oct-20	1.67	\pm 1.86	10	904
24-Oct-20	0.83	\pm 1.60	5	452
25-Oct-20	0.17	\pm 0.41	1	90
26-Oct-20	1.00	\pm 2.45	6	542
27-Oct-20	0.33	\pm 0.82	2	181
28-Oct-20	1.83	\pm 2.79	11	994
29-Oct-20	2.67	\pm 2.94	16	1447
30-Oct-20	3.17	\pm 5.38	19	1718
31-Oct-20	2.00	\pm 3.10	12	1085
01-Nov-20	2.33	\pm 2.42	14	1266
02-Nov-20	3.83	\pm 5.67	23	2079
03-Nov-20	1.83	\pm 2.23	11	994
04-Nov-20	0.83	\pm 1.33	5	452
05-Nov-20	2.83	\pm 2.23	17	1537
06-Nov-20	0.83	\pm 1.17	5	452
07-Nov-20	0.33	\pm 0.82	2	181
08-Nov-20	0.17	\pm 0.41	1	90
09-Nov-20	0.50	\pm 1.22	3	271
10-Nov-20	1.50	\pm 1.38	9	814
11-Nov-20	0.83	\pm 2.04	5	452
12-Nov-20	1.67	\pm 1.21	10	904
13-Nov-20	1.83	\pm 2.99	11	994
14-Nov-20	0.17	\pm 0.41	1	90
15-Nov-20	0.67	\pm 1.63	4	362
16-Nov-20	0.50	\pm 0.84	3	271
17-Nov-20	0.00	\pm 0.00	0	0
18-Nov-20	1.00	\pm 1.26	6	542
19-Nov-20	1.00	\pm 1.67	6	542
20-Nov-20	1.33	\pm 2.42	8	723
21-Nov-20	0.50	\pm 1.22	3	271
22-Nov-20	0.00	\pm 0.00	0	0
23-Nov-20	0.00	\pm 0.00	0	0
24-Nov-20	0.50	\pm 1.22	3	271
25-Nov-20	1.17	\pm 1.33	7	633
26-Nov-20	0.00	\pm 0.00	0	0
27-Nov-20	1.00	\pm 2.00	6	542
28-Nov-20	0.00	\pm 0.00	0	0
29-Nov-20	0.00	\pm 0.00	0	0
30-Nov-20	0.00	\pm 0.00	0	0
01-Dec-20	0.50	\pm 1.22	3	271
02-Dec-20	0.00	\pm 0.00	0	0

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
03-Dec-20	0.00	± 0.00	0	0
04-Dec-20	0.00	± 0.00	0	0
05-Dec-20	0.00	± 0.00	0	0
06-Dec-20	0.00	± 0.00	0	0
07-Dec-20	0.00	± 0.00	0	0
08-Dec-20	0.50	± 0.84	3	271
09-Dec-20	0.00	± 0.00	0	0
10-Dec-20	0.00	± 0.00	0	0
11-Dec-20	0.00	± 0.00	0	0
12-Dec-20	0.33	± 0.82	2	181
13-Dec-20	0.00	± 0.00	0	0
14-Dec-20	0.00	± 0.00	0	0
15-Dec-20	0.83	± 1.17	5	452
16-Dec-20	0.33	± 0.52	2	181
17-Dec-20	0.33	± 0.82	2	181
18-Dec-20	0.17	± 0.41	1	90
19-Dec-20	0.00	± 0.00	0	0
20-Dec-20	0.00	± 0.00	0	0
21-Dec-20	0.00	± 0.00	0	0
22-Dec-20	0.00	± 0.00	0	0
23-Dec-20	0.00	± 0.00	0	0
24-Dec-20	0.00	± 0.00	0	0
25-Dec-20	0.00	± 0.00	0	0
26-Dec-20	0.00	± 0.00	0	0
27-Dec-20	0.00	± 0.00	0	0
28-Dec-20	0.00	± 0.00	0	0
29-Dec-20	0.00	± 0.00	0	0
30-Dec-20	0.00	± 0.00	0	0
31-Dec-20	0.33	± 0.82	2	181
01-Jan-21	0.00	± 0.00	0	0
02-Jan-21	0.00	± 0.00	0	0
03-Jan-21	0.00	± 0.00	0	0
04-Jan-21	0.00	± 0.00	0	0
05-Jan-21	0.00	± 0.00	0	0
06-Jan-21	0.00	± 0.00	0	0
07-Jan-21	0.00	± 0.00	0	0
08-Jan-21	0.17	± 0.41	1	90
09-Jan-21	0.00	± 0.00	0	0
10-Jan-21	1.17	± 2.86	7	633
11-Jan-21	0.00	± 0.00	0	0
12-Jan-21	1.50	± 3.21	9	814
13-Jan-21	0.00	± 0.00	0	0
14-Jan-21	0.00	± 0.00	0	0
15-Jan-21	0.00	± 0.00	0	0
Total Count / Estimated Influx (Linnet)			312	28,546

FIGURE 3 - DAILY MEAN COUNTS OF COMMON LINNET PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER 2020 AND 15 JANUARY 2021 DURING THE 2020 SURVEY, BETWEEN 15 OCTOBER 2019 AND 10 JANUARY 2020 DURING THE 2019 SURVEY, AND BETWEEN 20 OCTOBER AND 31 DECEMBER



Source: Ecoserv, 2021

7.15 Raw daily counts for Common Chaffinch recorded from the 21 sites during the 2020 study varied between 0 and a maximum of 7, while the mean daily counts ranged between 0 and 1.67 (Table 4). Slightly higher counts for this species were recorded on some days between 18th October and 27th 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), did not vary appreciably between the different sites: at the lower end, no individuals were recorded throughout the survey period from the sites at grid locations 5872 and 3690, while at the higher end 17 Chaffinch individuals were recorded from the site at grid location 5064.

7.16 An estimate of total influx of Chaffinch over the Maltese Islands is given in Table 4 below. Based on the mean daily counts, extrapolation translates to an estimated daily influx ranging between 0 and 904 individuals, with a total influx

over the survey period (15 October 2020 – 15 January 2021) of 10,844 individuals, that is, 117 birds per day.

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 CHAFFINCH

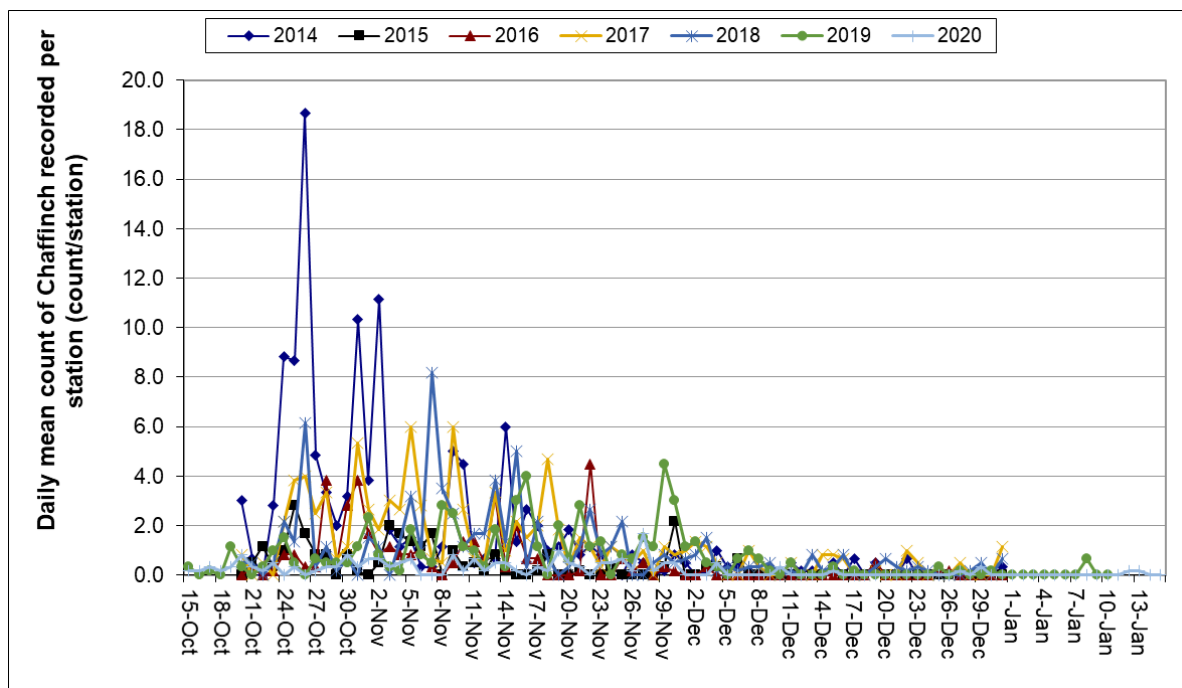
Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-20	0.17	\pm 0.41	1	90
16-Oct-20	0.17	\pm 0.41	1	90
17-Oct-20	0.33	\pm 0.82	2	181
18-Oct-20	0.17	\pm 0.41	1	90
19-Oct-20	0.33	\pm 0.82	2	181
20-Oct-20	0.83	\pm 2.04	5	452
21-Oct-20	0.33	\pm 0.82	2	181
22-Oct-20	0.17	\pm 0.41	1	90
23-Oct-20	0.50	\pm 0.84	3	271
24-Oct-20	0.00	\pm 0.00	0	0
25-Oct-20	0.33	\pm 0.52	2	181
26-Oct-20	0.00	\pm 0.00	0	0
27-Oct-20	0.17	\pm 0.41	1	90
28-Oct-20	0.33	\pm 0.52	2	181
29-Oct-20	0.33	\pm 0.52	2	181
30-Oct-20	0.83	\pm 1.33	5	452
31-Oct-20	0.33	\pm 0.82	2	181
01-Nov-20	0.67	\pm 1.21	4	362
02-Nov-20	0.67	\pm 1.63	4	362
03-Nov-20	0.33	\pm 0.52	2	181
04-Nov-20	0.50	\pm 0.84	3	271
05-Nov-20	0.67	\pm 1.63	4	362
06-Nov-20	0.00	\pm 0.00	0	0
07-Nov-20	0.00	\pm 0.00	0	0
08-Nov-20	0.00	\pm 0.00	0	0
09-Nov-20	0.83	\pm 1.33	5	452
10-Nov-20	0.17	\pm 0.41	1	90
11-Nov-20	0.67	\pm 1.21	4	362
12-Nov-20	0.17	\pm 0.41	1	90
13-Nov-20	0.50	\pm 1.22	3	271
14-Nov-20	0.50	\pm 0.84	3	271
15-Nov-20	0.17	\pm 0.41	1	90
16-Nov-20	0.00	\pm 0.00	0	0
17-Nov-20	0.33	\pm 0.52	2	181
18-Nov-20	0.17	\pm 0.41	1	90
19-Nov-20	1.00	\pm 2.00	6	542
20-Nov-20	0.50	\pm 0.55	3	271
21-Nov-20	0.33	\pm 0.82	2	181
22-Nov-20	0.00	\pm 0.00	0	0
23-Nov-20	0.50	\pm 1.22	3	271
24-Nov-20	0.50	\pm 0.84	3	271
25-Nov-20	0.67	\pm 1.21	4	362
26-Nov-20	0.17	\pm 0.41	1	90

