Report on the Outcome of the 2022 Spring Hunting Season in Malta

June 2022

Wild Birds Regulation Unit

Table of Contents

List of Figures

List of Tables

Enclosures

Annex 1: Report on a survey of the influx of migratory Common Quail and Turtle-dove over the Maltese Islands in autumn 2021

Annex 2: Assessment of the conservation status of Turtle-dove and Common Quail, February 2022

Annex 3: Specimen of the special licence issued for the 2022 Spring Hunting Season

Annex 4: Report on a survey of the influx of migratory Common Quail and Turtle-dove over the Maltese Islands in Spring 2022

1. Introduction

1.1 This report has been prepared in addition to Malta's formal reporting obligation under Article 9 of the Birds Directive. During a bilateral meeting between the Maltese authorities and the services of the European Commission in June 2019, it was agreed that spring hunting reports are to be submitted within one month from termination of the migration study—a fixed period between 15 March and 15 May—rather than within one month from closure of the spring hunting season. The report provides an overview of the implementation of Malta's spring hunting derogation for European Turtle-dove (*Streptopelia turtur*) and Common Quail (*Coturnix coturnix*) in April 2022, including:

- an overview of the decision-making process leading up to the application of the derogation,
- consideration of the relevant legal and policy parameters,
- consideration of the conservation status of the species concerned,
- an assessment of the outcome of the previous autumn hunting season and an independent assessment of the migratory influx of European Turtle-dove (*Streptopelia turtur)* and Common Quail (*Coturnix coturnix*) during autumn 2021,
- the necessary preparatory measures and regulatory controls effected prior to and during the season,
- an assessment of the migratory influx of Turtle-dove and Quail during the 2022 spring season and bag data,
- the enforcement effort in place to ensure the strict supervision of hunting during the 2022 season,
- disclosed offences and corresponding enforcement action taken, and
- the legal and other management aspects of relevance.

2. Legal and policy basis for the application of a derogation permitting spring hunting of Turtle-dove and Common Quail in 2022

2.1 As was also the case in previous years, a derogation permitting spring hunting in 2021 was applied on the basis of Article 9(1) of Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the Conservation of Wild Birds, which states that "*Member States may derogate from the provisions of Articles 5 to 8* [of the same Directive], *where there is no other satisfactory solution*" in line with a number of limited reasons, such as that stipulated by Article 9(1)(c): *"to permit, under strictly supervised conditions and on a selective basis, the capture, keeping or other judicious use of certain birds in small numbers*".

2.2 As regards the "no other satisfactory solution" criterion, the judgment delivered by the Court of Justice of the European Union (CJEU) on 10 September 2009, in case C-76/08, explicitly noted that "*hunting for Quail and Turtle Doves during the autumn hunting season cannot be regarded as constituting, in Malta, another satisfactory solution, so that the condition that there be no other satisfactory solution, laid down in Article 9(1) of the Directive, should, in principle, be considered met*"[1].

2.3 This judgment therefore recognises the right to apply a derogation for spring hunting in Malta subject to the strict conditions laid down in Directive 2009/147/EC. Malta's

[1] Case C-76/08 *Commission v Malta*, ECR I-8213, paragraph 63

biogeographical circumstances that were recognised by the Court in 2009 have remained the same, and therefore the hunting of Turtle-dove and Quail in spring remained the only satisfactory solution within the meaning of Article 9(1)(c).

2.4 The Conservation of Wild Birds (Framework for Allowing a Derogation Opening a Spring Hunting Season for Turtle-dove and Quail) Regulations (S.L. 549.57)[2] establishes a series of parameters to be considered **prior to** any decision to apply a derogation, particularly the requirement to consider the previous autumn hunting bag data for Turtle-dove and Quail, and to consider the conservation status of the species concerned.

2.5 Consideration of the above two parameters is discussed in the following sections of this report.

3. Consideration by the Malta Ornis Committee

3.1 The Malta Ornis Committee, established under Regulation 10 of the Conservation of Wild Birds Regulations (S.L. 549.42)[3] considered a range of aspects prior to providing a recommendation to the Maltese Government.

3.2 At its sitting on 16 March 2022, the Committee[4] considered an updated assessment of the conservation status of Common Quail and Turtle-dove (enclosed in Annex 2 to this report). The findings of this assessment are summarised in section 4 of this report.

3.3 The Committee further discussed the potential application of a spring hunting derogation for Quail and Turtle-dove. As a result of its deliberations, the Committee recommend in principle the application of a hunting derogation for Common Quail in spring 2022 with the same parameters as established in 2021. During the same sitting, the Committee voted in favor of opening a spring hunting season for the Turtle-dove (*Streptopelia turtur*). A final recommendation to Government on the dates of the season was made, namely to open the season for Quail from 10 April until 30 April, with a national quota of 2,400 Quail and to open the season for Turtle-dove from 17 until 30 April, with a national quota of 1,500 Turtle-doves.

3.4 After giving due consideration to the outcome of the meeting of the Malta Ornis Committee held on the 16 March 2022, the Government of Malta declared the cessation with immediate effect of the moratorium on the application of spring hunting derogation for European Turtle-dove (*Streptopelia turtur*) as was declared on the 27 May 2016 by virtue of Government Notice No. 538[5]. The declaration on cessation of moratorium on spring hunting of Turtle-dove was published on the 25 March 2022 by virtue of Government Notice No. 337[6].

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[2] Conservation of Wild Birds (Framework for Allowing a Derogation Opening a Spring Hunting Season for Turtle-dove and Quail) Regulations (S.L. 549.57)
http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=11570&l=1

[3] Conservation of Wild Birds Regulations (S.L. 549.42)
http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=11548&l=1

[4] Minutes of the Ornis Committee meetings are available at:
https://mgoz.gov.mt/en/Documents/WBRU/Ornis%20Commttiee/Minutes%202022/oMinutesSixTeeMar22.pdf

[5] Government Notice No. 538
https://www.gov.mt/en/Government/DOI/Government%20Gazette/Documents/2016/05/Government%20Gazette%20-%2027th%20May.pdf

[6] Government Notice No. 337
https://www.gov.mt/en/Government/DOI/Government%20Gazette/Documents/2022/03/Government%20Gazette%20-%2025th%20March.pdf

3.5 Following Ornis Committee recommendation, the Government opted to open the season between 10 April and 30 April, inclusive of both dates for Quail and between 17 until 30 April inclusive of both dates for Turtle-dove by virtue of Legal Notice 116 of 2022[7].

Warrant of Prohibitory Injunction

3.6 On the 11 April 2022, BirdLife Malta filed a warrant of prohibitory injunction against the Prime Minister of Malta, the Minister for Energy, Enterprise and Sustainable Development, the Minister for Gozo and the Wild Birds Regulation Unit and requested the Court to order the immediate suspension of L.N. 116 of 2022 and to withhold the Government from opening a spring hunting season for Turtle-dove. In its decree of the 12 April, the Court provisionally accepted the request for prohibitory injunction and reserved its right to provide a definite decision at a later stage. Additionally, in a separate request, BirdLife Malta requested the court to seek referral to the Court of Justice of the European Union (CJEU) for an urgent preliminary sentence under Article 267 of the Treaty on the Functioning of the European Union, requesting the same Court to interpret the warrant of prohibitory injunction.

3.7 Following the defendants' submission of arguments, on the 15 April 2022 the Court revoked the provisional injuction it had issued earlier and delivered the decree from its chambers. The court noted that the questions that BirdLife wanted the CJEU to interpret concerned the warrant of prohibitory injunction - a procedure regulated by domestic law that was not a matter of interpretation. BirdLife had also asked the court to order a prohibitory injunction as "interim relief", and cited a previous such instance in a case filed by rule of law NGO Repubblika concerning the appointment of judges and magistrates. The court also rejected that request, noting that the Repubblika request concerned a human rights claim brought before the First Hall, Civil Court in its constitutional jurisdiction. The judge pointed out that the application filed by BirdLife did not concern human rights and the court was not a constitutional court. Moreover, the judge declared that an injunction and interim relief were two distinct procedures that could not be considered as one and the same. Birdlife's request was to be considered within the procedural framework for the issuance of an injunction, meaning it had to prove a *prima facie* right that such an injunction was necessary to safeguard that right, and that it would suffer prejudice unless its request for the injunction was upheld. When the other party was the government or some other constitutional authority, the applicant had to also prove that the action was planned and that if it went ahead as planned, the applicant would suffer a disproportionate prejudicial effect.

3.8 Upon the evidence put forward, the court concluded that such legal requisites had not been satisfactorily proved. The court noted that BirdLife's request to suspend Legal Notice 116/2022 was a request to suspend a law that is already in place, rather than to inhibit the relative authorities from doing something which had not yet taken place. The legal notice targeted by BirdLife had already taken effect and thus "there was no action which the court could inhibit." BirdLife also failed to establish exactly what *prima facie* right it was seeking to safeguard. The claim appeared to be that Turtle-doves would suffer prejudice unless the legal notice was suspended, yet figures included in a report put forward in evidence by the respondents (the government) showed that 46.5% of Malta's reference population breeds in Italy, with an increasing population trend (vide Table 13 [p.44] in Annex II to this report). Moreover, while the total national bag limit was 1,500 birds, there were 150,000 minimum breeding pairs. Finally the court observed that the alleged prejudice was neither disproportionate nor irremediable and thus it rejected Birdlife's request and revoked the injunction provisionally upheld on April 12.

[7]Legal Notice 116 of 2022 https://legislation.mt/eli/ln/2022/116/eng

4. Consideration of the conservation status of European Turtle-dove and Common Quail

4.1 As was also the case in previous years, prior to further consideration by the Malta Ornis Committee on whether or not to recommend to Government the application of a derogation, the Wild Birds Regulation Unit carried out an assessment of all latest available scientific data pertaining to the population status of the Turtle-dove (*Streptopelia turtur*) and Common Quail (*Coturnix coturnix*). This assessment was presented to the Malta Ornis Committee on 16 March 2022 and is contained in Annex 2 to this report, which also includes an update on the conservation status of the European Turtle-dove.

Common Quail (*Coturnix coturnix*)

4.2 The EU population status for Common Quail is Unknown, as the data reported were not sufficient to assess the population status of the species (EEA, 2020). The Common Quail has an IUCN Least Concern classification at global level but at European Level it was placed in a higher risk Red List category from Least Concern (2015) to **Near Threatened** (2021) (BirdLife International, 2021: 19). At EU level, the breeding population status is **Unknown** (EEA, 2020). This species is not included in the Pan-European Common Bird Monitoring Scheme.

4.3 During the current (2013–2018) Article 12 reporting period, the Italian population (95% of Malta's reference population) registered an increase in the long-term trend from the previous (2008–2012) status of unknown. However, the Hungarian population now stands at 5,000–10,000 *less* calling males than previously reported. **Malta's reference population retained a stable short-term trend status in the maximum number of calling males and improved the short-term trend status in the minimum number of calling males, from declining to stable. The long-term trend of the reference population remains unknown.**

European Turtle-dove (*Streptopelia turtur*)

4.4 This species is listed as **Vulnerable** at the European and global levels and **Near Threatened** within the territory of the European Union (BirdLife International, 2015a: 41). A ten-year (2018–2028) international single species action plan is in place *to restore the European Turtle-dove to a favourable population status so that it can be safely removed from the Globally Threatened categories of the IUCN Red List* (Fisher *et al.* 2018).

4.5 The European Bird Census Council (2021 update; 2019 base year) has shown that at Pan-European level, the Turtle-dove **declined by 82%** when compared with the 1980 baseline data and by 12% during the 10-year trend (2010–2019). Compared with the previous EBCC update, the Turtle-dove declined by an additional 2% in the long-term trend [from -80% to -82%] and increased by 5% in the short-term (10-year) trend [from -17% to -12%].

4.6 Based on the latest Article 12 reporting cycle (2013–2018), **the Turtle-dove reference population improved its short-term trend status from Decreasing to Stable** (Min. Pairs: -0.30%; Max. Pairs: -0.29%) and remained **Stable in the long-term trend** (Min. Pairs: -0.32%; Max. Pairs: -0.36%). During the previous reporting cycle (2008–2013), the decrease in the short-term trend of Malta's reference population was as follows: Min. Pairs: -13.02%; Max. Pairs: -10.61%. Thus, **in the short-term, the reference population increased by 12.7% (Min. Pairs) and 10.25% (Max. Pairs)**. However, it should be noted that **more than half the reference population (55%) is decreasing in the short-term trend**. In the long-term, the majority of the reference population (81%) is either decreasing (36%) or has an unknown trend (45%) but the overall trend remained stable at -0.32% in the minimum number of breeding pairs and -0.36% in the maximum number of breeding pairs. When compared with the previous trends (for Article 12 reporting period 2008–

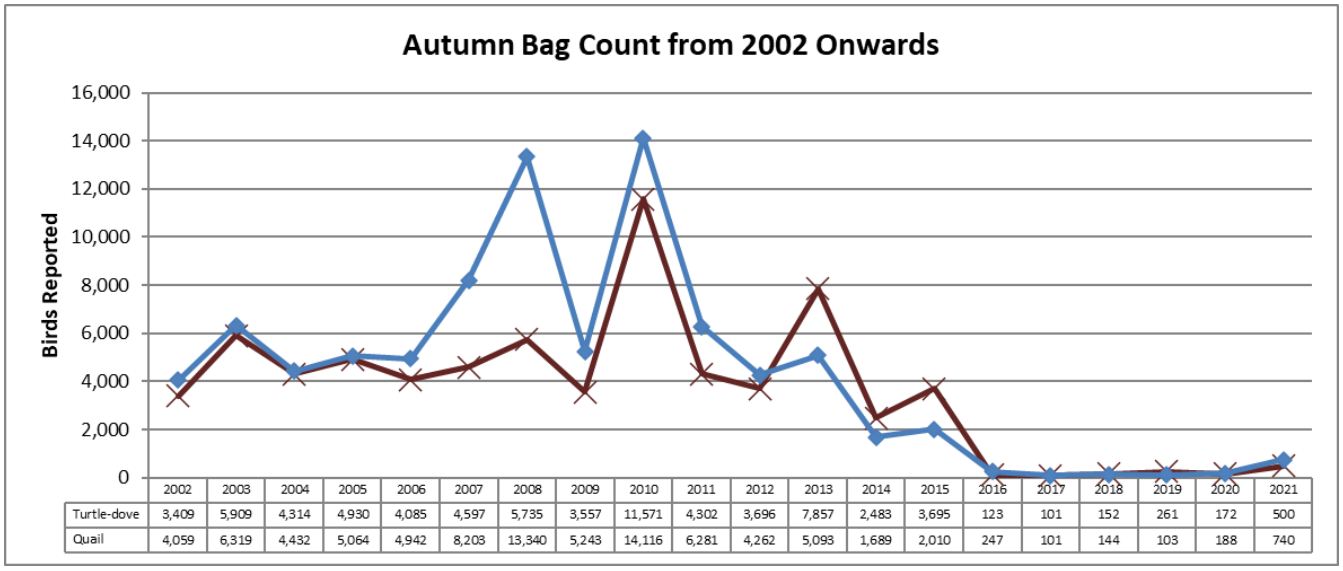
2012), this equates to an increase of 11.73% [(-0.32%) – (-12.05%)] in the minimum number of breeding pairs and an increase of 15.31% [(-0.36%) – (-15.67%)] in the maximum number of breeding pairs.

5. Consideration of autumn 2021 bag statistics, migration data and enforcement parameters

5.1 In 2021, there were 9,611 persons licensed to hunt birds on land. During the autumn hunting season, a total of 740 Common Quail (between 1st September 2021 – 31st January 2022) and 500 Turtle-doves (during September 2021) were reported hunted.