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
27-Nov-20	1.67	± 2.73	10	904
28-Nov-20	0.17	± 0.41	1	90
29-Nov-20	0.50	± 0.84	3	271
30-Nov-20	0.50	± 0.84	3	271
01-Dec-20	0.00	± 0.00	0	0
02-Dec-20	0.00	± 0.00	0	0
03-Dec-20	0.00	± 0.00	0	0
04-Dec-20	0.50	± 0.84	3	271
05-Dec-20	0.00	± 0.00	0	0
06-Dec-20	0.00	± 0.00	0	0
07-Dec-20	0.00	± 0.00	0	0
08-Dec-20	0.00	± 0.00	0	0
09-Dec-20	0.00	± 0.00	0	0
10-Dec-20	0.33	± 0.82	2	181
11-Dec-20	0.00	± 0.00	0	0
12-Dec-20	0.00	± 0.00	0	0
13-Dec-20	0.00	± 0.00	0	0
14-Dec-20	0.00	± 0.00	0	0
15-Dec-20	0.17	± 0.41	1	90
16-Dec-20	0.00	± 0.00	0	0
17-Dec-20	0.00	± 0.00	0	0
18-Dec-20	0.00	± 0.00	0	0
19-Dec-20	0.00	± 0.00	0	0
20-Dec-20	0.00	± 0.00	0	0
21-Dec-20	0.00	± 0.00	0	0
22-Dec-20	0.00	± 0.00	0	0
23-Dec-20	0.00	± 0.00	0	0
24-Dec-20	0.00	± 0.00	0	0
25-Dec-20	0.00	± 0.00	0	0
26-Dec-20	0.00	± 0.00	0	0
27-Dec-20	0.17	± 0.41	1	90
28-Dec-20	0.00	± 0.00	0	0
29-Dec-20	0.33	± 0.82	2	181
30-Dec-20	0.00	± 0.00	0	0
31-Dec-20	0.00	± 0.00	0	0
01-Jan-21	0.00	± 0.00	0	0
02-Jan-21	0.00	± 0.00	0	0
03-Jan-21	0.00	± 0.00	0	0
04-Jan-21	0.00	± 0.00	0	0
05-Jan-21	0.00	± 0.00	0	0
06-Jan-21	0.00	± 0.00	0	0
07-Jan-21	0.00	± 0.00	0	0
08-Jan-21	0.00	± 0.00	0	0
09-Jan-21	0.00	± 0.00	0	0
10-Jan-21	0.00	± 0.00	0	0
11-Jan-21	0.00	± 0.00	0	0
12-Jan-21	0.17	± 0.41	1	90
13-Jan-21	0.17	± 0.41	1	90
14-Jan-21	0.00	± 0.00	0	0
15-Jan-21	0.00	± 0.00	0	0

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
Total Count / Estimated Influx (Chaffinch)			120	10,844

Source: Ecoserv, 2021

FIGURE 4– DAILY MEAN COUNTS OF COMMON CHAFFINCH PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER 2020 AND 15 JANUARY 2021 DURING THE 2020 SURVEY, 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.



Source: Ecoserv, 2021

7.17 Raw daily counts for European Greenfinch recorded from the 21 sites during the 2020 study varied between 0 and a maximum of 25, while the mean daily counts ranged between 0 and 4.17. Low or zero counts for this species were recorded throughout most of the survey period, with a single peak count on 21st October. 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), varied slightly between the different sites: at the higher end, 26 Greenfinch individuals were recorded throughout the survey period from the site at grid location 4077, while at the lower end between zero and three Greenfinch individuals were recorded from all other survey sites.

7.18 Values of mean daily counts and total counts of Greenfinch recorded during the period 15 October 2020 to 15 January 2021 from the 2020 survey are summarised in Table 5. Values of standard deviation associated with the mean daily counts are also provided. Counts of Greenfinch recorded from the 2020 survey, along with ones made during the autumn 2014, 2015, 2016, 2017, 2018 and 2019 surveys, are shown graphically in Figure 5. Overall, count values for Greenfinch from the present (autumn/winter 2020) survey are similar to those recorded during the autumn 2015, 2016 and 2018 surveys, and lower than those recorded from the autumn 2014, 2017 and 2019 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 and 2019 surveys, but only sporadic low counts during the 2015, 2016, 2018 and 2020 surveys.

7.19 The estimated total influx of Greenfinch over the Maltese Islands is given in Table 5. Based on the mean daily counts, extrapolation translates to an estimated daily influx ranging between 0 and 2,260 individuals, with a total influx over the survey period (15 October 2020 – 15 January 2021) of 3,163 individuals; that is some 24 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 GREENFINCH

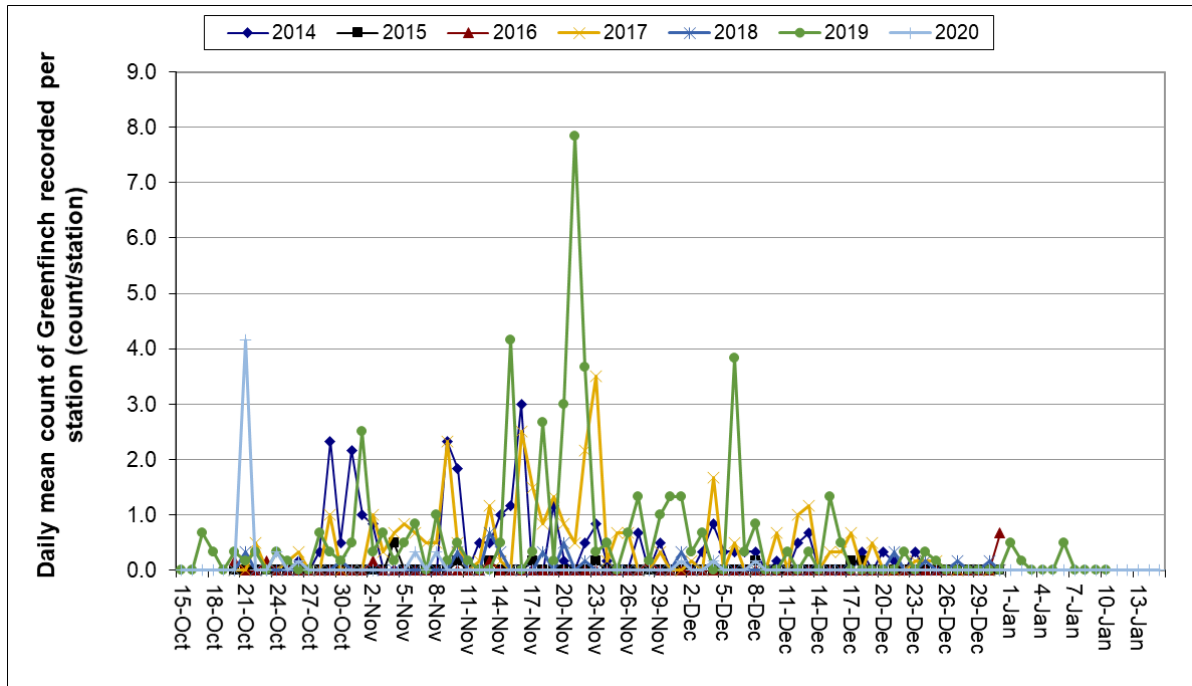
Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-20	0.00	\pm 0.00	0	0
16-Oct-20	0.00	\pm 0.00	0	0
17-Oct-20	0.00	\pm 0.00	0	0
18-Oct-20	0.00	\pm 0.00	0	0
19-Oct-20	0.00	\pm 0.00	0	0
20-Oct-20	0.00	\pm 0.00	0	0
21-Oct-20	4.17	\pm 10.21	25	2260
22-Oct-20	0.00	\pm 0.00	0	0
23-Oct-20	0.00	\pm 0.00	0	0
24-Oct-20	0.33	\pm 0.82	2	181
25-Oct-20	0.00	\pm 0.00	0	0