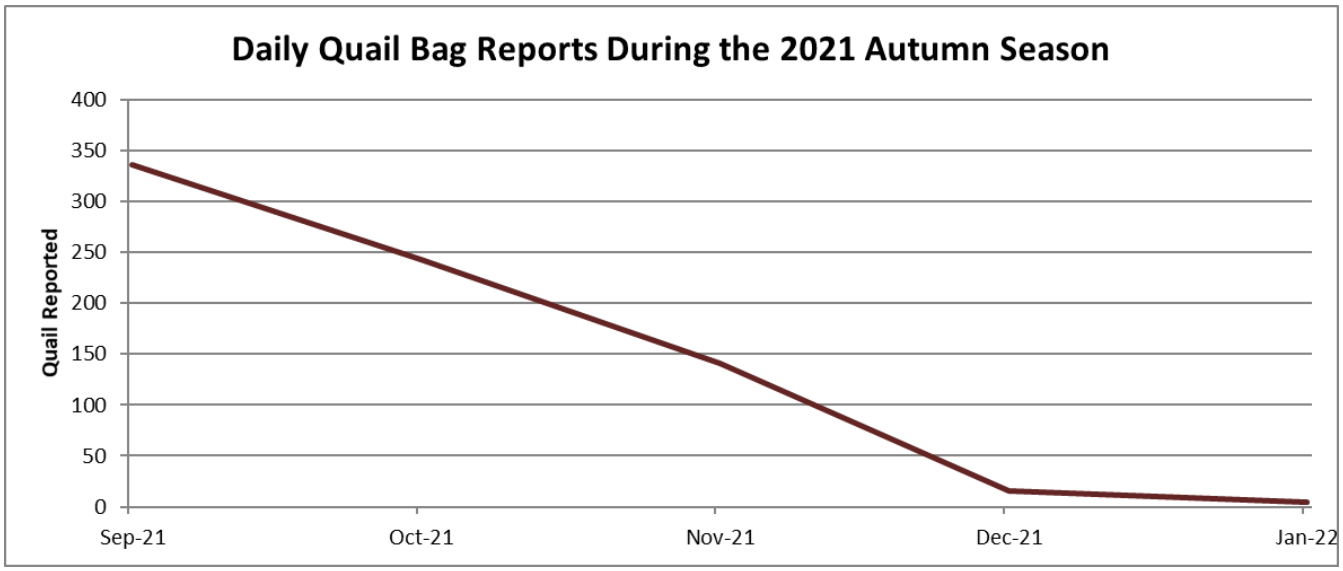
5.2 The total number of Quail reported hunted during the 2021 autumn season was higher than in 2020 (188). The total number of Turtle-doves reported hunted during the 2021 autumn season was higher than in 2020 (172).

Figure 1 - Quail and Turtle-dove reported during autumn seasons since 2002.



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Turtle-dove	3,409	5,909	4,314	4,930	4,085	4,597	5,735	3,557	11,571	4,302	3,696	7,857	2,483	3,695	123	101	152	261	172	500
Quail	4,059	6,319	4,432	5,064	4,942	8,203	13,340	5,243	14,116	6,281	4,262	5,093	1,689	2,010	247	101	144	103	188	740

Figure 2 - Reported catches for Quail between September 2021 and January 2022.



5.3 Detailed accounts of the reported catches by each month of the season (Figure 2, Table 1) were also considered.

Table 1 - Monthly catches of Common Quail and Turtle-dove in the autumn of 2021 / winter 2022

Month	**Quail**	**Turtle-dove**
September '21	336	500
October '21	243	N/A
November '21	141	N/A
December '21	16	N/A
January '22	4	N/A
Total	**740**	**500**

5.4 An independent **migration study** to estimate the influx of Turtle-dove and Quail during the peak migration period in the autumn of 2021 was conducted. The study aimed at surveying and scientifically monitoring the daily influx of Turtle-dove and Common Quail between 1st September and 31st October 2021 in order to estimate the overall presence (influx) of these two species per day and for the whole study period, subject to scientifically justified assumptions. The full report of the study is enclosed in Annex 1.

5.5 The methodology used by Ecoserv during the autumn 2021 survey was identical to that used in surveys made by the same company from autumn 2015 to autumn 2020 (Ecoserv, 2015–2020) and during the spring migration studies (Ecoserv, 2011–2021).

5.6 The survey design was aimed at assessing changes in migratory influx, which entails trend analysis based on data from monitoring carried out regularly over a sufficiently long period comprising subsequent years, and using the same methodology. During the survey, two individuals—a field assistant capable of identifying Turtle-dove and Common Quail and an observer who was responsible for recording of data in the field—were stationed at a total of 21 sites (= count stations) distributed over Malta, Comino and Gozo.

5.7 Prior to enrolment for the survey, the field assistants and observers (field personnel) were assessed by Ecoserv's environmental consultants and ecologists to ensure that they were capable of identifying the two bird species and were also briefed on the contractual procedures required for data collection. Throughout the survey, Ecoserv's environmental consultants and ecologists ensured close monitoring of the activities of the field personnel to ensure that collection of data proceeded as per designated protocol by carrying out field visits (most of which were surprise / unannounced visits) on a regular basis.

Migration observations of Common Quail

5.8 Raw daily counts for Common Quail recorded from any given site (out of the 21 sites) during the present study varied between 0 and a maximum of 4, while the mean daily counts ranged between 0 and 0.83. The recorded counts did not vary appreciably between the different sites: at the higher end, a total of 10 individuals were recorded from grid location 4073 located in northwest Malta; at the lower end, no Quail individuals were recorded throughout the survey period from grid location 6067 (southeast Malta).

5.9 Values of mean daily counts and total counts of Common Quail recorded during the period 1 September to 31 October 2021 from the present survey, as well as the respective area surveyed at each site, are given in Table 2. Values of standard deviation associated with the mean daily counts are also provided in Table 2. Standard deviation is a measure of the

variability among counts recorded from the different sites, that is, 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 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. These same values are also shown, along with values of mean counts for the same period in 2008, 2009 (Thomaidis, nd), 2014 (Ecoserv, 2014a), 2015 (Ecoserv, 2015a), 2016 (Ecoserv, 2016a), 2017 (Ecoserv, 2017a), 2018 (Ecoserv, 2018a), 2019 (Ecoserv, 2019a), and 2020 (Ecoserv, 2020a), in Figure 4. The daily mean counts recorded during the period 1 September to 31 October 2021 (present survey) are overall lower than values recorded in 2008 and 2009 (Thomaidis, nd) for the same period, but similar to those recorded in 2014–2020 (Ecoserv, 2014a; 2015a; 2016a; 2017a; 2018a; 2019a; 2020a). No migration peaks (with a mean count >2) were recorded during the 2021 survey. The general pattern from all years being compared is a main migratory influx between mid-September and mid-October.

5.10 Values of the grand mean for Common Quail counts for autumn 2021 (Ecoserv, 2021), 2020 (Ecoserv, 2020), autumn 2019 (Ecoserv, 2019), autumn 2018 (Ecoserv, 2018), autumn 2017 (Ecoserv 2017), autumn 2016 (Ecoserv 2016), autumn 2015 (Ecoserv 2015), autumn 2014 (Ecoserv, 2014a), and autumn 2008 and autumn 2009 (Thomaidis, nd) surveys, are shown graphically in Figure 3. The comparison in Figure 3 is based on data collected during the same period (1 September to 31 October) in each of the surveys. The grand mean recorded during the autumn 2021 survey is lower than that recorded during the 2008 and 2009 (Thomaidis, nd) surveys, but similar to values recorded during the 2014-2020 surveys (Ecoserv, 2014–2020).

Table 2 - Values of mean (± SD) daily count and daily total count recorded from the six study sites, together with total influx of migratory Common Quail

Date	Mean Count ± SD		Total Area Surveyed (km^2)	Total count	Estimated Daily Influx
01-Sep-21	0.00	± 0.00	0.162	0	0
02-Sep-21	0.00	± 0.00	0.182	0	0
03-Sep-21	0.00	± 0.00	0.148	0	0
04-Sep-21	0.00	± 0.00	0.242	0	0
05-Sep-21	0.00	± 0.00	0.162	0	0
06-Sep-21	0.17	± 0.41	0.182	1	1217
07-Sep-21	0.17	± 0.41	0.148	1	1493
08-Sep-21	0.00	± 0.00	0.242	0	0
09-Sep-21	0.33	± 0.52	0.162	2	2729
10-Sep-21	0.83	± 1.60	0.182	5	6085
11-Sep-21	0.00	± 0.00	0.148	0	0
12-Sep-21	0.50	± 0.84	0.242	3	2742
13-Sep-21	0.33	± 0.82	0.162	2	2729
14-Sep-21	0.00	± 0.00	0.182	0	0
15-Sep-21	0.00	± 0.00	0.148	0	0
16-Sep-21	0.17	± 0.41	0.242	1	914
17-Sep-21	0.17	± 0.41	0.162	1	1364
18-Sep-21	0.33	± 0.52	0.182	2	2434
19-Sep-21	0.17	± 0.41	0.148	1	1493
20-Sep-21	0.00	± 0.00	0.242	0	0
21-Sep-21	0.17	± 0.41	0.162	1	1364
22-Sep-21	0.00	± 0.00	0.182	0	0
23-Sep-21	0.33	± 0.52	0.148	2	2987
24-Sep-21	0.33	± 0.82	0.242	2	1828
25-Sep-21	0.00	± 0.00	0.162	0	0
26-Sep-21	0.33	± 0.52	0.182	2	2434

Date	Mean Count ± SD		Total Area Surveyed (km^2)	Total count	Estimated Daily Influx
27-Sep-21	0.00	± 0.00	0.148	0	0
28-Sep-21	0.33	± 0.82	0.242	2	1828
29-Sep-21	0.17	± 0.41	0.162	1	1364
30-Sep-21	0.00	± 0.00	0.182	0	0
01-Oct-21	0.00	± 0.00	0.148	0	0
02-Oct-21	0.33	± 0.82	0.242	2	1828
03-Oct-21	0.83	± 1.17	0.162	5	6821
04-Oct-21	0.50	± 0.84	0.182	3	3651
05-Oct-21	0.33	± 0.82	0.148	2	2987
06-Oct-21	0.17	± 0.41	0.242	1	914
07-Oct-21	0.50	± 1.22	0.162	3	4093
08-Oct-21	0.00	± 0.00	0.182	0	0
09-Oct-21	0.17	± 0.41	0.148	1	1493
10-Oct-21	0.33	± 0.52	0.242	2	1828
11-Oct-21	0.33	± 0.82	0.162	2	2729
12-Oct-21	0.00	± 0.00	0.182	0	0
13-Oct-21	0.33	± 0.82	0.148	2	2987
14-Oct-21	0.33	± 0.52	0.242	2	1828
15-Oct-21	0.00	± 0.00	0.162	0	0
16-Oct-21	0.00	± 0.00	0.182	0	0
17-Oct-21	0.00	± 0.00	0.148	0	0
18-Oct-21	0.33	± 0.82	0.242	2	1828
19-Oct-21	0.00	± 0.00	0.162	0	0
20-Oct-21	0.00	± 0.00	0.182	0	0
21-Oct-21	0.00	± 0.00	0.148	0	0
22-Oct-21	0.00	± 0.00	0.242	0	0
23-Oct-21	0.00	± 0.00	0.162	0	0
24-Oct-21	0.17	± 0.41	0.182	1	1217
25-Oct-21	0.00	± 0.00	0.148	0	0
26-Oct-21	0.00	± 0.00	0.242	0	0
27-Oct-21	0.00	± 0.00	0.162	0	0
28-Oct-21	0.00	± 0.00	0.182	0	0
29-Oct-21	0.33	± 0.82	0.148	2	2987
30-Oct-21	0.00	± 0.00	0.242	0	0
31-Oct-21	0.50	± 0.55	0.162	3	4093
Sum total				**62**	**76,289**

5.11 The highest mean count was recorded from Fomm ir-Riħ (Grid 4073) located in northwest Malta, while overall high counts were also recorded from SanBlas (Grid 3690) and Marsalforn (Grid 3292) in Gozo, and from Għallis (Grid 4878) and Ċirkewwa (Grid 3881) in north/northeast Malta. The lowest mean counts were recorded from San Tumas (Grid 6067), Comino (Grid 4085) and other sites mainly in the southern parts of Malta.

5.12 As has been done in previous surveys undertaken in autumn (Ecoserv, 2014–2019) and spring (Ecoserv, 2011–2020), the total influx of Common Quail was estimated for the whole area of the Maltese Islands using the recorded area surveyed for Common Quail at each site. However, such an estimate should be considered with great caution because of the assumption that the rate of Common Quail settling at coastal sites (where the survey was carried out) is equal to that at inland locations. While this appears to hold true during spring, observations indicate that Quail tend to settle in larger numbers in coastal areas compared to inland ones.

5.13 It was furthermore noted that Quail also tends to appear in certain localities before others (Fenech, 2010; Fenech, *in. litt.*). On the other hand, coastal areas are more likely to serve as short-term stopover sites immediately following a migratory flight compared to inland locations; thus, including inland locations as study sites in the survey may result in an overestimate of the total influx due to repeat counting of resident Quail.

5.14 To ensure that the total area used to estimate the migration count does not include regions within which Quail do not normally settle, even though some birds may fly over urbanized areas, the total area was calculated as the sum of agricultural areas (161.5 km^2), forested areas (2.1 km^2) and areas of natural vegetation (57.8 km^2); this amounts to 221.4 km^2, representing 72% of the 315 km^2 total area of the Maltese Islands (land cover data source: MEPA, 2010).

5.15 The mean (± SD) daily counts and estimated daily influx of birds per day are shown above in Table 2. The estimated daily influx was obtained by extrapolating the mean daily values obtained for the surveyed areas to an area of 221.4 km^2 obtained as explained above. Values of estimated daily influx were then summed to obtain an estimate of the total influx of migrating Quail for the eight-week study period. Based on these data, extrapolation translates to a total influx of Common Quail during 1 September – 31 October 2021 of 76,289 individuals, or some 1,251 Quail per day (Table 2).

Figure 3 - Grand mean of Common Quail counts made using data from the period 1 September – 31 October for autumn 2021 (Ecoserv 2021) and autumn 2014-2020 (Ecoserv, 2014; 2015; 2016; 2017; 2018; 2019; 2020) and autumn 2008 - 2009 (Thomaidis, nd)

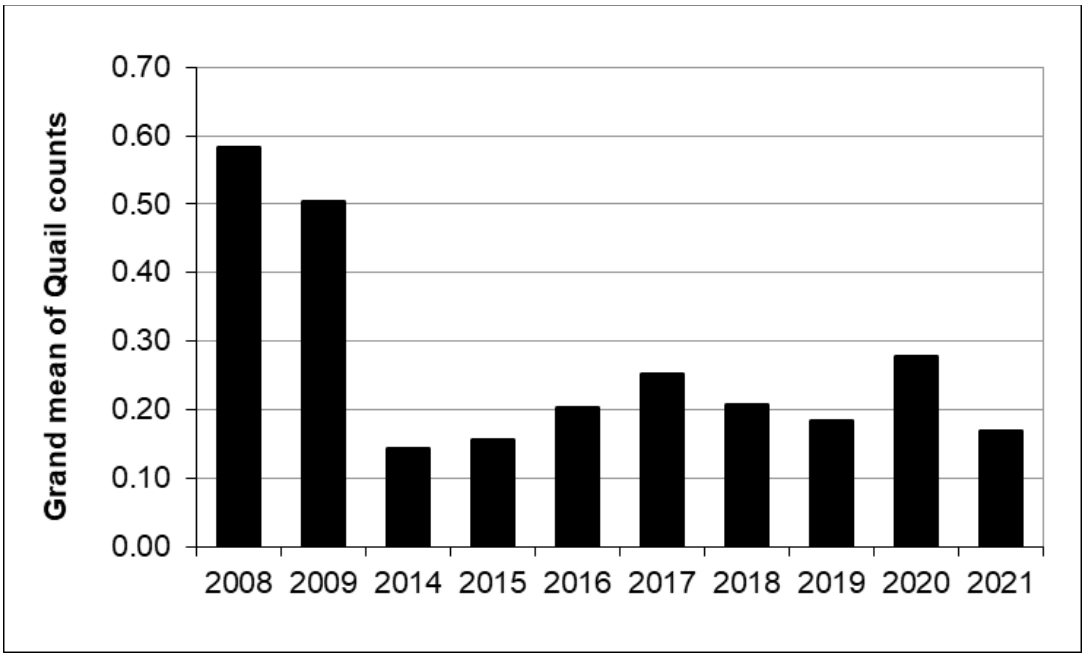
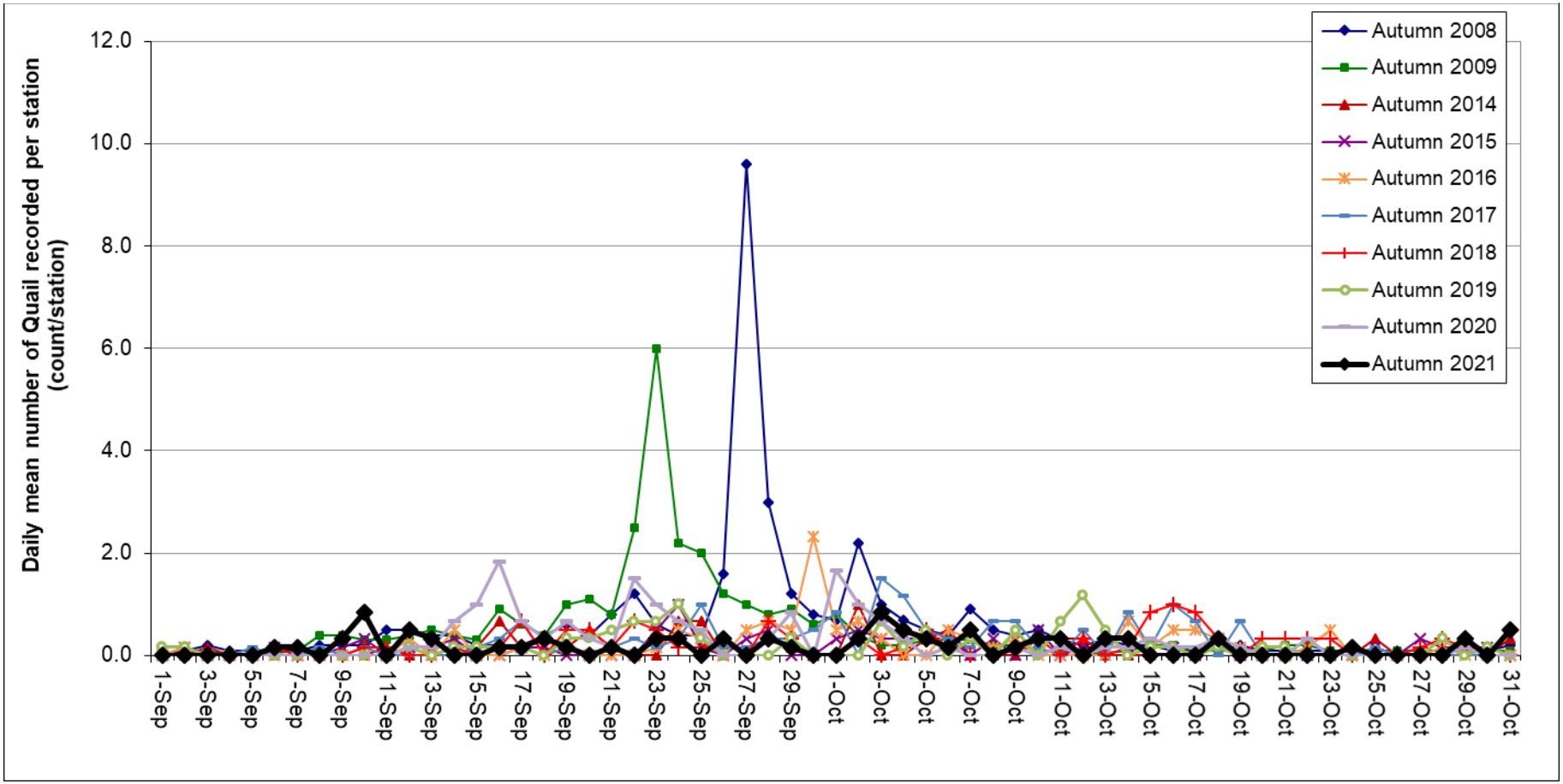


Figure 4 - Daily mean counts of Common Quail per station (= site) recorded during the present survey during the period 1 September to 31 October 2021, together with values of the same statistic for autumn 2008 and 2009 as reported in Thomaidis (nd), for autumn 2014, 2015, 2016, 2017, 2018, 2019 and 2020 as reported in Ecoserv (2014; 2015; 2016; 2017; 2018; 2019; 2020).



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Migration observations of Turtle-dove

5.16 Raw daily counts for Turtle-dove recorded from any given site (out of the 21 sites) during the autumn migration study 2021, varied between 0 and a maximum of 16, while the mean daily counts ranged between 0 and 3.5. A minor peak in migratory counts was recorded on 10 September. The recorded counts showed some variation between the different sites over the whole survey period: at the lower end, only one Turtle-dove individual was recorded throughout the survey period from grid locations 3690 (north Gozo), 3881 (north Malta), 5872 and 6067 (southeast Malta), while at the higher end, 54 Turtle-dove individuals were recorded from the site at grid location 4070 (northwest Malta).

5.17 Values of mean daily counts and total counts of Turtle-dove recorded during the period 1 September to 31 October 2021 are summarised in Table 3. Values of standard deviation associated with the mean daily counts are also provided in Table 3. As explained above for Common Quail, 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 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. These same values are also shown, along with values of mean counts recorded for the same period in 2008, 2009 (Thomaidis, nd), 2014 till 2020 (Ecoserv, 2014 - 2020) in Figure 6. Overall, counts recorded during the present survey show a similar trend to those recorded by Thomaidis (nd) in autumn 2008 and 2009, and by Ecoserv (2014a; 2015a; 2016a; 2017a; 2018a; 2019a; 2020a) in autumn 2014–2020; that is, the main migratory influx occurs during September, with occasional migratory peaks recorded in some years.

5.18 Values of the grand mean of Turtle-dove counts recorded during the period 1 September to 31 October 2021 from the present survey, together with values of the grand mean for the same period in 2008, 2009 (Thomaidis, nd), 2014, 2015, 2016, 2017, 2018, 2019 and 2020 (Ecoserv, 2014a; 2015a; 2016a; 2017a; 2018a; 2019a; 2020a) are shown in Figure 5. Overall, the grand mean recorded during the autumn 2021 falls within the range of those recorded during previous surveys held in autumn.

Table 3 - Values of mean (± SD) daily count and daily total count recorded from the six study sites, together with total influx of migratory Turtle-dove.

Date	Mean Count ± SD		Total count	Estimated Daily Influx
01-Sep-21	0.50	± 1.22	3	271
02-Sep-21	0.83	± 0.75	5	452
03-Sep-21	0.00	± 0.00	0	0
04-Sep-21	1.50	± 2.35	9	814
05-Sep-21	1.00	± 0.89	6	542
06-Sep-21	1.00	± 0.63	6	542
07-Sep-21	0.67	± 1.21	4	362
08-Sep-21	0.50	± 0.55	3	271
09-Sep-21	1.83	± 2.64	11	994
10-Sep-21	3.50	± 5.24	21	1899
11-Sep-21	0.33	± 0.82	2	181
12-Sep-21	0.33	± 0.82	2	181
13-Sep-21	0.67	± 1.63	4	362
14-Sep-21	0.67	± 1.03	4	362
15-Sep-21	1.33	± 0.82	8	723
16-Sep-21	0.83	± 0.75	5	452
17-Sep-21	0.50	± 0.84	3	271

Date	Mean Count ± SD		Total count	Estimated Daily Influx
18-Sep-21	0.50	± 0.84	3	271
19-Sep-21	0.33	± 0.52	2	181
20-Sep-21	0.17	± 0.41	1	90
21-Sep-21	1.67	± 3.20	10	904
22-Sep-21	0.67	± 0.82	4	362
23-Sep-21	0.17	± 0.41	1	90
24-Sep-21	0.67	± 0.82	4	362
25-Sep-21	0.50	± 0.84	3	271
26-Sep-21	0.00	± 0.00	0	0
27-Sep-21	0.33	± 0.52	2	181
28-Sep-21	0.00	± 0.00	0	0
29-Sep-21	0.00	± 0.00	0	0
30-Sep-21	0.33	± 0.82	2	181
01-Oct-21	0.17	± 0.41	1	90
02-Oct-21	0.67	± 0.82	4	362
03-Oct-21	1.50	± 3.67	9	814
04-Oct-21	0.67	± 0.82	4	362
05-Oct-21	0.50	± 1.22	3	271
06-Oct-21	0.00	± 0.00	0	0
07-Oct-21	2.67	± 6.53	16	1447
08-Oct-21	0.00	± 0.00	0	0
09-Oct-21	0.00	± 0.00	0	0
10-Oct-21	0.17	± 0.41	1	90
11-Oct-21	0.17	± 0.41	1	90
12-Oct-21	0.00	± 0.00	0	0
13-Oct-21	0.00	± 0.00	0	0
14-Oct-21	0.00	± 0.00	0	0
15-Oct-21	0.00	± 0.00	0	0
16-Oct-21	0.00	± 0.00	0	0
17-Oct-21	0.00	± 0.00	0	0
18-Oct-21	0.00	± 0.00	0	0
19-Oct-21	0.00	± 0.00	0	0
20-Oct-21	0.00	± 0.00	0	0
21-Oct-21	0.00	± 0.00	0	0
22-Oct-21	0.00	± 0.00	0	0
23-Oct-21	0.17	± 0.41	1	90
24-Oct-21	0.00	± 0.00	0	0
25-Oct-21	0.17	± 0.41	1	90
26-Oct-21	0.00	± 0.00	0	0
27-Oct-21	0.00	± 0.00	0	0
28-Oct-21	0.00	± 0.00	0	0
29-Oct-21	0.00	± 0.00	0	0
30-Oct-21	0.00	± 0.00	0	0
31-Oct-21	0.00	± 0.00	0	0
Sum total			**169**	**15,278**

5.19 The highest mean count was recorded from Mtaħleb (Grid 4070) located in northwest Malta, while overall high counts were recorded from other study sites located along the western parts of Malta and to a lesser extent from Marsalforn (Grid 3292) in Gozo. The lowest mean counts were recorded from Ċirkewwa (Grid 3881) in north Malta and from San Blas (Grid 3690) in north Gozo, while low counts were also recorded from several sites located on the southern and eastern sides of the Maltese Islands. The mean count recoded from the study site on Comino was 0.230, which was the median value for the whole range of recorded mean counts.

5.20 As has been done in previous surveys undertaken in autumn (Ecoserv, 2014a; 2015a; 2016a; 2017a; 2018a; 2019a; 2020a) and spring (Ecoserv, 2011; 2012; 2013; 2014b; 2015b; 2016b; 2017b; 2018b; 2019b; 2020b; 2021), an estimate of the total influx of Turtle-dove over the Maltese Islands was made using the daily counts. Extrapolations were then made to obtain the total number of individuals of this species that have migrated over the Maltese Islands on a particular date. However, as emphasised in reports from previous surveys (Ecoserv, 2014a; 2015a; 2016a; 2017a; 2018a; 2019a; 2020a), such an estimate must be treated with utmost caution, given that the Turtle-dove migration starts around the third week of August, which period is not covered by the present survey; the relatively small number of sites used; and that the counts were not made daily at each site.

5.21 Furthermore, passage of birds at different localities is extremely variable, with potential large differences in number of birds passing at two different localities, even if these are separated only by a very small distance. As already stated, the other limiting factor is that the field survey stops at 14:00 and does not start again before 07:00, hence potentially missing birds that arrive in the afternoon and during the night, which are usually seen at the very first light of day, many of which end up being shot within a very short time, and therefore these may have not been recorded by the field observers during the survey. On the other hand, the estimate given in the present report is useful when making comparisons between different years, assuming data from surveys based on a similar design are available to assess whether the trend in influx is increasing or decreasing with time. Since the coastal length surveyed at each site during the present survey is approximately 0.5 km, the mean daily count represents the mean influx of Turtle-dove per 0.5 km coastline.

5.22 The estimated daily influx was obtained by extrapolating the recorded mean daily values (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); 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 migrating Turtle-dove for the eight-week study period. Based on the mean daily counts, extrapolation translates to an estimated daily influx ranging between 0 and 1,899 individuals, with a total influx over the survey period (1 September to 31 October; i.e. 61 days) of 15,278 individuals, i.e. some 250 birds per day.

Figure 5 - Grand mean of Turtle-dove counts made using data from the period 1 September to 31 October for autumn 2021 (present survey), autumn 2014–2020 (Ecoserv, 2014a; 2015a; 2016a; 2017a; 2018a; 2019a; 2020a) and autumn 2008–2009 (Thomaidis, nd).

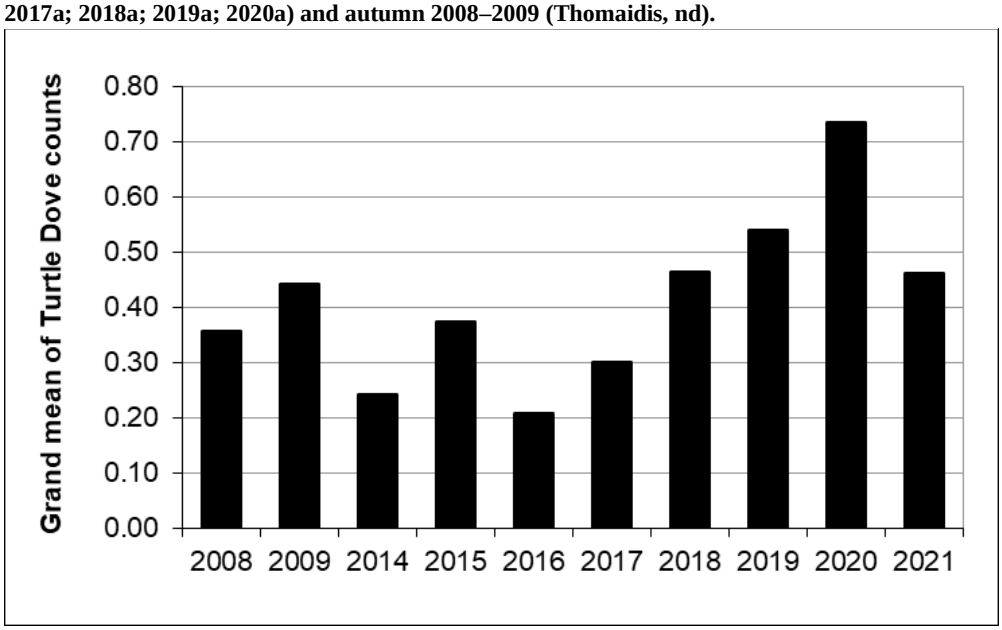


Figure 6 - Daily mean counts of Turtle-dove per station (= site) recorded during the present survey from1 September to 31 October 2021, together with values of the same statistic for autumn 2008 and 2009 as reported in Thomaidis (nd), and for autumn 2014, 2015, 2016, 2017, 2018, 2019 and 2020 as reported in Ecoserv (2014a; 2015a; 2016a; 2017a; 2018a; 2019a; 2020a).