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
26-Oct-20	0.17	± 0.41	1	90
27-Oct-20	0.00	± 0.00	0	0
28-Oct-20	0.00	± 0.00	0	0
29-Oct-20	0.00	± 0.00	0	0
30-Oct-20	0.00	± 0.00	0	0
31-Oct-20	0.00	± 0.00	0	0
01-Nov-20	0.00	± 0.00	0	0
02-Nov-20	0.00	± 0.00	0	0
03-Nov-20	0.00	± 0.00	0	0
04-Nov-20	0.00	± 0.00	0	0
05-Nov-20	0.00	± 0.00	0	0
06-Nov-20	0.33	± 0.82	2	181
07-Nov-20	0.00	± 0.00	0	0
08-Nov-20	0.33	± 0.82	2	181
09-Nov-20	0.00	± 0.00	0	0
10-Nov-20	0.00	± 0.00	0	0
11-Nov-20	0.00	± 0.00	0	0
12-Nov-20	0.00	± 0.00	0	0
13-Nov-20	0.00	± 0.00	0	0
14-Nov-20	0.00	± 0.00	0	0
15-Nov-20	0.00	± 0.00	0	0
16-Nov-20	0.00	± 0.00	0	0
17-Nov-20	0.00	± 0.00	0	0
18-Nov-20	0.00	± 0.00	0	0
19-Nov-20	0.00	± 0.00	0	0
20-Nov-20	0.00	± 0.00	0	0
21-Nov-20	0.00	± 0.00	0	0
22-Nov-20	0.00	± 0.00	0	0
23-Nov-20	0.00	± 0.00	0	0
24-Nov-20	0.00	± 0.00	0	0
25-Nov-20	0.00	± 0.00	0	0
26-Nov-20	0.00	± 0.00	0	0
27-Nov-20	0.00	± 0.00	0	0
28-Nov-20	0.00	± 0.00	0	0
29-Nov-20	0.00	± 0.00	0	0
30-Nov-20	0.00	± 0.00	0	0
01-Dec-20	0.17	± 0.41	1	90
02-Dec-20	0.00	± 0.00	0	0
03-Dec-20	0.00	± 0.00	0	0
04-Dec-20	0.17	± 0.41	1	90
05-Dec-20	0.00	± 0.00	0	0
06-Dec-20	0.00	± 0.00	0	0
07-Dec-20	0.00	± 0.00	0	0
08-Dec-20	0.17	± 0.41	1	90
09-Dec-20	0.00	± 0.00	0	0
10-Dec-20	0.00	± 0.00	0	0
11-Dec-20	0.00	± 0.00	0	0
12-Dec-20	0.00	± 0.00	0	0
13-Dec-20	0.00	± 0.00	0	0
14-Dec-20	0.00	± 0.00	0	0
15-Dec-20	0.00	± 0.00	0	0

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
16-Dec-20	0.00	± 0.00	0	0
17-Dec-20	0.00	± 0.00	0	0
18-Dec-20	0.00	± 0.00	0	0
19-Dec-20	0.00	± 0.00	0	0
20-Dec-20	0.00	± 0.00	0	0
21-Dec-20	0.00	± 0.00	0	0
22-Dec-20	0.00	± 0.00	0	0
23-Dec-20	0.00	± 0.00	0	0
24-Dec-20	0.00	± 0.00	0	0
25-Dec-20	0.00	± 0.00	0	0
26-Dec-20	0.00	± 0.00	0	0
27-Dec-20	0.00	± 0.00	0	0
28-Dec-20	0.00	± 0.00	0	0
29-Dec-20	0.00	± 0.00	0	0
30-Dec-20	0.00	± 0.00	0	0
31-Dec-20	0.00	± 0.00	0	0
01-Jan-21	0.00	± 0.00	0	0
02-Jan-21	0.00	± 0.00	0	0
03-Jan-21	0.00	± 0.00	0	0
04-Jan-21	0.00	± 0.00	0	0
05-Jan-21	0.00	± 0.00	0	0
06-Jan-21	0.00	± 0.00	0	0
07-Jan-21	0.00	± 0.00	0	0
08-Jan-21	0.00	± 0.00	0	0
09-Jan-21	0.00	± 0.00	0	0
10-Jan-21	0.00	± 0.00	0	0
11-Jan-21	0.00	± 0.00	0	0
12-Jan-21	0.00	± 0.00	0	0
13-Jan-21	0.00	± 0.00	0	0
14-Jan-21	0.00	± 0.00	0	0
15-Jan-21	0.00	± 0.00	0	0
Total Count / Estimated Influx (Greenfinch)			35	3,163

Source: Ecoserv, 2021

FIGURE 5 – DAILY MEAN COUNTS OF EUROPEAN GREENFINCH PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER 2020 AND 15 JANUARY 2021 DURING THE 2020 SURVEY, 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.



Source: Ecoserv, 2021

7.20 Raw daily counts for Eurasian Siskin recorded from the 21 sites during the 2020 study varied between 0 and a maximum of 6, while the mean daily counts ranged between 0 and 1.00 (Table 6). Counts for this species were recorded between 24th October and 8th December, with zero counts thereafter. 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), did not vary appreciably between the different sites: at the lower end, no Siskin individuals were recorded from ten sites, while at the higher end 16 Siskin individuals were recorded from the site at grid location 4085, which was surveyed daily, and 7 individuals were recorded from the site at grid location 4480.

7.21 The estimated total influx of Siskin over the Maltese Islands is given in Table 12. Based on the mean daily counts (Figure 6), extrapolation translates to an

estimated daily influx ranging between 0 and 542 individuals, with a total influx over the survey period (15 October 2020 – 15 January 2021) of 4,338 individuals; that is some 6 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 SISKIN

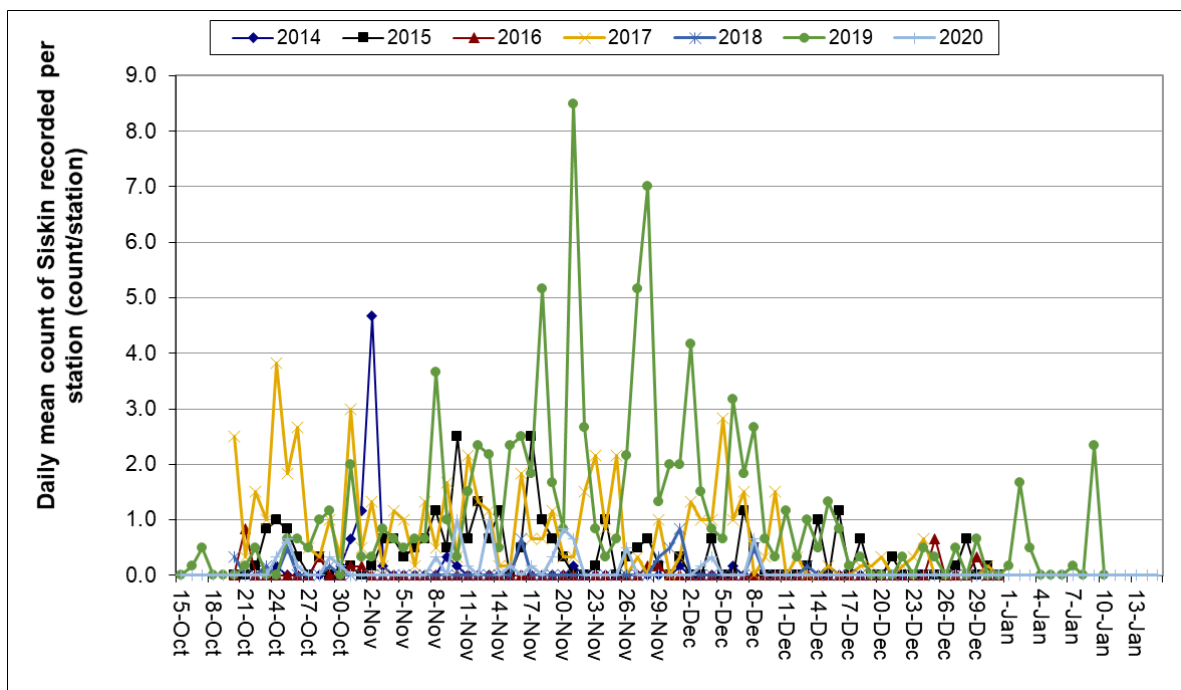
Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-20	0.00	\pm 0.00	0	0
16-Oct-20	0.00	\pm 0.00	0	0
17-Oct-20	0.00	\pm 0.00	0	0
18-Oct-20	0.00	\pm 0.00	0	0
19-Oct-20	0.00	\pm 0.00	0	0
20-Oct-20	0.00	\pm 0.00	0	0
21-Oct-20	0.00	\pm 0.00	0	0
22-Oct-20	0.00	\pm 0.00	0	0
23-Oct-20	0.00	\pm 0.00	0	0
24-Oct-20	0.33	\pm 0.82	2	181
25-Oct-20	0.67	\pm 1.03	4	362
26-Oct-20	0.17	\pm 0.41	1	90
27-Oct-20	0.00	\pm 0.00	0	0
28-Oct-20	0.00	\pm 0.00	0	0
29-Oct-20	0.33	\pm 0.82	2	181
30-Oct-20	0.17	\pm 0.41	1	90
31-Oct-20	0.00	\pm 0.00	0	0
01-Nov-20	0.00	\pm 0.00	0	0
02-Nov-20	0.00	\pm 0.00	0	0
03-Nov-20	0.00	\pm 0.00	0	0
04-Nov-20	0.00	\pm 0.00	0	0
05-Nov-20	0.00	\pm 0.00	0	0
06-Nov-20	0.00	\pm 0.00	0	0
07-Nov-20	0.00	\pm 0.00	0	0
08-Nov-20	0.33	\pm 0.52	2	181
09-Nov-20	0.00	\pm 0.00	0	0
10-Nov-20	1.00	\pm 2.45	6	542
11-Nov-20	0.17	\pm 0.41	1	90
12-Nov-20	0.00	\pm 0.00	0	0
13-Nov-20	1.00	\pm 2.00	6	542
14-Nov-20	0.00	\pm 0.00	0	0
15-Nov-20	0.17	\pm 0.41	1	90
16-Nov-20	0.00	\pm 0.00	0	0
17-Nov-20	0.17	\pm 0.41	1	90
18-Nov-20	0.00	\pm 0.00	0	0
19-Nov-20	0.33	\pm 0.82	2	181
20-Nov-20	0.83	\pm 1.60	5	452
21-Nov-20	0.67	\pm 1.63	4	362
22-Nov-20	0.00	\pm 0.00	0	0
23-Nov-20	0.00	\pm 0.00	0	0
24-Nov-20	0.00	\pm 0.00	0	0
25-Nov-20	0.00	\pm 0.00	0	0

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

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
Total Count / Estimated Influx (Siskin)			48	4,338

Source: Ecoserv, 2021

FIGURE 6 – DAILY MEAN COUNTS OF EURASIAN SISKIN PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER 2020 AND 15 JANUARY 2021 DURING THE 2020 SURVEY, 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.