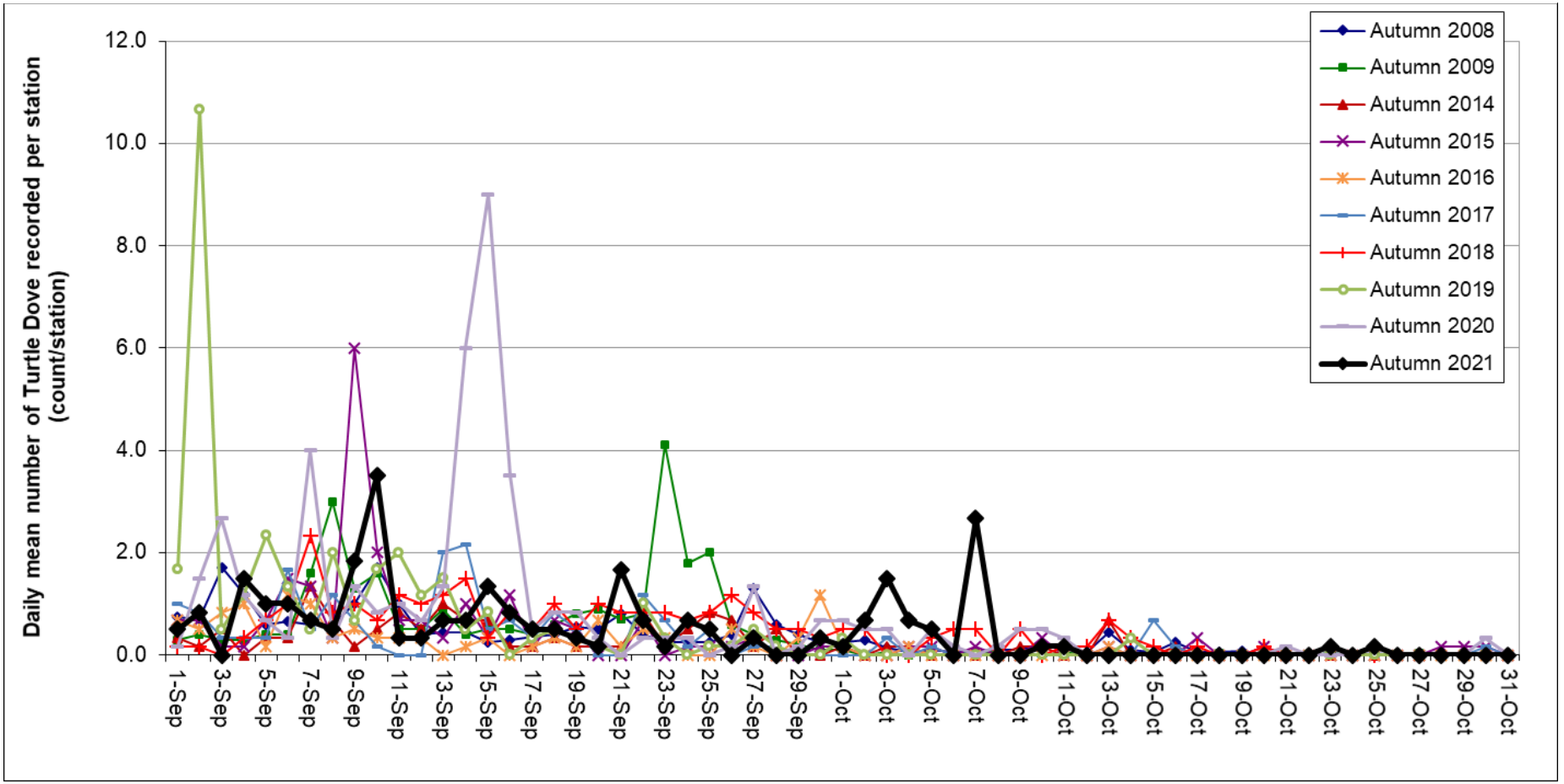


Figure 7 - Daily bag count of Common Quail during 2021 (blue line; values on left-side y-axis), together with the mean daily counts recorded during the 2021 survey (black line; values on right-side y-axis), for the period 1 September – 31 October 2021.

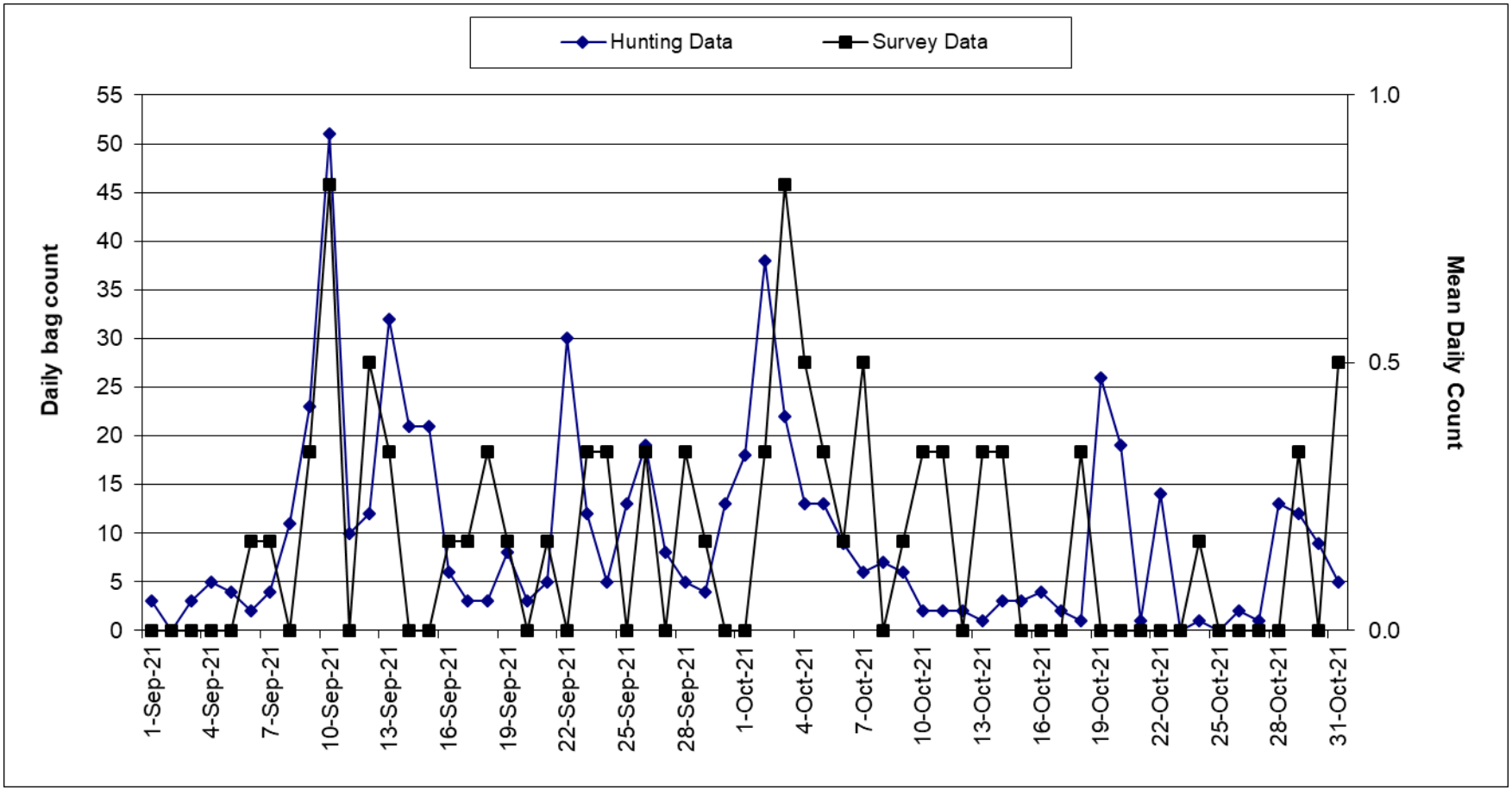
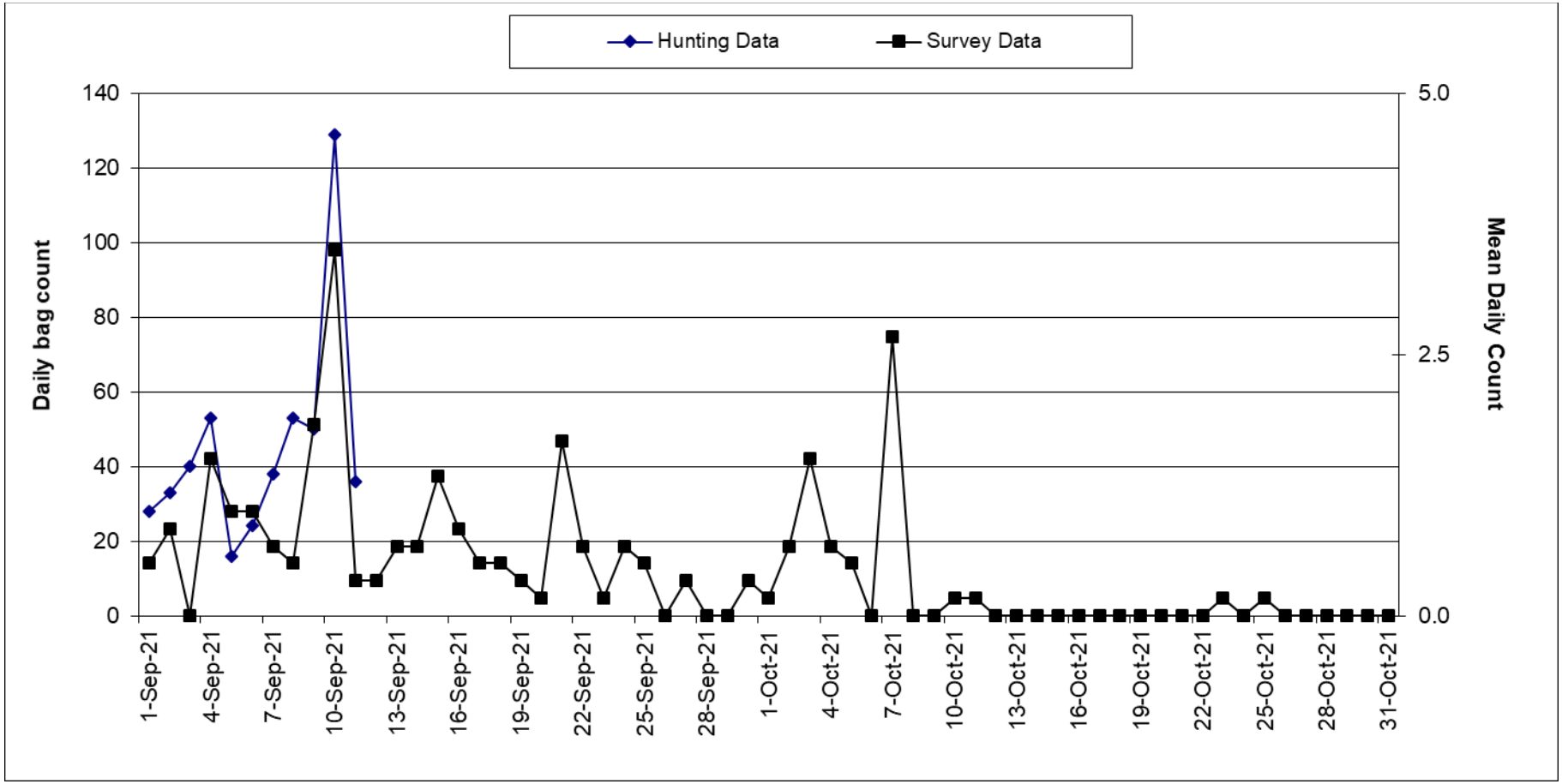


Figure 8 - Daily bag count of Turtle-dove during 2021 (blue line; values on left-side y-axis), together with the mean daily counts recorded during the 2021 survey (black line; values on right-side y-axis), for the period 1 September – 31 October 2021. It should be noted that bag counts after 11 September are all zero given that the hunting season for this species closed on this date.



Correlation of migration observations with reported bags

5.23 As was also the case in 2021, correlation between migration observation data was performed. This analysis shows a generally strong correlation between the number of catches reported by hunters in autumn and independent observations of migration (Figure 7 and Figure 8).

5.24 The above data on reported catches and observation trends were considered also in the context of the enforcement statistics pertaining to the 2021 autumn season summarised below.

Enforcement during 2021 autumn hunting season

5.25 During the autumn hunting season, the authorities deployed a maximum complement of 76 officers tasked with overseeing compliance with the parameters of the season. This complement consisted of 20 officers of the Environmental Protection Unit (EPU) of the Malta Police Force, ten officers of the Armed Forces of Malta (AFM), 15 Gozo Police officers, ten police officers temporarily seconded with the EPU from other police units, six WBRU officers and 15 environmental rangers responsible for patrols in terrestrial Natura 2000 sites, other protected and scheduled areas and public ODZ sites.

5.26 This enforcement complement of the Police Force and AFM was deployed gradually from the 1st of September until the 19th of October, with a daily field deployment ranging between a maximum of 19 officers and a minimum of nine officers in the field at any point in time from 05:00hrs to 15:00hrs and a maximum of 13 officers and a minimum of five officers in the field at any point in time from 15:00hrs to 21:00hrs. From the 20th October till the 10th January, the daily field deployment ranged between a maximum of 59 officers and a minimum of 44 officers in the field at any point in time from 05:00hrs to 15:00hrs and a maximum of 56 officers and a minimum of 37 officers in the field at any point in time from 15:00hrs to 21:00hrs. From the 11th of January till the end of January, the daily field deployment ranged between a maximum of 41 officers and a minimum of 25 officers in the field at any point in time from 05:00hrs to 15:00hrs and a maximum of 31 officers and a minimum of 16 officers in the field at any point in time from 15:00hrs to 21:00hrs. The indicated number of officers deployed includes all other non-field staff assigned on-duties related to the supervision of the season but excludes field staff on shift rotation.

5.27 In addition to this complement, the 15 environmental rangers were deployed daily on a twelve-hour shift from 06:30hrs to 18:30hrs on patrols in Terrestrial Natura 2000 sites, other protected and scheduled areas and public ODZ sites, whilst WBRU officers were active daily from 07:15hrs to 16:00hrs and provided on-call service during other hours. These officers reported illegal activities directly to the Police. The WBRU ensured effective operational liaison between enforcement entities and other stakeholders and provided 24/7 on-call enforcement service to the Police, the general public, and NGOs.

5.28 As was also the case in previous years, prior to the start of the season the Wild Birds Regulation Unit organised specialised training sessions to officers involved in enforcement of the season, both in Malta and in Gozo on enforcement priorities and techniques. Training sessions in Malta and Gozo were held prior to the opening of the hunting season. Over 34 attendees were trained in basic field ornithology, applicable regulations, principles of surveillance as well as counter-poaching operations and wildlife crime detection and prosecution techniques.

5.29 Enforcement authorities assigned a higher priority to spot-checks on individual licensees since 2018[8], and in 2021 this resulted in a total of 4,7048 spot-checks on individual licensees (3,876 in Malta and 828 in Gozo). In addition, police have also carried out 50

[8] Out of which 25 were road checks.

patrols at sea in order to ascertain compliance with legal requirements during hunting at sea.

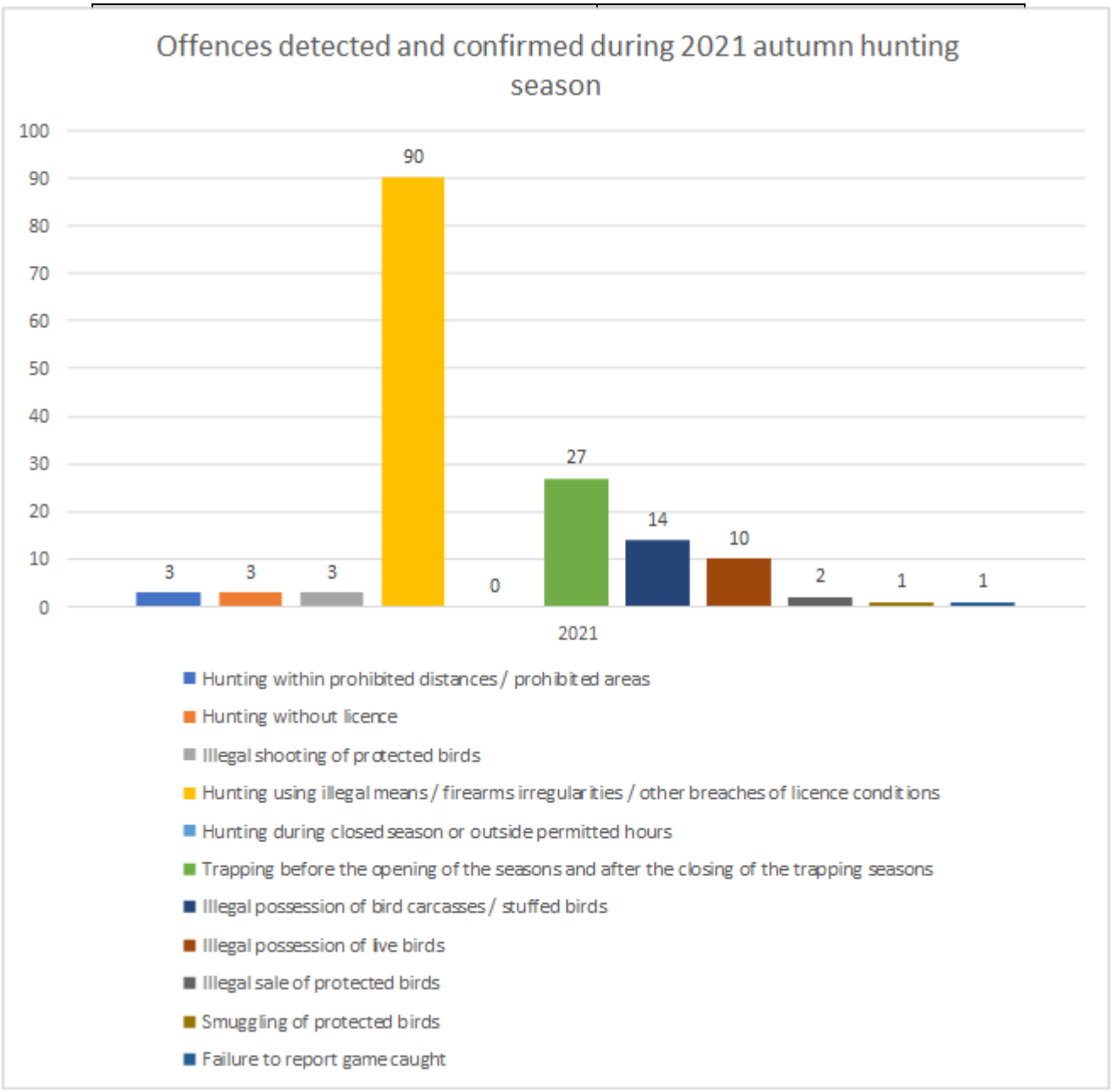
5.30 In the course of field surveillance, inspections and spot-checks, the authorities disclosed a total of 154 offences, of which five offences were committed by the same offender. Legal action was taken against 140 offenders, of which 65 persons were subject to criminal prosecution and 75 persons subject to administrative fines. No legal action could be taken on the remaining nine cases given that the perpetrator/s remained unknown to the police.

5.31 Additionally, during the eleven-day Turtle-dove hunting season (1st to 11th September) no infringements directly related to the hunting of this species were detected. However, after the closing of the season for this species, enforcement officers found a person in possession of eight Turtle-dove carcasses and another individual in possession of three unreported carcasses found in a freezer within his property. Legal action was initiated against bothindividuals.

5.32 The data in the Table 4 and Figure 9 shows hunting related offences which were detected and confirmed by enforcement officers. It should be noted that, for the purpose of these tables, cases comprising of more than one offence have been listed under the most grievous category, for example: 'Illegal shooting of protected birds' and 'Illegal possession of protected bird carcasses'.

Table 4 - Hunting offences detected and confirmed during autumn hunting season.

Figure 9 - Offences detected and confirmed during the 2021 autumn hunting season.

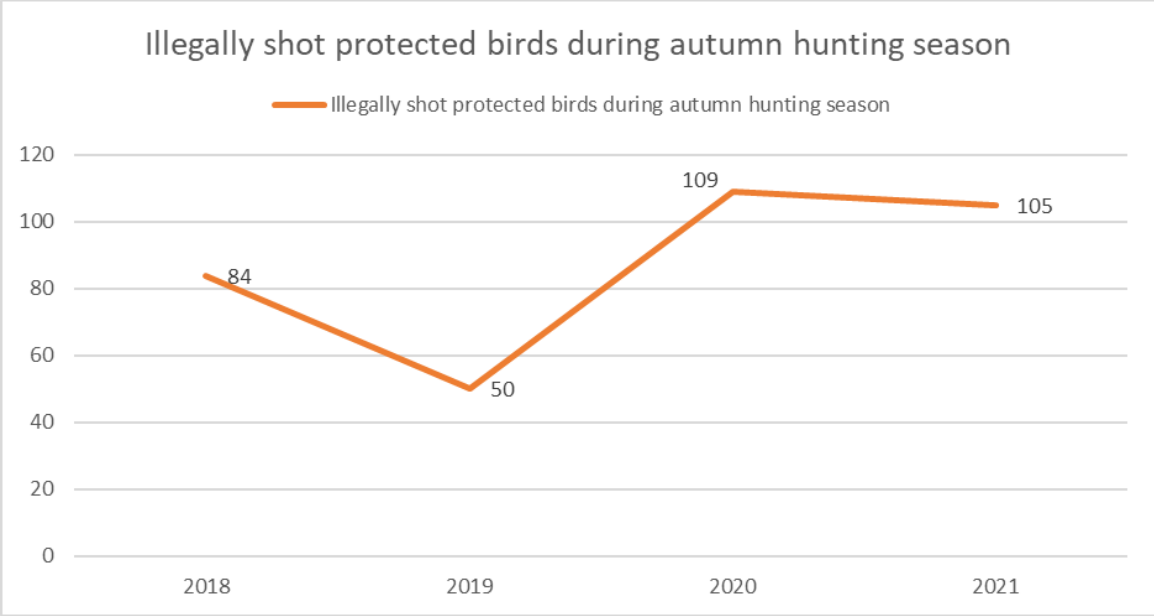


5.33 A procedure coordinated by the WBRU was put in place in conjunction with the Environmental Protection Unit, BirdLife Malta and the government-appointed veterinarian to provide appropriate veterinary care and, where possible, rehabilitation of wild birds. During the 2021 autumn hunting season, 286 injured wild birds belonging to 64 species were referred to the government-appointed veterinarian. These birds were provided with the appropriate veterinary care and in a number of cases, were successfully rehabilitated and released back into the wild. Of these, 105 protected birds (37%) were confirmed to have sustained gunshot wounds. This figure also includes a Turtle-dove

[9] Cases refer to hunting within less than 200m from inhabited areas.
[10] Cases refer to the illegal shooting of a Short-eared owl (*Asio flammeus*), illegal shooting of four Greater Flamingos (*Phoenicopterus roseus*) and the illegal shooting of a Mediterranean Gull (*Ichthyaetus melanocephalus*). Offences were carried out by individualsagainst whom legal action is being taken.
[11] Cases refer to 68 cases of use of bird caller whilst hunting and 22 cases of firearm irregularities (15 cases referred for court action and 7 cases subject to administrative fine).
[12] Total consists of 154 cases, 140 committed by known individualsleading to legal action (five individuals committed double offences) and nine cases committed by unknown individuals where no further legal action could be taken.
[13] 75 administrative fines and 65 court cases.

which was found in a decomposed state on the 22nd of September. Given its decomposed state, it cannot be excluded that it was hunted during the Turtle-dove open season for this species and not retrieved (the hunting season for Turtle-dove closed on 11th September as soon as the national bag limit was reached). The below figure illustrates the number of illegally shot protected birds during autumn hunting season over the past four years (2018–2021).

Figure 10 - The number of illegally shot protected birds during autumn hunting season recovered by the authorities over the past four years (2018-2021).



5.34 Recognising the fact that illicit trade and taxidermy of illegally acquired protected birds is a substantial driver behind illegal targeting of protected birds, the law enforcement authorities continued to dedicate substantial effort towards preventing, detecting and curtailing any potential abuse. During 2021, the WBRU together with the EPU and ERA officials inspected 1,676 stuffed bird specimens held in ten private collections. During these investigations, a total of 285 registered stuffed bird specimens were found to be illegally possessed and seized and another registered 708 specimens were found to have been illegally disposed. Legal action was initiated against the individuals.

5.35 WBRU was also involved in a joint inspection concerning the importation of a protected bird from overseas which led to the seizure of the specimen and legal action against the individual. During 2021, the compliance team also assisted the police and the government-appointed veterinarian in identifying and verifying the legality of other specimens pertaining to pending investigations.

6. Determination of the 2022 spring hunting bag limit and other parameters

6.1 Regulation 5 of the Framework Regulations (S.L. 549.57) stipulates the requirement for the establishment of an overall bag limit for a spring hunting season for Quail and for Turtle-dove, based on figures contained in Annex 1 to the same Regulations. The same Regulations also stipulate the requirement of taking into consideration the conservation status of the two species concerned and the maintenance of the population of both species at a satisfactory level when establishing the overall bag limit. Regulation 5 also provides for the requirement of establishing seasonal and daily bag limits per hunting licence.

6.2 The Regulations also establish that, should a spring hunting season be declared open, the overall national spring hunting limits would be set at not more than a ceiling limit of 5,000 for Quail and 11,000 for Turtle-dove, based on the principle of 1% of the total annual mortality of the species. They also establish that a spring hunting season will not be opened in cases where the number of birds hunted during the previous autumn season reaches 20,000 in the case of Quail and 21,000 in the case Turtle-dove. Furthermore, it should be noted that:

(i) the maximum bag limit for a spring hunting derogation may be fully allowed in cases where the number of Quail or Turtle-dove hunted during the previous autumn season does not exceed 10,000 individuals for each species respectively; and that,

(ii) the maximum bag limit for a spring hunting derogation should be reduced by inverse proportion to the number of birds hunted in excess of 10,000 or each species in the previous autumn season.

6.3 Since the total bag for the autumn 2021 hunting season was 740 Quail and 500 Turtle-dove (L.N. 341 of 2021[14]), the maximum limit of birds hunted in autumn as established by the Regulations in question (20,000 for Quail / 21,000 for Turtle-dove) was not reached. Moreover, since the numbers hunted did not exceed 10,000 individuals in either species, the maximum national bag limit allowed by law could have been applied.

6.4 However, the European Turtle-dove (*Streptopelia turtur*) was uplisted as Vulnerable on the IUCN global Red List of Threatened Species and, on the basis of Member States' reports under Article 12 of the Birds Directive, it was classified as Near Threatened within the territory of the European Union. Given the rapid decline an "International Single Species Action Plan for the Conservation of the European Turtle-dove 2018-2028" (ISSAP) was prepared in the context of the LIFE EuroSAP project. It was recommended for implementation by NADEG members in May 2018 and then adopted at COP 12 (October 2018) of the Convention on Migratory Species. After discussing the issue through workshops and ad-hoc meetings, the European Commission requested Member States forming part of the Central-Eastern Flyway and that hunt this species, to implement a compliance system if a hunting season of the Turtle-dove was foreseen. Malta has committed to implementthe measures recommended by the European Commission and limited the annual bag to a maximum 50% of the average off-take between 2013–2018. The 50% reduction in hunting bag of the average off-take between 2013–2018 for Malta adds up to 2,000 Turtle-doves. Legal Notice 341 of 2021[15] reduced the autumn national quota of the Turtle-dove from 7,000 to 500 birds, huntable in September only (from 1 to 30 September 2021, inclusive of both dates). Considering that 500 Turtle-doves were taken-up in September 2021 hunting season, a quota of 1,500 Turtle-doves for spring hunting season was proposed.

6.5 After taking into consideration all the parameters and the Malta Ornis Committee's recommendations, the Government removed the individual season's bag limit and the daily bag limit and recommended that the national bag limit for Quail is decreased to 2,400 and the national bag limit of 1,500 Turtle-dove in line with Legal Notice 116 of 2022, which declared the parameters of the derogation.

6.6 Based on the above, the 2022 spring hunting overall bag limit for Quail was thus set at 2,400 and 1,500 for Turtle-dove on condition that the season would be closed immediately should this national overall bag limit be reached before 30 April 2022.

[14] L.N. 341 of 2021 https://legislation.mt/eli/ln/2021/341/eng
[15] L.N. 341 of 2021https://legislation.mt/eli/ln/2021/341/eng

7. Application process and issuance of special spring hunting licences

7.1 In order to be eligible for a 2022 Spring Hunting Special Licence, a hunter was required to be in possession, by the time of application, of the following:

(a) Valid general licence to hunt birds on land;
(b) Paid-up membership in a recognised hunting organisation for 2022;
(c) Valid third party liability insurance cover for 2022;
(d) Valid permit to carry a firearm for hunting of birds on land issued by the Police.

7.2 Applications for a special spring hunting licence were received through the Game Reporting System (GRS) during a four-day period from 28 March to 31 March 2022. During this period, the GRS was switched over to an application call flow where callers in possession of a valid general hunting licence were guided via automated voice prompts and declarations to apply for a special licence. Applications received after the closing date of 31 March 2022 were not accepted.

7.3 The Wild Birds Regulation Unit received 8,057 applications for a spring hunting special licence. Upon verification, sixteen of these applications were considered invalid and thus rejected. The number of applications for the 2022 spring hunting season (8,057) was approximately 2% lower than in 2021 (8,231) and 7% higher than in 2020 (7,487).

7.4 A total of 8,041 licences were subsequently issued, 6,697 to applicants resident in Malta and 1,344 to applicants resident in Gozo. A total of 60 issued licences (44 in Malta and 16 in Gozo) remained unclaimed throughout the season leaving a total of 7,981 active licences. Details on minimum statutory enforcement deployment is provided in the enforcement section of this report.

7.5 Spring hunting licence conditions were established according to the provisions of the Framework Regulations (S.L. 549.57) and the provisions of Legal Notice 116 of 2022. Additionally, all licensed hunters were required to abide by the regulations laid down in the Conservation of Wild Birds Regulations (S.L. 549.42). A copy of the special spring hunting licence, including details of the licence conditions, is attached in Annex 3 to this report.

7.6 Hunters were required to carry their spring hunting licence and general licence at all times. They were also required to immediately report Quail and/or Turtle-dove caught by calling on 8000 2020, or by using the Game Reporting MT app. Hunters were also required to abide by the time restrictions and respect the national bag limits of 2,400 Quail and 1,500 Turtle-dove.These conditions were strictly monitored, supervised and enforced, as described in the enforcement section of this report.