Source: Ecoserv, 2021

7.22 Raw daily counts for European Goldfinch recorded from the 21 sites during the 2020 study varied between 0 and a maximum of 2, while the mean daily counts ranged between 0 and 0.33 (Table 7). Counts for this species were therefore very low overall: between one and two Goldfinch individuals were recorded in total from each of the sites at grid locations 4268, 4480 and 4878, while no individuals were recorded throughout the survey period from any of the other sites.

7.23 Based on the mean daily counts (Table 7), extrapolation translates to an estimated daily influx ranging between 0 and 181 individuals, with a total influx over the survey period (15 October 2020 – 15 January 2021) of 361 individuals;

i.e. some 2 birds per day. Counts were only recorded from three sites located in western and north-eastern Malta.

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 EUROPEAN GOLDFINCH

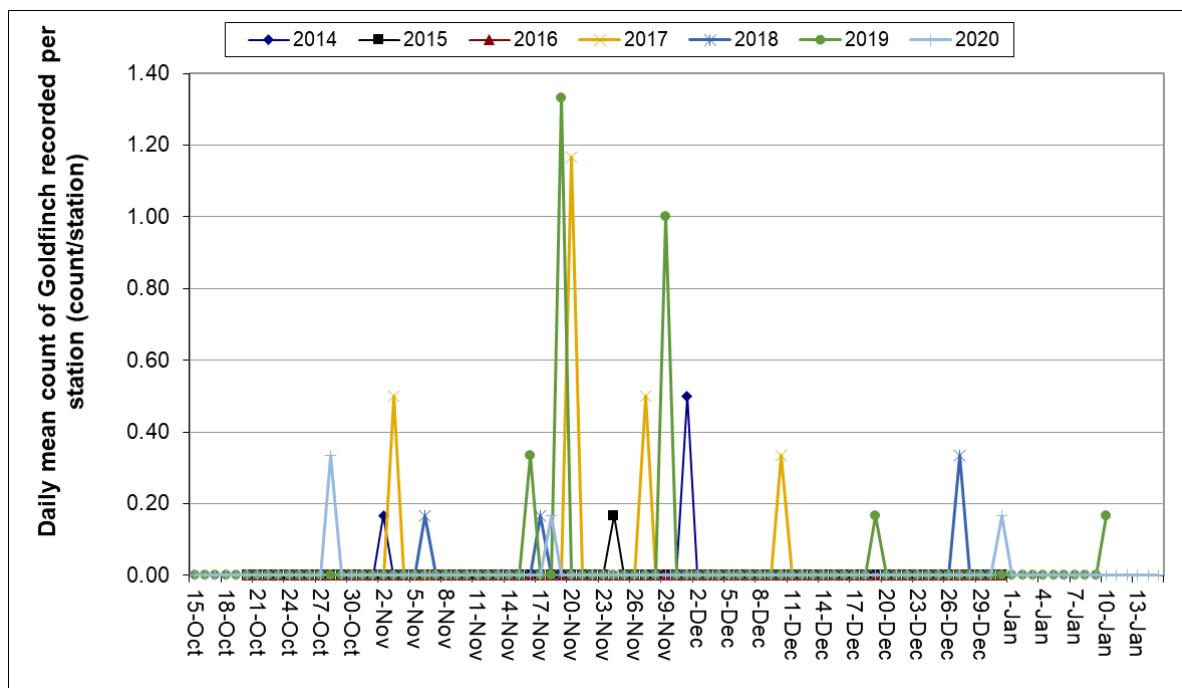
Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-20	0.00	\pm 0.00	0	0
16-Oct-20	0.00	\pm 0.00	0	0
17-Oct-20	0.00	\pm 0.00	0	0
18-Oct-20	0.00	\pm 0.00	0	0
19-Oct-20	0.00	\pm 0.00	0	0
20-Oct-20	0.00	\pm 0.00	0	0
21-Oct-20	0.00	\pm 0.00	0	0
22-Oct-20	0.00	\pm 0.00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

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

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
Total Count / Estimated Influx (Goldfinch)			4	361

Source: Ecoserv, 2021

FIGURE 7 - DAILY MEAN COUNTS OF EUROPEAN GOLDFINCH PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER 2020 AND 15 JANUARY 2021 DURING THE 2020 SURVEY, 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.



Source: Ecoserv, 2021

7.24 Raw daily counts for European Serin recorded from the 21 sites during the 2020 study varied between 0 and a maximum of 7, while the mean daily counts ranged between 0 and 1.50 (Table 8). This species was recorded on most days during November and December, apart from a weeklong period in November (14–22 November) that was characterised by zero counts. 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 the sites at grid locations 5064 and 5663, while at the higher end, 19 Serin individuals were recorded from the site at grid

location 4085, which was surveyed daily, and 12 individuals were recorded from the site at grid location 4079.

7.25 Overall, count values for Serin from the autumn/winter 2020 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 late December is noted between 2014 and 2020, 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 814 individuals, with a total influx over the survey period (15 October 2020 – 15 January 2021) of 10,216 individuals; i.e. some 9 birds per day.

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 SERIN

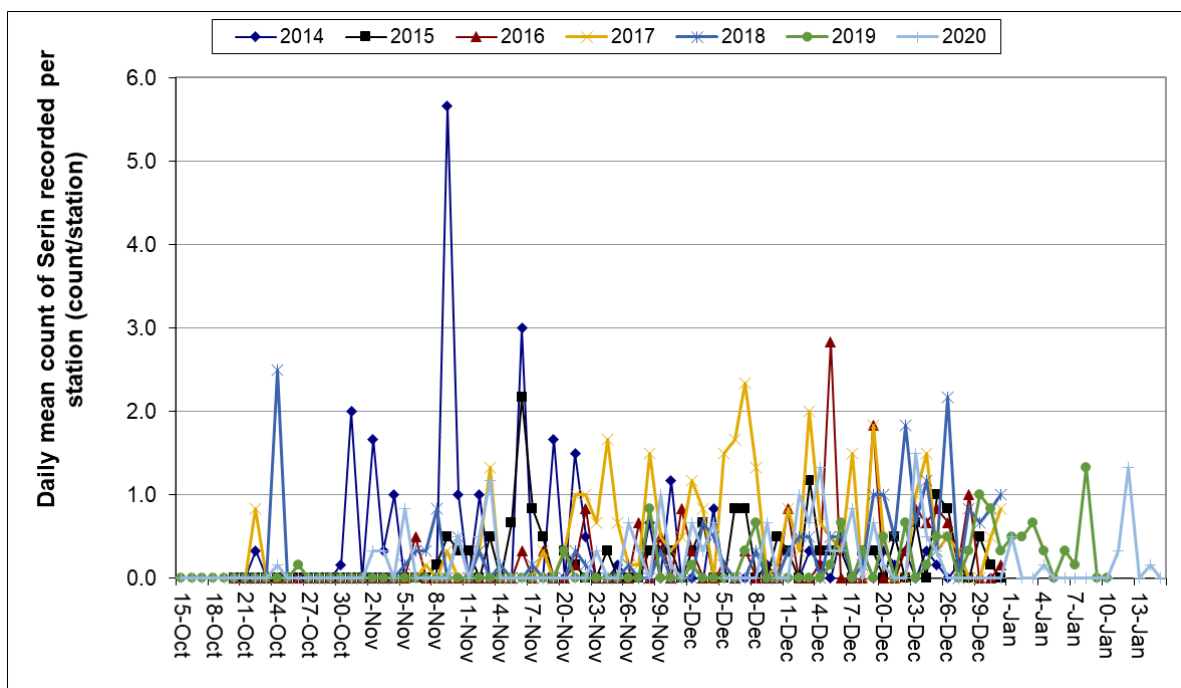
Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-20	0.00	\pm 0.00	0	0
16-Oct-20	0.00	\pm 0.00	0	0
17-Oct-20	0.00	\pm 0.00	0	0
18-Oct-20	0.00	\pm 0.00	0	0
19-Oct-20	0.00	\pm 0.00	0	0
20-Oct-20	0.00	\pm 0.00	0	0
21-Oct-20	0.00	\pm 0.00	0	0
22-Oct-20	0.00	\pm 0.00	0	0
23-Oct-20	0.00	\pm 0.00	0	0
24-Oct-20	0.17	\pm 0.41	1	90
25-Oct-20	0.00	\pm 0.00	0	0
26-Oct-20	0.00	\pm 0.00	0	0
27-Oct-20	0.00	\pm 0.00	0	0
28-Oct-20	0.00	\pm 0.00	0	0
29-Oct-20	0.00	\pm 0.00	0	0
30-Oct-20	0.00	\pm 0.00	0	0
31-Oct-20	0.00	\pm 0.00	0	0
01-Nov-20	0.00	\pm 0.00	0	0
02-Nov-20	0.33	\pm 0.82	2	181
03-Nov-20	0.33	\pm 0.82	2	181
04-Nov-20	0.00	\pm 0.00	0	0
05-Nov-20	0.83	\pm 1.33	5	452
06-Nov-20	0.00	\pm 0.00	0	0
07-Nov-20	0.00	\pm 0.00	0	0
08-Nov-20	0.00	\pm 0.00	0	0