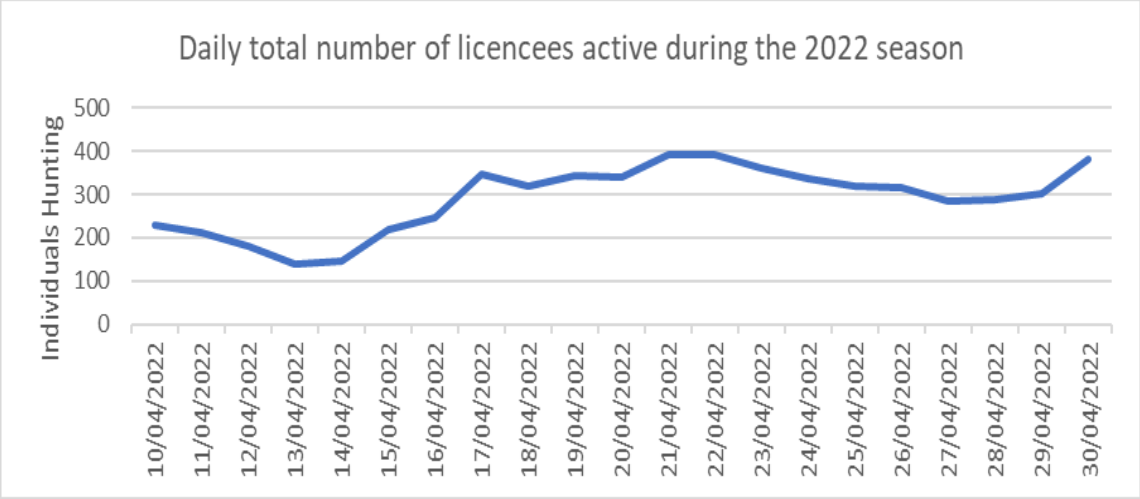
8. Activity Data (Hunting Effort)

8.1 During this year's spring hunting season, hunters were obliged to report 'hunting effort' after each hunting outing which did not result in any bagged game through the Telephone Game Reporting System or the Game Reporting mobile app.

8.2 Hunters were sent a reminder of this obligation on 9th April 2022 through an SMS to each registered mobile number and through a social media post on the WBRU's Facebook page. Reporting 'hunting effort' is a legal obligation as provided for by Regulation 12(9) and paragraph 1(c) of Schedule IV of S.L. 549.42. Subsequently, hunters who upon inspection were found to have failed to report their hunting effort were issued with an administrative fine of €50, in line with Schedule VIII of the same regulation.

8.3 During the 2022 spring hunting saeson, 529 individuals reported at least one bird caught whereas 903 individuals reported hunting effort only (no birds caught)—the data excludes individuals who were issued with a fine for failure to fulfil their reporting obligations (vide section 12 on enforcement). The maximum number of hunters active on any given day during the 2022 spring hunting season was 400, as shown in Figure 11.

Figure 11 - Individuals hunting during the open season.



9. Real-time Game Reporting System

9.1 Prior to the commencement of the season, as was also the case in previous years, the Wild Birds Regulation Unit carried out an intense information campaign to promote awareness of hunting regulations and enforce compliance with the legal obligations, including the hunters' reporting obligations. All hunters in possession of a spring hunting licence were reminded of their legal obligations through a letter sent together with the Spring Hunting Licence.

9.2 In accordance with Regulation 5(d) of the Framework Regulations (S.L. 549.57), hunters in possession of the special spring hunting licence were obliged to immediately notify the authorities of any Quail and/or Turtle-dove hunted during the season. The Special Licence required the hunters to do so by calling on the telephone reporting system via their mobile phones or through a mobile reporting app immediately after catching a Quail or Turtle-dove stating the amount of birds caught.

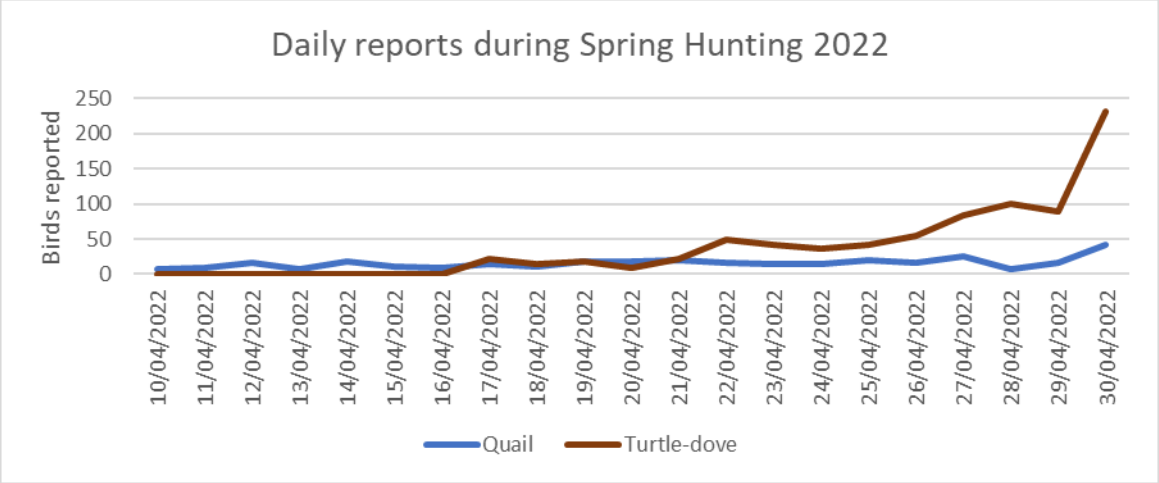
9.3 Each report was registered in a database. Only calls made from registered mobile numbers of hunters in possession of a Special Licence were accepted for reporting. The relevant data for reported Quail and Turtle-dove is presented in Table 5 and Figure 12 respectively.

Table 5 - Number of birds reported through the telephonic system

Date	Quail	Turtle-dove
10/04/2022	8	N/A
11/04/2022	9	N/A
12/04/2022	16	N/A
13/04/2022	8	N/A
14/04/2022	18	N/A
15/04/2022	10	N/A
16/04/2022	9	N/A
17/04/2022	14	22

18/04/2022	10	14
19/04/2022	18	19
20/04/2022	19	9
21/04/2022	20	22
22/04/2022	17	50
23/04/2022	14	42
24/04/2022	15	37
25/04/2022	20	41
26/04/2022	17	55
27/04/2022	25	84
28/04/2022	8	100
29/04/2022	17	89
30/04/2022	42	232
Total	**334**	**816**

Figure 12 - Daily total number of Quail reported during the 2022 spring hunting season – as reported through the telephonic system.



9.4 The total number of reported birds did not exceed any of the national overall bag limits—to the contrary, the totals based on reported figures are substantially lower. During the 2022 spring hunting, the total number of Quail reported equates to 13.9% of the limit permitted by law, while the total number of Turtle-dove reported equates to 54.4% of the limit. Table 6 provides data on the number of Quail and Turtle-dove caught. There were 187 hunters who reported Quail and 453 hunters who reported Turtle-dove during the 2022 spring hunting season.

Table 6 - Number of birds caught by hunters

Birds reported shot by hunter	Number of hunters declaring Quail	Number of hunters declaring Turtle-dove
1	114	280
2	42	98
3	14	34
4	9	20
5	4	7
6	1	6
7	1	2

8	0	1
9	1	1
10	0	2
>10	1	2

9.5 Hunters were bound by a legal obligation to report game caught immediately upon making a catch, thus allowing precise temporal data to be collected. Table 7 indicates percentages of Quail and Turtle-dove reports made within each hour time band.

Table 7 - Percentages of Quail reports made within each hour time band.

Time	Quail Reports (%)	Turtle-dove Reports (%)
05:00 - 06:00	0.0	0.0
06:00 - 07:00	3.9	9.3
07:00 - 08:00	17.0	20.3
08:00 - 09:00	17.0	18.6
09:00 - 10:00	19.8	15.0
10:00 - 11:00	20.7	17.2
11:00 - 12:00	21.6	19.6

10. Independent bird migration study in spring 2022

10.1 As was also the case in previous years, an independent scientific study was carried out in Spring 2022, in order to obtain an estimate of migratory influxes of Turtle-dove and Common Quail over the derogation period. The study was carried out by Ecoserv (2022) with the following main objective: *To survey and scientifically monitor the daily influx of the Turtle-dove and Common Quail; to estimate the overall presence (influx) of these two species per day and for the whole study period and to analyse observed and estimated migration trends in conjunction with the trends recorded in past studies, and in conjunction with any hunting data on the species surveyed*. The geographical scope of the study extended across the three inhabited islands of the Maltese archipelago (that is, Malta, Gozo and Comino), with data gathered between 15 March and 15 May 2022. A full copy of the report in question is attached in Annex 4, with key conclusions summarised below.

10.2 The methodology used in this study was identical to the methodology used for similar studies conducted in 2011–2021. Twenty-eight monitoring stations were set up across the Maltese Islands, with counts obtained from ten different sites each day. A field assistant capable of identifying the relevant species and an observer responsible to record data were posted to each station, in order to conduct counts of individuals. Each group of ten sites was surveyed once every three days, such that over a three-day period, all 28 sites would have been surveyed. Furthermore, wherever possible, the study site at Comino was included in the ten 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 at an alternative site (Qala, San Blas or Ramla tal-Bir) instead. Given that the study was mainly intended to quantify the influx of migrating individuals, field sites were located at strategic locations along the coast, which locations would be expected to serve as stop-over points for migrating individuals.

10.3 Counts obtained across this network of observation stations over the survey period for the Turtle-dove are given in Table 8 below.

Table 8 - Counts obtained forTurtle-dove across the network of observation stations over the study period.

Date	Total Daily Count
15-Mar-22	0
16-Mar-22	0
17-Mar-22	1
18-Mar-22	0
19-Mar-22	5
20-Mar-22	0
21-Mar-22	0
22-Mar-22	1
23-Mar-22	0
24-Mar-22	0
25-Mar-22	1
26-Mar-22	0
27-Mar-22	4
28-Mar-22	1
29-Mar-22	0
30-Mar-22	2
31-Mar-22	5
01-Apr-22	3
02-Apr-22	3
03-Apr-22	0
04-Apr-22	4
05-Apr-22	2
06-Apr-22	1
07-Apr-22	12
08-Apr-22	5
09-Apr-22	8
10-Apr-22	15
11-Apr-22	4
12-Apr-22	10
13-Apr-22	14
14-Apr-22	31
15-Apr-22	44
16-Apr-22	56
17-Apr-22	44
18-Apr-22	24
19-Apr-22	15
20-Apr-22	7
21-Apr-22	11
22-Apr-22	47
23-Apr-22	28
24-Apr-22	23
25-Apr-22	22
26-Apr-22	26
27-Apr-22	67
28-Apr-22	74
29-Apr-22	49
30-Apr-22	27
01-May-22	23
02-May-22	10
03-May-22	17
04-May-22	26
05-May-22	10
06-May-22	7
07-May-22	12

Date	Total Daily Count
08-May-22	9
09-May-22	8
10-May-22	10
11-May-22	14
12-May-22	5
13-May-22	11
14-May-22	7
15-May-22	4
Total	**869**

10.4 Daily raw counts for Turtle-dove recorded from the 28 sites during the present study varied between 0 and a maximum of 2, while the mean daily counts ranged between 0 and 7.40. Overall, counts recorded during the present survey show a similar trend to those recorded in previous surveys. The general pattern is of very low counts recorded in March and early April, with marginally higher counts recorded from mid-April to early May. The daily mean counts recorded during the present survey are similar to those recorded in previous years. Occasional peaks were recorded in some years: in 2008, a very high mean count (98, on 15-4-08) and a secondary peak (26, on 20-04-08) were recorded, while a single main peak was recorded in 2009 (33, on 23-04-09) and in 2018 (25, on 19-04-18); no mean counts greater than 20 were recorded in any of the other years, including during the 2022 survey (Figure 14).

10.5 Comparisons of the grand mean for the period 15 March to 15 May from the present (2022) study with that from other previous surveys is not possible since the latter covered much shorter periods. The main period which was covered by most surveys is from 10 to 30 April. Values of the grand mean of Turtle-dove counts recorded during this period (10 to 30 April) from the present (2022) survey, together with values of the grand mean for the same period in 2018, 2009 (Thomaidis, nd), 2012, 2013, 2014, 2016, 2019, 2020 and 2021 (Ecoserv, 2012; 2013; 2014; 2016; 2019; 2020; 2021), for the period 14 to 30 April 2015 (Ecoserv, 2015), for the period 10 to 14 April 2017 (Ecoserv, 2017), and for the period 10 to 21 April 2018 (Ecoserv, 2018) are shown in Figure 13. Overall, the grand mean recorded during the present (2022) survey during the period 10 to 30 April is similar to that recorded from most surveys held between 2012 and 2021, but lower than that recorded from surveys made in 2008, 2009 and 2018.

Figure 13 - Grand mean of Turtle-dove counts for data from the period 10 to 30 April recorded in spring 2022 (present survey) and spring 2008, 2009 (Thomaidis, nd), 2012, 2013, 2014, 2016, 2019, 2020 and 2021 (Ecoserv, 2012; 2013; 2014; 2016; 2019; 2020; 2021), together with the grand mean for data from the period 14 to 30 April recorded in spring 2015 (Ecoserv, 2015), from the period 10 to 14 April recorded in spring 2017 (Ecoserv, 2017), and from the period 10 to 21 April recorded in spring 2018 (Ecoserv, 2018).

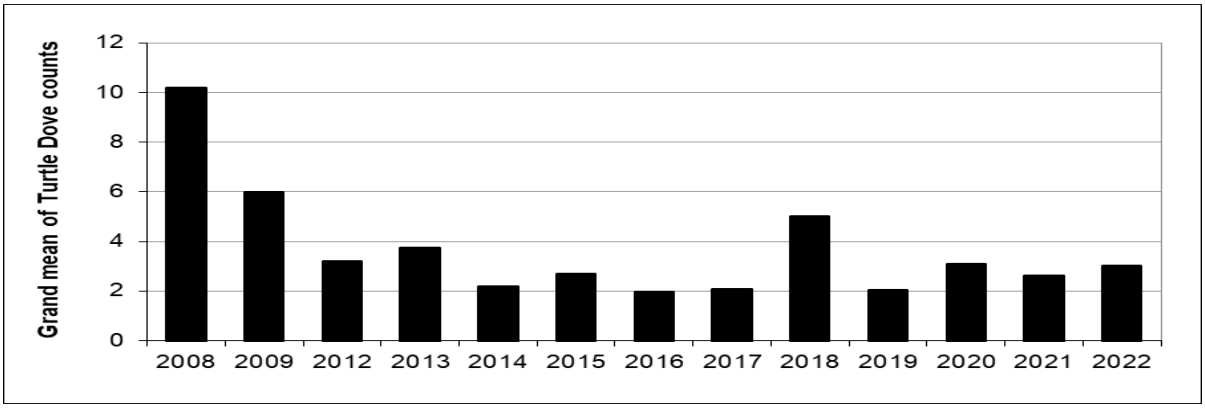
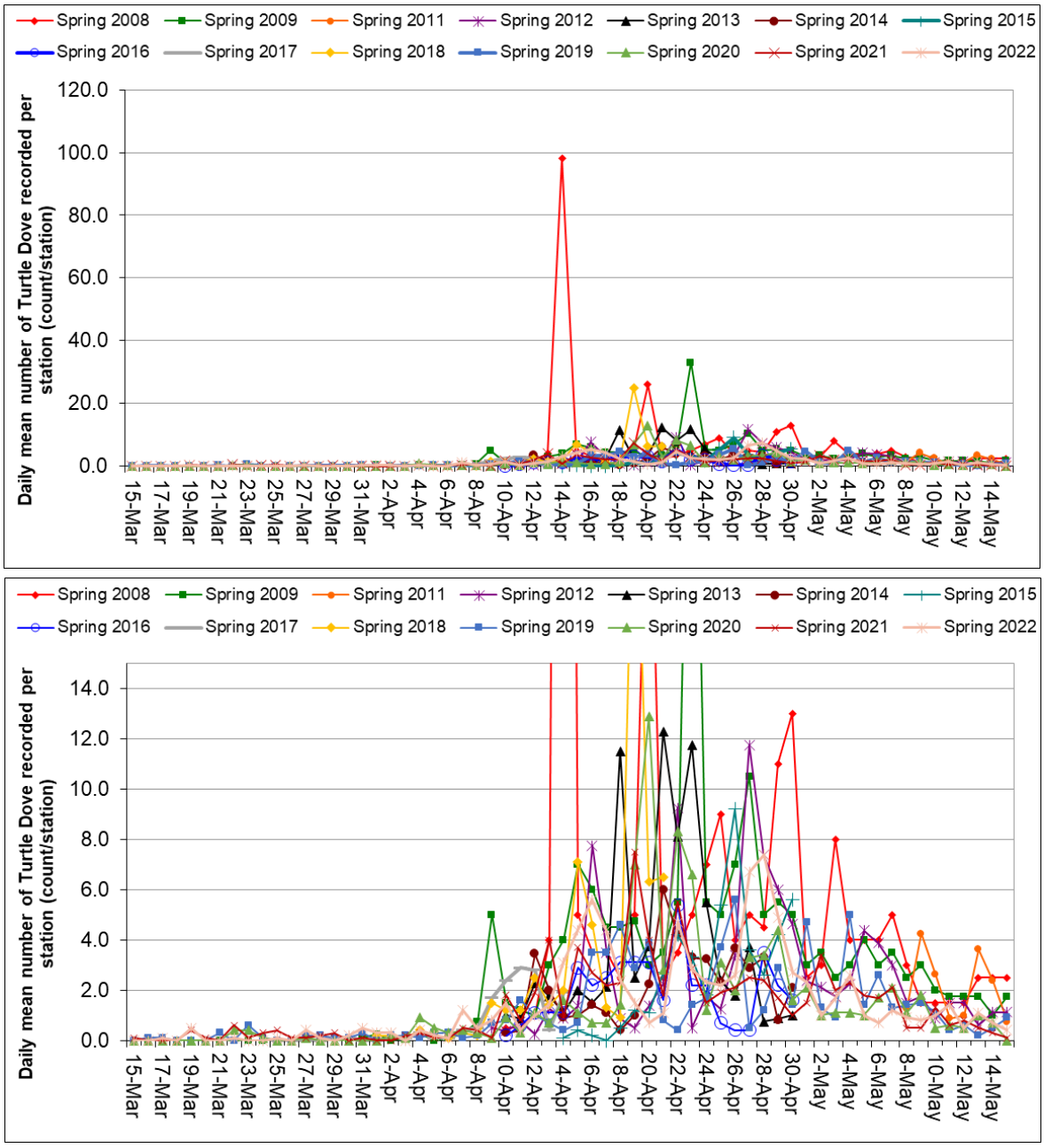


Figure 14 - Daily mean counts of Turtle-dove per station (= site) recorded during the present (spring 2022) survey held between 15 March and 15 May, together with values of the same statistic for: spring 2008 and 2009 as reported in Thomaidis (nd), spring 2012 as reported in Ecoserv (2012), spring 2013 as reported in Ecoserv (2013), spring 2014 as reported in Ecoserv (2014), spring 2015 as reported in Ecoserv (2015), spring 2016 as reported in Ecoserv (2016), spring 2017 as reported in Ecoserv (2017), spring 2018 as reported in Ecoserv (2018), spring 2019 as reported in Ecoserv (2019), spring 2020 as reported in Ecoserv (2020), and spring 2021 as reported in Ecoserv (2021). *Top*: graph showing all values including peak counts >20 individuals recorded in 2008, 2009 and 2018; *Bottom*: graph showing all values except the peak counts >20 individuals recorded in 2008, 2009 and 2018.



10.6 An estimate of the total influx of Turtle-dove over the Maltese Islands was made using the daily counts recorded from the 2022 survey. Extrapolations were then made to obtain the approximate total number of individuals of this species that are envisaged to have migrated over the Maltese Islands on a particular date. However, as emphasised in reports of surveys from previous years made in spring (Ecoserv, 2011; 2012; 2013; 2014; 2015; 2016; 2017; 2018; 2019; 2020; 2021), such an estimate must be treated with utmost caution, given the relatively small number of sites used on any one day and that the counts were not made daily at each site. Furthermore, passage of birds at different localities is extremely variable, with potential large differences in birds passing at two different sites, even if these are separated by a small distance. As

already stated in the introduction section above, the other limiting factor is that the field survey stops at 14:00 and does not start again before 07:00 of the following morning, hence potentially missing birds arriving late in the afternoon and early evening, as well as those arriving during the night, which may have not been recorded by the field observers during the survey.

10.7 On the other hand, the estimate given in the present report is useful when making comparison between different years, assuming data from surveys based on a similar design are available to assess whether the trend in influx is increasing or decreasing with time. Since the coastal length surveyed at each site during the present survey is approximately 0.5 km, the total influx of migrating Turtle-dove for the three-week study period was estimated by extrapolating the values obtained to the total coastline length for the Maltese Islands, which have a perimeter of 271.22 km (Mallia et al, 2002) . Based on the mean daily counts (Table 9), extrapolation translates to an estimated daily influx ranging between 0 and 4,014 individuals, with a total influx over the survey period (15 March to 15 May 2022; i.e. 62 days) of 47,136 individuals, i.e. some 760 birds per day.

Table 9- Estimated total influx of Turtle-dove during 2022 study period.

Date	Estimated Total Daily Influx
15-Mar-22	0
16-Mar-22	0
17-Mar-22	54
18-Mar-22	0
19-Mar-22	271
20-Mar-22	0
21-Mar-22	0
22-Mar-22	54
23-Mar-22	0
24-Mar-22	0
25-Mar-22	54
26-Mar-22	0
27-Mar-22	217
28-Mar-22	54
29-Mar-22	0
30-Mar-22	108
31-Mar-22	271
01-Apr-22	163
02-Apr-22	163
03-Apr-22	0
04-Apr-22	217
05-Apr-22	108
06-Apr-22	54
07-Apr-22	651
08-Apr-22	271
09-Apr-22	434
10-Apr-22	814
11-Apr-22	217
12-Apr-22	542
13-Apr-22	759
14-Apr-22	1682
15-Apr-22	2387
16-Apr-22	3038
17-Apr-22	2387
18-Apr-22	1302
19-Apr-22	814

Date	Estimated Total Daily Influx
20-Apr-22	380
21-Apr-22	597
22-Apr-22	2549
23-Apr-22	1519
24-Apr-22	1248
25-Apr-22	1193
26-Apr-22	1410
27-Apr-22	3634
28-Apr-22	4014
29-Apr-22	2658
30-Apr-22	1465
01-May-22	1248
02-May-22	542
03-May-22	922
04-May-22	1410
05-May-22	542
06-May-22	380
07-May-22	651
08-May-22	488
09-May-22	434
10-May-22	542
11-May-22	759
12-May-22	271
13-May-22	597
14-May-22	380
15-May-22	217
Total	**47,136**

10.8 Counts for Common Quail obtained across the twenty-eight monitoring stations set up across the Maltese Islands as described in section 10.2 are given in Table 10 below.

Table 10 - Counts obtained for Common Quail across the network of observation stations over the study period.

Date	Total Daily Count
15-Mar-22	6
16-Mar-22	3
17-Mar-22	2
18-Mar-22	2
19-Mar-22	2
20-Mar-22	2
21-Mar-22	9
22-Mar-22	6
23-Mar-22	1
24-Mar-22	4
25-Mar-22	1
26-Mar-22	8
27-Mar-22	1
28-Mar-22	4
29-Mar-22	8
30-Mar-22	5
31-Mar-22	5
01-Apr-22	4

02-Apr-22	2
03-Apr-22	8
04-Apr-22	4
05-Apr-22	5
06-Apr-22	2
07-Apr-22	5
08-Apr-22	2
09-Apr-22	6
10-Apr-22	1
11-Apr-22	3
12-Apr-22	5
13-Apr-22	5
14-Apr-22	4
15-Apr-22	4
16-Apr-22	6
17-Apr-22	3
18-Apr-22	1
19-Apr-22	4
20-Apr-22	8
21-Apr-22	0
22-Apr-22	2
23-Apr-22	5
24-Apr-22	2
25-Apr-22	2
26-Apr-22	5
27-Apr-22	3
28-Apr-22	0
29-Apr-22	1
30-Apr-22	1
01-May-22	1
02-May-22	4
03-May-22	2
04-May-22	2
05-May-22	3
06-May-22	0
07-May-22	0
08-May-22	0
09-May-22	1
10-May-22	0
11-May-22	2
12-May-22	0
13-May-22	0
14-May-22	1
15-May-22	0
Total	**188**

10.9 Daily raw counts for Common Quail recorded from the 28 sites during the present study varied between 0 and a maximum of 4, while the mean daily counts ranged between 0 and 0.90. Overall, counts recorded during the present study remained low during the entire

survey period. The general pattern observed in previous surveys is of low migratory counts in mid-March, which start to increase in late March, with the highest counts usually recorded in mid to end April, and a subsequent decline in counts during May. The daily mean counts recorded during the present survey are overall slightly lower than those in 2008 and 2009 (Thomaidis, nd) and similar to those in 2011–2021 (Ecoserv 2011; 2012; 2013; 2014; 2015; 2016; 2017; 2018; 2019; 2020; 2021). Minor peaks of around 2.0–3.0 were recorded in spring 2008, 2009, 2012 and 2020, while no mean counts greater than 1.5 were recorded in any of the other years, including in the 2022 survey.

10.10 The grand mean of Common Quail counts recorded during the period 15 March to 15 May from the present (2022) survey is 0.30, which is lower than the grand mean of 0.74 recorded over the same period in 2009, but similar to those recorded in 2019–2021 (0.25–0.40). Comparisons of the grand mean for the period 15 March to 15 May with other previous surveys is not possible since these covered much shorter periods. The main period which was covered by most surveys is from 10 to 30 April. Values of the grand mean of Common Quail counts recorded during this period (10 to 30 April) from the present (2022) survey, together with values of the grand mean for the same period in 2018, 2009 (Thomaidis, nd), 2012, 2013, 2014, 2016, 2019, 2020 and 2021 (Ecoserv, 2012; 2013; 2014; 2016; 2019; 2020; 2021), for the period 14 to 30 April 2015 (Ecoserv, 2015), for the period 10 to 14 April 2017 (Ecoserv, 2017), and for the period 10 to 21 April 2018 (Ecoserv, 2018) are shown in Figure 15. Overall, the grand mean recorded during the present (2022) survey for the period 10 to 30 April is similar to that recorded during the 2013–2021 surveys, but lower than that recorded in 2008, 2009 and 2012.

Figure 15 - Grand mean of Common Quail counts for data from the period 10 to 30 April recorded in spring 2022 (present survey) and spring 2008, 2009 (Thomaidis, nd), 2012, 2013, 2014, 2016, 2019, 2020 and 2021 (Ecoserv, 2012; 2013; 2014; 2016; 2019; 2020; 2021), together with the grand mean for data from the period 14 to 30 April recorded in spring 2015 (Ecoserv, 2015), from the period 10 to 14 April recorded in spring 2017 (Ecoserv, 2017), and from the period 10 to 21 April recorded in spring 2018 (Ecoserv, 2018).

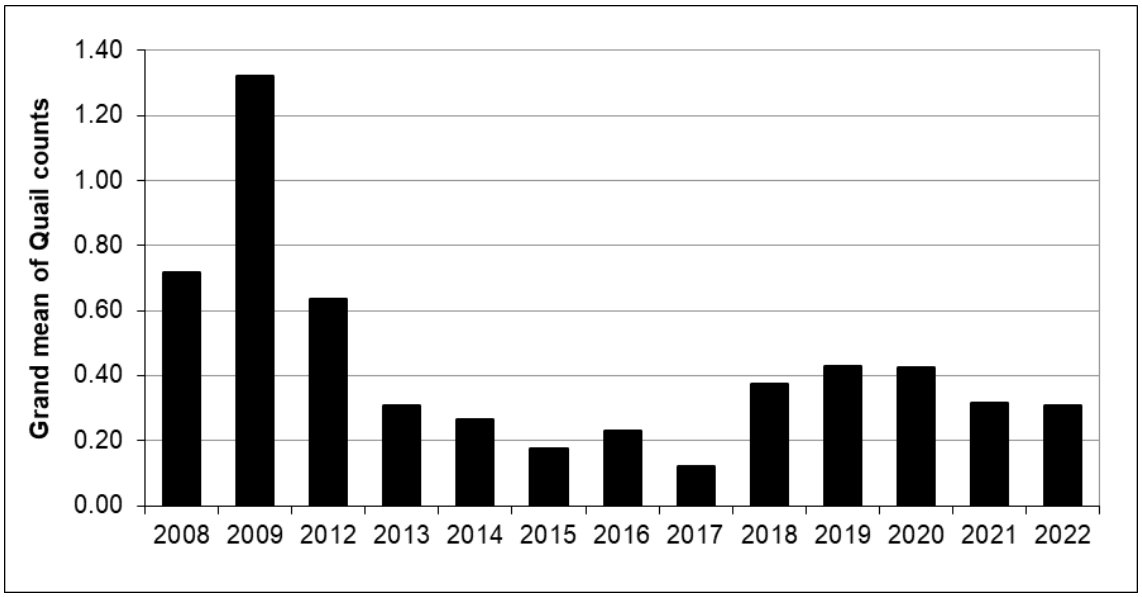
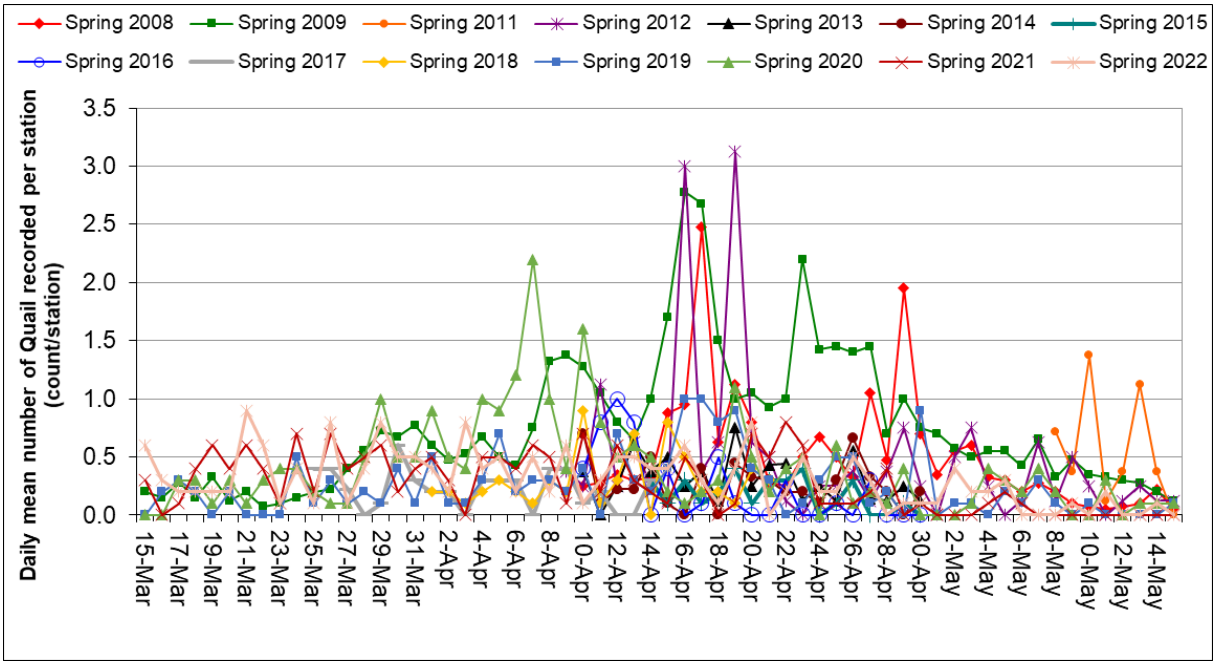


Figure 16 - Daily mean counts of Common Quail per station (= site) recorded during the present (spring 2022) survey held between 15 March and 15 May, together with values of the same statistic for: spring 2008 and 2009 as reported in Thomaidis (nd), spring 2012 as reported in Ecoserv (2012), spring 2013 as reported in Ecoserv (2013), spring 2014 as reported in Ecoserv (2014), spring 2015 as reported in Ecoserv (2015), spring 2016 as reported in Ecoserv (2016), spring 2017 as reported in Ecoserv (2017), spring 2018 as reported in Ecoserv (2018), spring 2019 as reported in Ecoserv (2019), spring 2020 as reported in Ecoserv (2020), and spring 2021 as reported in Ecoserv (2021).