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
09-Nov-20	0.00	± 0.00	0	0
10-Nov-20	0.50	± 1.22	3	271
11-Nov-20	0.00	± 0.00	0	0
12-Nov-20	0.50	± 1.22	3	271
13-Nov-20	1.17	± 2.86	7	633
14-Nov-20	0.00	± 0.00	0	0
15-Nov-20	0.00	± 0.00	0	0
16-Nov-20	0.00	± 0.00	0	0
17-Nov-20	0.00	± 0.00	0	0
18-Nov-20	0.00	± 0.00	0	0
19-Nov-20	0.00	± 0.00	0	0
20-Nov-20	0.00	± 0.00	0	0
21-Nov-20	0.00	± 0.00	0	0
22-Nov-20	0.00	± 0.00	0	0
23-Nov-20	0.33	± 0.82	2	181
24-Nov-20	0.00	± 0.00	0	0
25-Nov-20	0.00	± 0.00	0	0
26-Nov-20	0.67	± 1.03	4	362
27-Nov-20	0.33	± 0.82	2	181
28-Nov-20	0.00	± 0.00	0	0
29-Nov-20	1.00	± 1.67	6	542
30-Nov-20	0.17	± 0.41	1	90
01-Dec-20	0.00	± 0.00	0	0
02-Dec-20	0.67	± 1.63	4	362
03-Dec-20	0.33	± 0.82	2	181
04-Dec-20	0.67	± 1.03	4	362
05-Dec-20	0.00	± 0.00	0	0
06-Dec-20	0.00	± 0.00	0	0
07-Dec-20	0.00	± 0.00	0	0
08-Dec-20	0.00	± 0.00	0	0
09-Dec-20	0.67	± 1.63	4	362
10-Dec-20	0.00	± 0.00	0	0
11-Dec-20	0.00	± 0.00	0	0
12-Dec-20	1.00	± 1.55	6	542
13-Dec-20	0.67	± 1.63	4	362
14-Dec-20	1.33	± 1.51	8	723
15-Dec-20	0.33	± 0.82	2	181
16-Dec-20	0.33	± 0.82	2	181
17-Dec-20	0.83	± 0.98	5	452
18-Dec-20	0.00	± 0.00	0	0
19-Dec-20	0.67	± 1.03	4	362
20-Dec-20	0.17	± 0.41	1	90
21-Dec-20	0.00	± 0.00	0	0
22-Dec-20	0.00	± 0.00	0	0
23-Dec-20	1.50	± 2.35	9	814
24-Dec-20	0.50	± 0.84	3	271
25-Dec-20	0.33	± 0.52	2	181
26-Dec-20	0.00	± 0.00	0	0
27-Dec-20	0.00	± 0.00	0	0
28-Dec-20	0.00	± 0.00	0	0
29-Dec-20	0.00	± 0.00	0	0

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
30-Dec-20	0.00	± 0.00	0	0
31-Dec-20	0.00	± 0.00	0	0
01-Jan-21	0.50	± 1.22	3	271
02-Jan-21	0.00	± 0.00	0	0
03-Jan-21	0.00	± 0.00	0	0
04-Jan-21	0.17	± 0.41	1	90
05-Jan-21	0.00	± 0.00	0	0
06-Jan-21	0.00	± 0.00	0	0
07-Jan-21	0.00	± 0.00	0	0
08-Jan-21	0.00	± 0.00	0	0
09-Jan-21	0.00	± 0.00	0	0
10-Jan-21	0.00	± 0.00	0	0
11-Jan-21	0.33	± 0.82	2	181
12-Jan-21	1.33	± 2.16	8	723
13-Jan-21	0.00	± 0.00	0	0
14-Jan-21	0.17	± 0.41	1	90
15-Jan-21	0.00	± 0.00	0	0
Total Count / Estimated Influx (Serin)			113	10,216

Source: Ecoserv, 2021

FIGURE 8 – DAILY MEAN COUNTS OF EUROPEAN SERIN PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER 2020 AND 15 JANUARY 2021 DURING THE 2020 SURVEY, 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.



Source: Ecoserv, 2021

7.26 Raw daily counts for Hawfinch recorded from the 21 sites during the 2020 study varied between 0 and a maximum of 2, while the mean daily counts ranged

between 0 and 0.33 (Table 9). Counts for this species were therefore low overall: between two and three Hawfinch individuals were recorded in total from each of the sites at grid locations 4079 and 4480, while no individuals were recorded throughout the survey period from any of the other sites.

7.27 The estimated total influx of Hawfinch over the Maltese Islands is given in Table 9. Mean count values for Hawfinch recorded during the 2020 survey are similar to those made in autumn 2015, 2016 and 2018 when very few counts of this species were recorded, and lower than those made in autumn 2014, 2017 and 2019. The overall temporal trend seen during the autumn 2014, 2017 and 2019 surveys is of highest count values recorded from late-October to end-November. Based on the mean daily counts (Table 9), extrapolation translates to an estimated daily influx ranging between 0 and 181 individuals, with a total influx over the survey period (15 October 2020 – 15 January 2021) of 452 individuals; i.e. some 2 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 HAWFINCH

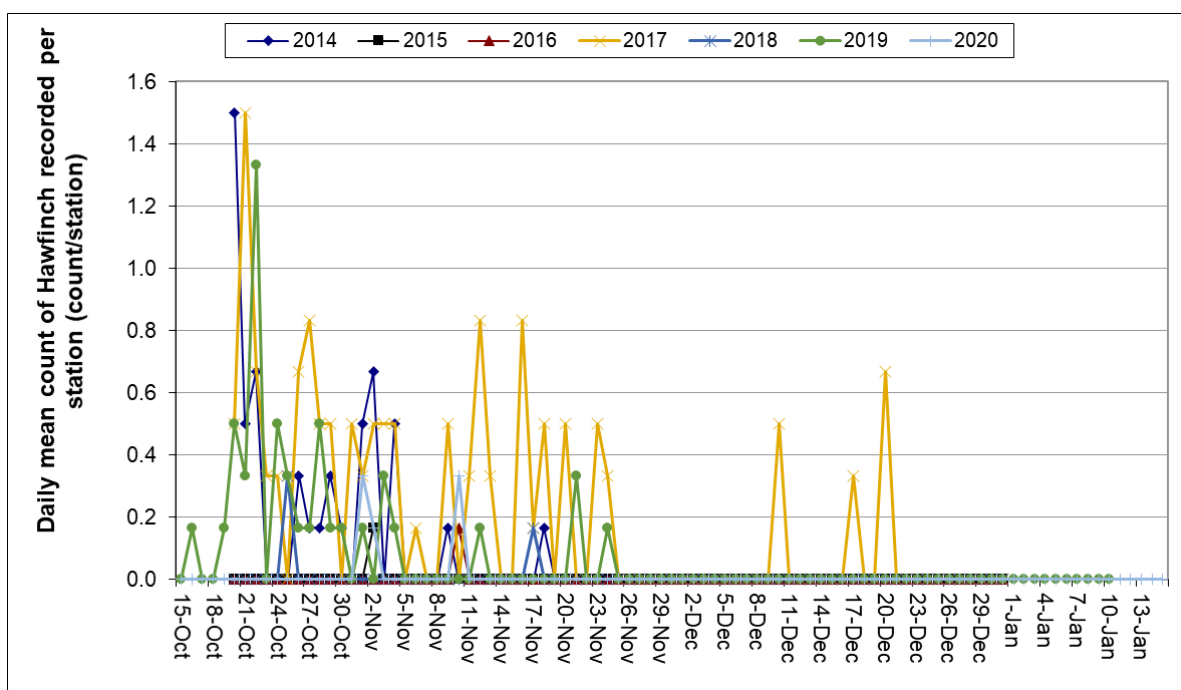
Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
15-Oct-20	0.00	\pm 0.00	0	0
16-Oct-20	0.00	\pm 0.00	0	0
17-Oct-20	0.00	\pm 0.00	0	0
18-Oct-20	0.00	\pm 0.00	0	0
19-Oct-20	0.00	\pm 0.00	0	0
20-Oct-20	0.00	\pm 0.00	0	0
21-Oct-20	0.00	\pm 0.00	0	0
22-Oct-20	0.00	\pm 0.00	0	0
23-Oct-20	0.00	\pm 0.00	0	0
24-Oct-20	0.00	\pm 0.00	0	0
25-Oct-20	0.00	\pm 0.00	0	0
26-Oct-20	0.00	\pm 0.00	0	0
27-Oct-20	0.00	\pm 0.00	0	0
28-Oct-20	0.00	\pm 0.00	0	0
29-Oct-20	0.00	\pm 0.00	0	0
30-Oct-20	0.00	\pm 0.00	0	0
31-Oct-20	0.00	\pm 0.00	0	0
01-Nov-20	0.33	\pm 0.82	2	181
02-Nov-20	0.17	\pm 0.41	1	90

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
03-Nov-20	0.00	± 0.00	0	0
04-Nov-20	0.00	± 0.00	0	0
05-Nov-20	0.00	± 0.00	0	0
06-Nov-20	0.00	± 0.00	0	0
07-Nov-20	0.00	± 0.00	0	0
08-Nov-20	0.00	± 0.00	0	0
09-Nov-20	0.00	± 0.00	0	0
10-Nov-20	0.33	± 0.82	2	181
11-Nov-20	0.00	± 0.00	0	0
12-Nov-20	0.00	± 0.00	0	0
13-Nov-20	0.00	± 0.00	0	0
14-Nov-20	0.00	± 0.00	0	0
15-Nov-20	0.00	± 0.00	0	0
16-Nov-20	0.00	± 0.00	0	0
17-Nov-20	0.00	± 0.00	0	0
18-Nov-20	0.00	± 0.00	0	0
19-Nov-20	0.00	± 0.00	0	0
20-Nov-20	0.00	± 0.00	0	0
21-Nov-20	0.00	± 0.00	0	0
22-Nov-20	0.00	± 0.00	0	0
23-Nov-20	0.00	± 0.00	0	0
24-Nov-20	0.00	± 0.00	0	0
25-Nov-20	0.00	± 0.00	0	0
26-Nov-20	0.00	± 0.00	0	0
27-Nov-20	0.00	± 0.00	0	0
28-Nov-20	0.00	± 0.00	0	0
29-Nov-20	0.00	± 0.00	0	0
30-Nov-20	0.00	± 0.00	0	0
01-Dec-20	0.00	± 0.00	0	0
02-Dec-20	0.00	± 0.00	0	0
03-Dec-20	0.00	± 0.00	0	0
04-Dec-20	0.00	± 0.00	0	0
05-Dec-20	0.00	± 0.00	0	0
06-Dec-20	0.00	± 0.00	0	0
07-Dec-20	0.00	± 0.00	0	0
08-Dec-20	0.00	± 0.00	0	0
09-Dec-20	0.00	± 0.00	0	0
10-Dec-20	0.00	± 0.00	0	0
11-Dec-20	0.00	± 0.00	0	0
12-Dec-20	0.00	± 0.00	0	0
13-Dec-20	0.00	± 0.00	0	0
14-Dec-20	0.00	± 0.00	0	0
15-Dec-20	0.00	± 0.00	0	0
16-Dec-20	0.00	± 0.00	0	0
17-Dec-20	0.00	± 0.00	0	0
18-Dec-20	0.00	± 0.00	0	0
19-Dec-20	0.00	± 0.00	0	0
20-Dec-20	0.00	± 0.00	0	0
21-Dec-20	0.00	± 0.00	0	0
22-Dec-20	0.00	± 0.00	0	0
23-Dec-20	0.00	± 0.00	0	0

Date	Mean daily count	Standard deviation	Total daily count	Estimated daily influx
24-Dec-20	0.00	± 0.00	0	0
25-Dec-20	0.00	± 0.00	0	0
26-Dec-20	0.00	± 0.00	0	0
27-Dec-20	0.00	± 0.00	0	0
28-Dec-20	0.00	± 0.00	0	0
29-Dec-20	0.00	± 0.00	0	0
30-Dec-20	0.00	± 0.00	0	0
31-Dec-20	0.00	± 0.00	0	0
01-Jan-21	0.00	± 0.00	0	0
02-Jan-21	0.00	± 0.00	0	0
03-Jan-21	0.00	± 0.00	0	0
04-Jan-21	0.00	± 0.00	0	0
05-Jan-21	0.00	± 0.00	0	0
06-Jan-21	0.00	± 0.00	0	0
07-Jan-21	0.00	± 0.00	0	0
08-Jan-21	0.00	± 0.00	0	0
09-Jan-21	0.00	± 0.00	0	0
10-Jan-21	0.00	± 0.00	0	0
11-Jan-21	0.00	± 0.00	0	0
12-Jan-21	0.00	± 0.00	0	0
13-Jan-21	0.00	± 0.00	0	0
14-Jan-21	0.00	± 0.00	0	0
15-Jan-21	0.00	± 0.00	0	0
Total Count / Estimated Influx (Hawfinch)			5	452

Source: Ecoserv, 2021

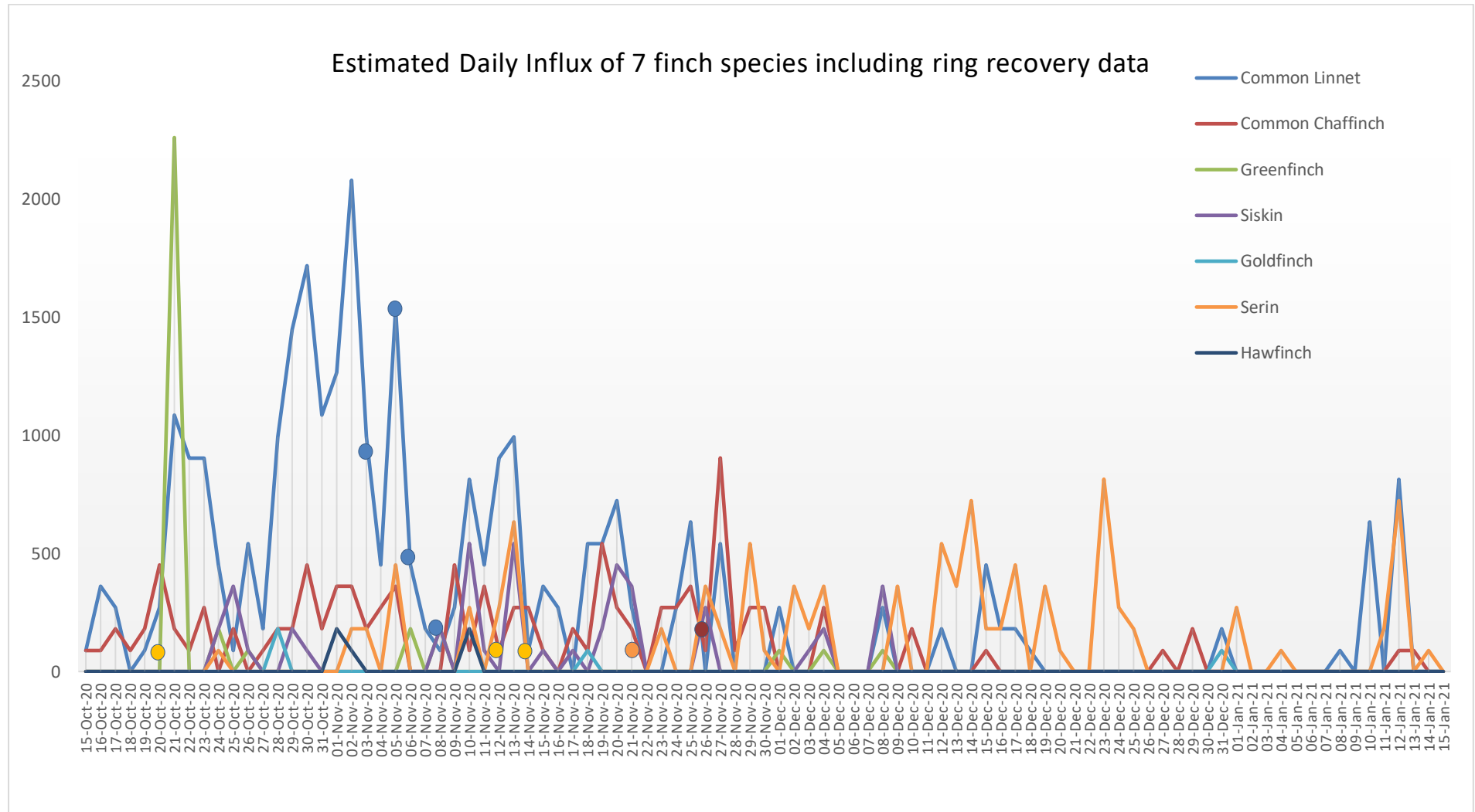
FIGURE 9 – DAILY MEAN COUNTS OF HAWFINCH PER STATION (= SITE) RECORDED BETWEEN 15 OCTOBER 2020 AND 15 JANUARY 2021 DURING THE 2020 SURVEY, BETWEEN 15 OCTOBER 2019 AND 10 JANUARY 2020 DURING THE 2019 SURVEY, AND BETWEEN 20 OCTOBER AND 31 DECEMBER DURING PREVIOUS (2014, 2015, 2016, 2017, 2018) SURVEYS.



Source: Ecoserv, 2021

7.28 Figure 10 shows the estimated daily influx 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.

FIGURE 10 - ESTIMATED DAILY INFLUX OF THE SEVEN FINCH SPECIES (= SITE) RECORDED BETWEEN 15 OCTOBER 2020 AND 15 JANUARY 2021 ILLUSTRATING (WITH A DOT) THE DAYS IN WHICH A RING RECOVERY WAS RECORDED. THE COLOUR OF THE DOT CORRESPONDS TO THE SPECIES RECOVERED.



8. Enforcement and strict supervision

8.1 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 120 officers attended for the training sessions held between the 12th and 16th October 2020 in Malta and Gozo. Given that this research project was the first of its kind, enforcement officers were given a detailed insight on all the parameters of the new 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

8.2 The Framework Regulations (S.L. 549.137) 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.

8.3 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.

8.4 Given that there were 3,098 special licences issued under the terms of the present derogation (2,202 in Malta and 896 in Gozo) and in view of the statutory requirement of 50 officers during permitted hours, 36 officers were

required in Malta and 14 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 1,319 special licences were issued to finches research licensees (i.e. the total number of licensed persons participating in either one or in both derogations was 3,365²²), the Maltese authorities opted to exceed this requirement to ensure for the strictest supervision possible.

8.5 During the 2020 finches research period (20 October to 20 December), the enforcement authorities deployed a total overall complement of 73 officers to oversee and supervise the parameters of the derogation (Table 10).

TABLE 10: DEPLOYMENT OF ENFORCEMENT OFFICERS DURING THE AUTUMN 2020 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	26	
Gozo police	12	
Armed Forces of Malta	6	Field patrols and surveillance
Environmental rangers	3	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	73	

8.6 Police (EPU and District) and Armed Forces of Malta officers maintained a daily field deployment that ranged between a maximum of 64 officers and a minimum of 53 officers in the field at any point in time from 05:00hrs to

²² 3,098 finch research licences + 1,319 Golden Plover and Song Thrush licences less 1,052 persons in possession of both licence categories = 3,365 licensed live-capturers.

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.

- 8.7 During the derogation period, enforcement officers carried out 2,377 spot-checks (1,291 in Malta and 1,086 in Gozo) on individual licensees. Table 11 lists the number of enforcement officers deployed, number of spot-checks on individual live-capturers per region, infringements related to this derogation and persons charged.

TABLE 11 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 live-capturers 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
20/10/2020	50	10	50	5	1	3	11	6	2	3	16	15	17	14	0	0	0	0
21/10/2020	52	11	52	4	2	1	1	5	8	6	19	2	2	3	0	2 Illegal trapping of finches ²³	0	0
22/10/2020	50	9	50	7	3	5	4	5	9	8	10	8	12	9	0	0	0	0
23/10/2020	51	9	51	5	2	1	3	5	8	5	5	7	2	1	0	0	0	0
24/10/2020	52	9	50	7	10	3	3	5	6	12	1	4	31	8	0	0	0	0
25/10/2020	52	9	52	7	3	4	6	7	13	15	6	2	1	4	0	0	0	0
26/10/2020	51	9	51	7	2	3	2	3	8	8	4	7	7	3	0	0	0	0
27/10/2020	50	11	50	5	2	1	2	4	4	5	2	1	4	1	1 Illegal trapping of finches ²⁴	0	1 Court action	0
28/10/2020	50	10	50	5	6	4	7	1	3	9	1	1	4	1	0	0	0	0
29/10/2020	52	10	52	5	4	1	11	1	6	22	4	5	1	7	0	0	0	0
30/10/2020	51	13	51	4	1	3	2	4	2	2	4	12	8	5	0	1 Illegal trapping of finches ²⁵	0	0
31/10/2020	52	10	52	4	2	1	15	4	10	3	6	4	7	4	0	0	0	0
01/11/2020	50	11	50	6	4	1	4	2	4	10	17	5	5	5	0	0	0	0
02/11/2020	50	11	50	6	2	2	1	4	2	2	9	3	8	5	0	1 Trapping without a Special Licence ²⁶	0	1 Court action
03/11/2020	51	10	51	6	3	4	3	2	4	6	14	2	7	5	0	0	0	0
04/11/2020	50	11	50	5	4	2	3	4	3	1	7	9	4	17	0	0	0	0
05/11/2020	49	13	49	6	8	2	3	1	4	10	9	11	11	5	0	0	0	0
06/11/2020	51	13	51	6	2	2	10	7	2	2	11	7	13	7	0	0	0	0

²³ Cases refer to two unregistered trapping sites found in Xewkija illegally targeting finches. Police seized all trapping paraphernalia including three Common Linnet *Linaria cannabina*, six Common Chaffinch *Fringilla coelebs*, five European Greenfinch *Chloris chloris*, six European Serin *Serinus serinus* and two Hawfinches *Coccothraustes coccothraustes* for further inspection by the government-appointed veterinarian. Following inspection one Chaffinch was found to be fitted with a seamless closed ring and was kept for lifetime care whilst the remaining birds were released because they were either fitted with a fake closed ring or not wearing any rings. No further legal action could be taken because the culprits remained unknown to the police.

²⁴Case refers to a person caught trapping for finches on an unregistered site in Delimara. Police seized all paraphernalia including two European Greenfinch *Chloris chloris*, a European Serin *Serinus serinus* and two Hawfinches *Coccothraustes coccothraustes* for further inspection and confirmation of the legality of the rings by the government-appointed veterinarian. Upon inspection, the veterinarian confirmed that one of the Hawfinches was fitted with a fake closed ring and the remaining birds were not fitted with a ring and thus all were illegally possessed. All the birds were released following removal of the fake ring. Legal action has been initiated against the culprit.

²⁵ Case refers to an unregistered trapping site found in Xaghra illegally targeting finches. Police seized all trapping paraphernalia including six Common Linnet *Linaria cannabina* and two Common Chaffinch *Fringilla coelebs* which were released on site because they were not wearing any rings. No further legal action could be taken because the culprit remained unknown to the police.

²⁶ Case refers to an individual found trapping for finches in San Dimitri limits of Gharb without a special licence. Police seized all trapping paraphernalia including two European Greenfinch *Chloris chloris*, two Common Linnet *Linaria cannabina*, three Common Chaffinch *Fringilla coelebs* and a European Goldfinch *Carduelis carduelis*. Most of the birds were released on site because they were not fitted with a ring whilst the two European Greenfinch *Chloris chloris* were taken to the government-appointed veterinarian for confirmation of legality of rings, which were confirmed to be illegal split rings and thus released. Legal action has been initiated against the culprit.

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 live-catchers per region										Offences detected (number of cases and nature of offence)		Number of persons charged and action taken	
07/11/2020	50	10	50	4	1	1	8	5	1	10	11	8	1	3	0	1 Illegal trapping of finches ²⁷	0	0
08/11/2020	48	9	48	5	3	2	9	1	11	2	12	3	7	0	0	0	0	0
09/11/2020	51	11	51	6	3	2	6	3	2	4	4	12	2	3	0	0	0	0
10/11/2020	50	12	50	6	5	1	6	6	3	1	6	2	8	1	5 Illegal trapping of finches ²⁸	0	0	0
11/11/2020	50	9	50	5	3	1	1	1	1	16	7	3	1	1	2 Illegal trapping of finches ²⁹	0	1 Court action	0
12/11/2020	51	11	51	5	1	1	3	2	2	1	11	6	11	6	0	0	0	0
13/11/2020	49	12	49	5	3	2	2	1	2	2	6	5	2	4	0	0	0	0
14/11/2020	50	11	50	4	7	1	9	7	5	2	1	3	4	1	0	0	0	0
15/11/2020	50	9	50	5	4	2	1	1	9	3	1	7	5	10	1 Illegal trapping of finches ³⁰	0	1 Court action	0
16/11/2020	49	9	49	5	1	2	2	16	1	2	11	2	6	18	0	0	0	0
17/11/2020	50	9	50	5	2	1	1	2	1	3	1	1	1	1	0	0	0	0
18/11/2020	51	12	51	6	2	1	2	4	2	5	8	1	5	2	1 Illegal trapping of finches ³¹	0	0	0
19/11/2020	50	9	50	7	2	1	2	1	1	2	4	1	2	1	0	0	0	0
20/11/2020	51	10	51	4	1	1	2	1	1	2	6	5	1	1	0	0	0	0
21/11/2020	49	10	49	6	2	5	7	2	2	7	8	8	3	3	0	0	0	0
22/11/2020	49	9	49	6	1	8	10	5	4	6	9	2	1	2	0	0	0	0
23/11/2020	51	13	51	5	4	1	6	1	1	4	3	2	1	1	0	0	0	0
24/11/2020	49	10	49	5	1	1	7	1	1	2	5	8	5	1	0	0	0	0
25/11/2020	50	11	50	7	2	2	6	5	6	2	5	2	2	2	0	0	0	0

²⁷ Case refers to an unregistered trapping site found in Žebbuġ illegally targeting finches. Police seized all trapping paraphernalia including ten finches, five of which were released on site because they were not fitted with any rings, whilst two Common Linnet *Linaria cannabina* and three Common Chaffinch *Fringilla coelebs* were taken to the government-appointed veterinarian for further inspection. All birds were subsequently released because they were fitted with a fake closed ring. No legal action could be taken because the culprit remained unknown to the police.

²⁸ Cases refer to five unregistered trapping sites found in ̄al-Għaxaq illegally targeting finches. Police seized all trapping paraphernalia including five pairs of trapping nets, five Common Linnet *Linaria cannabina*, four Common Chaffinch *Fringilla coelebs*, nine European Greenfinch *Chloris chloris*, a Eurasian Siskin *Spinus spinus* and two Hawfinch *Coccothraustes coccothraustes* for further inspection by the government-appointed veterinarian. Following inspection, one European Greenfinch *Chloris chloris* was found to be fitted with a genuine seamless closed ring and was referred for lifetime care whilst the remaining birds were released because they were either fitted with a fake closed ring or not fitted with any rings. No legal action could be taken because the culprits remained unknown to the police.

²⁹ Case refers to a person found illegally trapping for finches. Police seized all paraphernalia including four Common Chaffinch *Fringilla coelebs*, three Eurasian Siskin *Spinus spinus*, a Common Linnet *Linaria cannabina* and two European Greenfinch *Chloris chloris* for further inspection by the government-appointed veterinarian who later confirmed that all birds were illegally possessed and subsequently released. Legal action has been initiated against the perpetrator. The second case refers to an unattended trapping site from which police seized and released two European Greenfinch *Chloris chloris* and a European Goldfinch *Carduelis carduelis* which were not fitted with a ring. No further legal action could be taken because culprit remained unknown to the police.

³⁰ Case refers to a person found trapping for finches on an unregistered site. Police seized all trapping paraphernalia and initiated legal action against the culprit.

³¹ Case refers to an unregistered trapping site where Police seized all trapping paraphernalia including a European Greenfinch *Chloris chloris* and a Common Chaffinch *Fringilla coelebs*. The government-appointed veterinarian confirmed that both birds were fitted with a fake closed ring which was removed before release. No further legal action could be taken because the culprit 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 live-capturers per region										Offences detected (number of cases and nature of offence)		Number of persons charged and action taken	
26/11/2020	51	12	51	5	3	2	2	1	1	3	3	2	8	1	2 Illegal Trapping of Finches ³²	0	2 Court action	0
27/11/2020	49	10	49	4	1	2	1	1	5	1	5	3	1	2	0	0	0	0
28/11/2020	49	13	49	5	8	2	2	1	1	1	8	3	1	3	0	0	0	0
29/11/2020	49	9	49	6	2	1	6	1	2	3	4	2	5	1	0	0	0	0
30/11/2020	50	9	50	7	2	4	6	4	2	6	5	5	6	5	0	0	0	0
01/12/2020	49	10	49	5	1	2	1	1	6	4	5	3	1	2	2 Illegal trapping of finches ³³	0	2 Court action	0
02/12/2020	50	10	50	4	6	5	1	1	1	1	5	3	2	6	0	0	0	0
03/12/2020	50	9	50	5	2	1	14	3	4	7	1	2	2	1	0	0	0	0
04/12/2020	49	9	49	5	1	1	2	2	5	2	5	2	7	1	1 Trapping without a Special Licence ³⁴ 3 Illegal trapping of finches ³⁵	0	1 Court action	0
05/12/2020	50	9	50	6	3	1	21	1	1	2	10	2	1	3	1 Unattended trapping site ³⁶ 2 Illegal trapping of finches ³⁷	0	1 Court action	0
06/12/2020	49	9	49	5	1	2	1	3	2	4	7	7	1	3	0	0	0	0
07/12/2020	50	9	50	5	1	1	1	2	1	1	1	1	1	2	0	1 Illegal trapping of finches ³⁸	0	0
08/12/2020	49	12	50	4	1	2	1	9	13	1	4	4	1	2	0	0	0	0
09/12/2020	50	9	50	5	1	1	1	1	2	1	1	1	1	2	0	0	0	0
10/12/2020	49	9	49	5	1	2	1	1	1	1	2	1	1	2	0	0	0	0

³² Cases refer to illegal trapping of finches where police seized all paraphernalia including a Common Linnet *Linaria cannabina*, three European Greenfinch *Chloris chloris*, four Eurasian Siskin *Spinus spinus* and a European Goldfinch *Carduelis carduelis* for further inspection by the government-appointed veterinarian who later confirmed that all birds were illegally possessed because they were not fitted with a ring. Legal action has been initiated against both culprits.

³³ Cases refer to trapping of finches on unregistered sites. From these sites, police seized twelve Common Linnet *Linaria cannabina*, five Common Chaffinch *Fringilla coelebs*, five European Greenfinch *Chloris chloris*, four Eurasian Siskin *Spinus spinus*, two European Goldfinch *Carduelis carduelis* and three European Serin *Serinus serinus* for further inspection by the government-appointed veterinarian. The veterinarian confirmed that nine of these birds were fitted with a genuine seamless closed ring thus legally possessed, whilst the remaining 22 finches (ten Common Linnet *Linaria cannabina*, three Common Chaffinch *Fringilla coelebs*, three European Greenfinch *Chloris chloris*, three Eurasian Siskin *Spinus spinus*, one European Goldfinch *Carduelis carduelis* and two European Serin *Serinus serinus*) were either not fitted with a ring or fitted with fake closed rings. These birds had the ring removed and released.

³⁴ Case refers to an individual found trapping for finches without a special licence. Police seized all trapping paraphernalia including a bird caller and initiated legal action against the culprit

³⁵ Cases refer to three unregistered sites targeting finches. Police seized all paraphernalia including a Common Chaffinch *Fringilla coelebs*, five European Greenfinch *Chloris chloris*, a European Goldfinch *Carduelis carduelis*, and a Hawfinch *Coccothraustes coccothraustes* for further inspection by the government-appointed veterinarian who later confirmed that all birds were illegally possessed because these were not fitted with a closed ring. All birds were released however no further legal action could be taken because the culprits remained unknown to the police.

³⁶ Case refers to an unattended registered trapping site in Ħaż-Zabbar targeting finches. Legal action has been initiated against the culprit.

³⁷ Cases refer to unregistered trapping sites at Ħal-Għaxaq targeting finches. Police seized all trapping paraphernalia however no further legal action could be taken because the culprits remained unknown to the police.

³⁸ Cases refer to unregistered trapping sites at Għarb targeting finches. Police seized all trapping paraphernalia however no further legal action could be taken because the culprits 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 live-capturers per region										Offences detected (number of cases and nature of offence)		Number of persons charged and action taken		
11/12/2020	49	10	49	4	1	1	1	1	1	1	1	1	1	2	1	0	0	0	0
12/12/2020	50	9	50	5	1	2	2	1	2	5	3	2	4	3	0	0	0	0	
13/12/2020	49	9	49	5	1	3	4	2	1	1	3	2	1	1	0	0	0	0	
14/12/2020	50	10	50	4	4	1	1	9	1	1	5	2	1	3	1 Unattended trapping site ³⁹	0	1 Court action	0	
15/12/2020	49	9	49	5	1	1	2	2	1	1	5	1	1	2	0	0	0	0	
16/12/2020	50	9	50	5	1	1	1	1	3	1	1	2	2	4	0	0	0	0	
17/12/2020	49	10	49	4	1	2	2	5	1	1	5	2	1	1	0	0	0	0	
18/12/2020	50	10	50	4	1	1	1	7	1	1	1	1	3	1	0	0	0	0	
19/12/2020	49	9	49	5	7	1	1	3	2	2	1	2	1	1	1 Illegal possession of birds ⁴⁰	0	1 Court action	0	
20/12/2020	49	9	49	5	1	1	1	1	6	3	1	1	1	1	0	0	0	0	
	Average	Average	Average	Average	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	
	50	10	50	5	162	122	258	199	220	260	356	243	268	219	23 ⁴¹	6 ⁴²	11 ⁴³	1 ⁴⁴	

Source: Wild Birds Regulation Unit and Malta Police Force, 2021

³⁹ Case refers to an unattended finch trapping site in Marsaskala. Police seized all trapping paraphernalia and initiated legal action against the culprit.

⁴⁰ Case refers to the illegal possession of finches found on a trapping site in Attard. Police seized all paraphernalia including two Common Linnet *Linaria cannabina*, two Common Chaffinch *Fringilla coelebs* and a Eurasian Siskin *Spinus spinus* for further inspection by the government-appointed veterinarian. The veterinarian confirmed that a Common Linnet *Linaria cannabina* and a Common Chaffinch *Fringilla coelebs* were fitted with an illegal single-use ring and subsequently released. The remaining birds were confirmed to be legally possessed. Legal action has been initiated against the culprit.

⁴¹ 12 cases of unknown culprits, 11 cases of known culprits.

⁴² 5 cases of unknown culprits, 1 cases of known culprits.

⁴³All court actions.

⁴⁴1 court action.

8.8 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 licensees were in possession of all requisite documents;
- verifying that 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 finches 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.

8.9 In order to facilitate the conduct of their duties, enforcement officers had 15 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.

8.10 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 2020. 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.

8.11 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

8.12 During the patrols and spot-checks carried out by police throughout the finches research derogation period, a total of 29 infringements related to this derogation were detected. Legal action was taken against 12 individuals: seven

for the illegal trapping of finches, two for trapping without a special licence, two cases of unattended research station and one for the illegal possession of finches without adequate rings. No legal action could be taken in relation to the other 17 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 12 below.

TABLE 12 OFFENCES DISCLOSED DURING THE FINCHES RESEARCH PERIOD

	2020		
	(20.10.20-20.12.20)		
	Cases in Malta	Cases in Gozo	Total number of cases
Illegal trapping of finches (cases involving multiple offences)	19	5	24
Use of illegal means (e.g. cage traps; artificial light; vertical nets; decoys of protected birds)	0	0	0
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	0	0	0
Trapping using unmarked decoys	0	0	0
Trapping without licence	1	1	2
Unattended Trapping site	2	0	2
Illegal possession of finches without required rings	1	0	1
Total	23	6	29
Number of persons apprehended	11	1	12

Source: Wild Birds Regulation Unit and Malta Police Force, 2021

8.13 The following table lists the birds seized by police during the autumn 2020 finches research period. Legal action has been initiated in all cases where the culprit has been identified and charged, as already detailed above.

TABLE 13 BIRDS SEIZED DURING THE AUTUMN 2020 FINCH REASERCH DEROGATION

Species	Amount of birds seized	
	Malta	Gozo
Common Linnet <i>Linaria cannabina</i>	18	14
Common Chaffinch <i>Fringilla coelebs</i>	16	12
European Greenfinch <i>Chloris chloris</i>	25	7
Eurasian Siskin <i>Spinus spinus</i>	11	0
European Goldfinch <i>Carduelis carduelis</i>	4	1
European Serin <i>Serinus serinus</i>	3	6
Hawfinch <i>Coccothraustes coccothraustes</i>	5	2
Unspecified finches	0	5
Subtotal	82	47
Total	129	

8.14 In addition, before the opening of the finches research period (from 1 September 2020), police found eleven illegal trapping-related infringements, ten in Malta and one in Gozo. The cases in Malta involved nine cases of trapping on unregistered sites (and invariably without a special licence) by unknown culprits and a case of an unlicensed person (no general licence; no special licence) caught illegally trapping for finches. Police seized all trapping paraphernalia including nets and pre-recorded bird callers and initiated legal action against him. The case in Gozo refers to an illegal trapping site of unknown owner targeting finches. Police seized all trapping paraphernalia including two European Greenfinches (*Chloris chloris*), five Common Chaffinches (*Fringilla coelebs*), two Eurasian Siskins (*Spinus spinus*) and seven Common Linnets (*Linaria cannabina*) (16 in total), which were immediately released on site because they were not fitted with any rings. No further legal action could be taken because the culprit remained unknown to the police.

8.15 Following closure of the finch research period, police found a person illegally trapping for finches in Malta. Police seized all trapping paraphernalia including two bird callers and initiated legal action against the culprit.

8.16 During the research period, environmental NGOs carried out various patrols and surveillance activities. In their 2020 Annual Report⁴⁵, CABS reported that in November 2020, joint teams from CABS and BirdLife Malta spent a week searching for sites for the illegal capture of finches. A total of six unregistered trapping sites and two cage traps were reported to the police and a total of 31 finches (Chaffinches, Linnets, Serins and Hawfinches) were seized and released by police.

9. CONCLUSIONS

9.1 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.

9.2 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:

- judgment C-557/15 of the Court of Justice of the European Union 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 (a future Article 9(1)(c) derogation, applied in full compliance with the case-law and the Birds Directive);
- this research will enable a proper assessment of the "small numbers"-requirement with regard to the seven finch species;

⁴⁵ CABS Annual Report 2020 available at: <https://www.komitee.de/en/campaigns-and-operations/annual-reports/>

- 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; 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.

9.3 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. The study aims to provide sufficient information on the reference populations for Malta to introduce a derogation regime under Article 9(1)(c) of the Birds Directive that complies with the "small numbers"-criterion and all other material considerations as pronounced by the Court of Justice of the European Union in judgment C-557/15.

9.4 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.

9.5 During the two-month research period (20th October 2020 till 20th December 2020), seven rings recovered by licensees through this research were confirmed by EURING (six specimens ringed abroad; 1 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 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.

9.6 Considering that the Court of Justice of the European Union in judgment C-557/15 declared that 52 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 52 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 six 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.