10.11 The total influx of Common Quail was estimated for the whole area of the Maltese Islands using the recorded area surveyed for Quail at each site. However, such an estimate requires the following assumptions: (i) the rate of Quail settling at coastal sites (where the survey was carried out) is equal to that at inland locations, and (ii) the total area used to estimate the migration count does not include areas where settlement of Quail cannot occur in practice. Since Quail tend to migrate to inland sites, settling of Quail in coastal areas will likely be less than or equal to that in inland regions, but not greater, meaning that the estimated total may be an underestimate. The use of only coastal sites is still justified since these are more likely to serve as short-term stopover sites immediately following a migratory flight than inland locations; thus, including inland locations may result in an overestimate of the total influx due to repeated counting of resident Quails.

10.12 To ensure that the total area used to estimate the migration count does not include regions within which Quail do not normally settle, even though some birds may fly over urbanized areas, the total area was calculated as the sum of agricultural areas (161.5 km^2), afforested areas (2.1 km^2) and areas of natural vegetation (57.8 km^2); this amounts to 221.4 km^2, representing 72% of the 315 km^2 total area of the Maltese Islands (land cover data source: MEPA, 2010). The estimated total influx of birds per day are shown in Table 11. Based on this data, extrapolation translates to a total influx of Common Quail during 15 March to 15 May 2022 of 138,658 individuals, or some 2,236 Quail per day. However, as emphasised in the reports of previous surveys (Ecoserv, 2011-2021), such an estimate must be treated with utmost caution, given the relatively small number of field sites used on any one day and that counts were not made daily at each site, such that only a very small portion of the total area of potential habitat in the Maltese Islands was sampled.

Table 11 - Estimated total influx of Common Quail in 2022 study period.

Date	Estimated Daily Influx
15-Mar-22	5298
16-Mar-22	1476
17-Mar-22	1575
18-Mar-22	1766
19-Mar-22	984
20-Mar-22	1575
21-Mar-22	7946
22-Mar-22	2951
23-Mar-22	788
24-Mar-22	3532
25-Mar-22	492
26-Mar-22	6300
27-Mar-22	883
28-Mar-22	1967
29-Mar-22	6300
30-Mar-22	4415
31-Mar-22	2459
01-Apr-22	3150
02-Apr-22	1766
03-Apr-22	3935
04-Apr-22	3150
05-Apr-22	4415
06-Apr-22	984
07-Apr-22	3938
08-Apr-22	1766
09-Apr-22	2951
10-Apr-22	788
11-Apr-22	2649
12-Apr-22	2459
13-Apr-22	3938
14-Apr-22	3532
15-Apr-22	1967
16-Apr-22	4725
17-Apr-22	2649
18-Apr-22	492
19-Apr-22	3150
20-Apr-22	7063
21-Apr-22	0
22-Apr-22	1575
23-Apr-22	4415
24-Apr-22	984
25-Apr-22	1575
26-Apr-22	4415
27-Apr-22	1476
28-Apr-22	0
29-Apr-22	883

30-Apr-22	492
01-May-22	788
02-May-22	3532
03-May-22	984
04-May-22	1575
05-May-22	2649
06-May-22	0
07-May-22	0
08-May-22	0
09-May-22	492
10-May-22	0
11-May-22	1766
12-May-22	0
13-May-22	0
14-May-22	883
15-May-22	0
Total	**138,658**

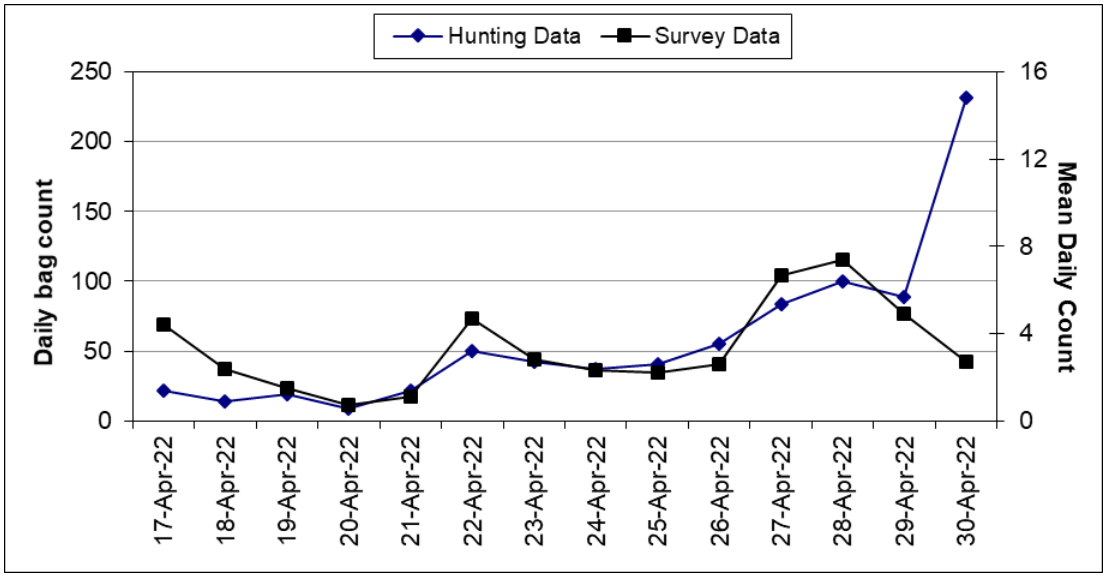
11. Comparison between migration study data and game reporting data

11.1 A comparative analysis of data from the monitoring study with bag data was undertaken. The bag dataset comprises the daily bag count of Turtle-dove (as reported by hunters through a telephone reporting system and the Game Reporting MT app) for the period 17 to 30 April 2022, and the daily bag count of Common Quail (as reported by hunters through a telephone reporting system and the Game Reporting MT app) for the period 10 to 30 April 2022. It should be noted that the two sets of data were collected for different purposes and using very different methodologies; therefore, the magnitudes of values are not directly comparable. However, the temporal trends can be expected to follow similar patterns; that is, within the same season the periods when higher mean daily counts were recorded during the monitoring survey should broadly follow the days when higher numbers of Turtle-dove or Common Quail were caught (and reported in the bag data). Graphical representations of the mean or total daily counts made during the 2022 survey and the daily bag counts for the same period (10 to 30 April 2022 or 17 to 30 April 2022) for Turtle-dove and Common Quail were compared.

11.2 The daily bag counts indicating the number of Turtle-dove caught during the 2022 spring hunting season made during the 2022 survey are shown in Figure 17. As already noted, the magnitudes of the bag counts and those of the total counts made in the 2022 survey are not directly comparable; hence the two sets of values are on different scales. Therefore, in Figure 17, two separate y-axes are used: the bag count data is plotted on the left-side y-axis, whereas the counts from the 2022 survey are plotted on the right-side y-axis.

11.3 Overall, the general trend of daily counts made during the 2022 survey is of relatively similar counts between 17 and 30 April, with small peaks on 22 and 27-28 April. The bag count data includes a similar trend of relatively similar counts between 17 and 29 April, with marginally higher numbers on 22 and 27-28 April, but also an appreciable increase in bag counts during the last day of the spring hunting season, when the bag count was more than twice that recorded on any of the other days. Therefore, overall, there was a similar temporal trend of slightly higher counts on 22 and 27-28 April in both the daily counts made during the present survey and the bag count data, but the bag count data showed a significant peak in counts on 30 April, whereas no such increase in daily counts made on 30 April 2022 was recorded during the 2022 survey.

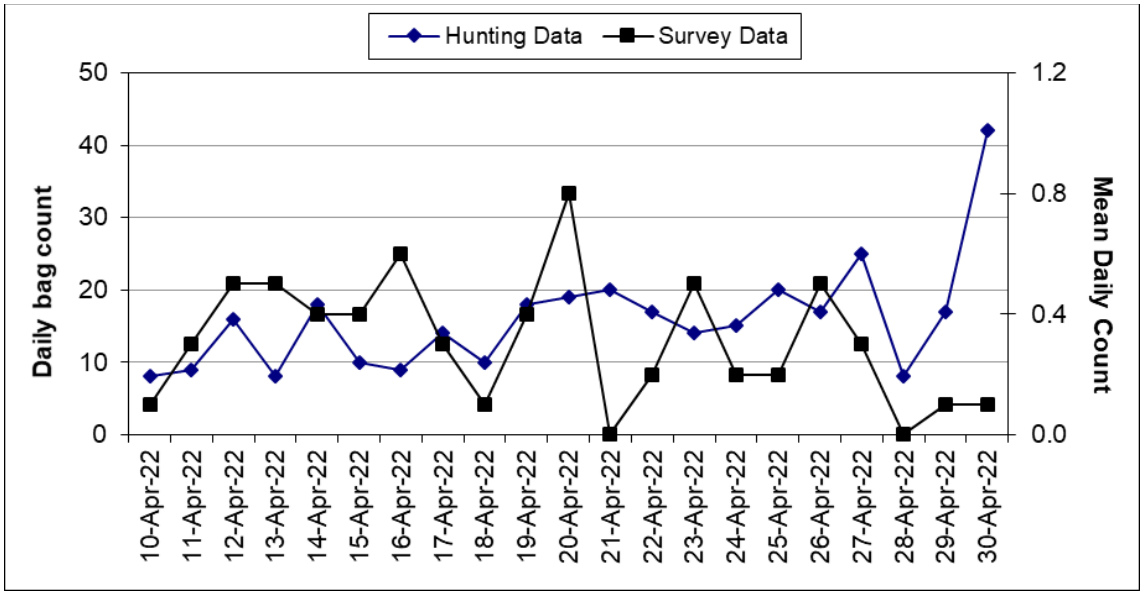
Figure 17 - Daily bag count of Turtle-dove during 2022 (blue line; values on left-side y-axis), together with the mean daily counts recorded during the 2022 survey (black line; values on right-side y-axis), for the period 17 – 30 April 2022.



11.4 The daily bag counts indicating the number of Common Quail caught during the 2022 spring hunting season are shown in Figure 18. As already noted, the magnitudes of the bag counts and those of the mean/total counts made in the 2022 survey are not directly comparable; hence the two sets of values are on different scales. Therefore, in Figure 18 two separate y-axes are used: the bag count data is plotted on the left-side y-axis, whereas the counts from the 2022 survey are plotted on the right-side y-axis.

11.5 The daily counts made during the 2022 survey include day-to-day fluctuations, but the overall pattern is of similar counts recorded throughout the period 10–30 April with marginally higher counts on some days between 12 and 26 April. No overall trend of increase or decrease in daily survey counts is discernible over most of the survey period but counts made from 28 to 30 April were lower than on most previous days. The bag count data also included an overall pattern of similar counts recorded throughout the period 10–29 April, but with an appreciable increase in bag counts during the last day of the spring hunting season. Therefore, overall, there was a similar temporal trend of similar counts between 10 and 29 April in both the daily counts made during the present survey and the bag count data, but with an increase in the bag count in the last day of the open season (30 April), which is not reflected in the daily counts made during the 2022 survey. It should be noted, however, that the total daily counts made during the 2022 survey were low, which introduces an additional difficulty in making interpretations of these comparisons.

Figure 18 - Daily bag count of Common Quail during 2022 (blue line; values on left-side y-axis), together with the mean daily counts recorded during the 2022 survey (black line; values on right-side y-axis), for the period 10 – 30 April 2022.



12. Enforcement

12.1 The Maltese authorities sought to maintain the level of enforcement effort deployed during previous spring hunting seasons. The Framework Regulations (S.L. 549.57) stipulate that a minimum of seven (7) enforcement officers for every 1,000 licensed hunters are required to be deployed during hunting hours. A total of 8,041 hunters (6,697 in Malta and 1,344 in Gozo) were issued with a spring hunting licence in 2022 and therefore a minimum of 57 enforcement personnel were needed in accordance with national legislation to supervise the derogation period (in the region of 47 officers in Malta and 10 in Gozo). Out of the total special licences issued, a total of 60 special licences remained uncollected (44 in Malta and 16 in Gozo), thus 7,981 individuals were in possession of a special licence.

12.2 Field surveillance and patrols were deployed from within the Environment Protection Unit (EPU) of the Malta Police Force with additional support from the 11 district police areas and from the Armed Forces of Malta, the Compliance Team of the Wild Birds Regulation Unit and Environmental Rangers from Ambjent Malta.

12.3 Prior to commencement of the season, enforcement officers received specialised training delivered by officials of the Compliance Section of the Wild Birds Regulation. Five training sessions were held: two in Malta and three in Gozo. In all, around 40 members of enforcement personnel participated in this training. Officers who attended the training sessions as well as all officers participating in enforcement received detailed information through digital platforms, namely:

- The legal framework concerning the conservation of wild birds;
- Legal requirements pertaining to the spring hunting season;
- Monitoring and surveillance techniques and approaches;
- Basic species identification skills;
- Inspections;
- Hotspots and areas requiring particular attention;
- Potential law enforcement evasion techniques deployed by poachers.

12.4 The objectives of training and enforcement operations are:

- To ensure continuous deployment presence in the countryside to deter any potential abuse from occurring in the first place;

- To ensure that no illegal targeting of species other than Quail and Turtle-dove occurs, and that any detected incidents of abuse are dealt with swiftly and effectively (that is, apprehension of suspects and gathering sufficient field evidence to enable prosecution);

- To ensure that the general prohibitions and parameters related to the open season are enforced (such as: no hunting in prohibited areas; outside permitted hours; using prohibited means like bird callers; semi-automatic or automatic weapons with a magazine capable of holding more than two rounds of ammunition; hunting without a valid spring hunting licence);

- To ensure that specific regulations applicable to the spring hunting derogation are enforced (such as game reporting obligation).

12.5 Specialised training sessions have been organised over the past years and enforcement statistics show that this training is demonstrating significant added value in terms of efficiency in enforcement action. Enforcement officers have also gained field experience which enables them to identify areas which require surveillance during particular days due to prevailing winds which affect migration, and are also aware of the areas commonly frequented by hunters thus enabling targeted enforcement action.

12.6 As was also the case in previous years, the enforcement operation throughout the season deployed a mix of the following approaches and techniques:

a) **Vehicular patrols** by EPU, AFM and WBRU to ensure regular coverage of the entire Maltese countryside, with an emphasis on priority surveillance areas and hunting grounds;

b) **Foot patrols** by uniformed officers (both the AFM and EPU) within particular locations, especially those areas with difficult vehicular access. WBRU officers also accompanied uniformed officers during some of the foot patrols;

c) **Stationary observation posts** manned by **uniformed** and **plain-clothed** personnel, including WBRU officers. Stationary observation posts were located at vantage points within priority surveillance areas and hunting grounds;

d) **Systematic spot-checks on individual licensees and roadblocks** at strategic vehicular entry and exit points by Police. The objective of spot-checks is two-fold: (1) to detect the possession of illegally shot protected birds or other illegal material and (2) to enforce bag limit and real-time reporting requirements.

e) Deployment of **covert surveillance** backed up by mobile units especially in response to large influxes of protected birds or to ensure sufficient surveillance of particular hotspots known for targeting of protected birds.

12.7 The Maltese authorities paid particular attention to collaboration with the numerous NGO volunteers who were present in the countryside during the season. These volunteers aided the overall enforcement effort by:

- Acting as a deterrent to illegal hunting by virtue of their presence in the countryside;
- Submitting vital day-to-day information about the presence of birds and alerting the authorities to the presence of high risk species or high risk sites such as roosting sites;

- Acting as ocular witnesses to illegal hunting incidents, and reporting such incidents to the authorities;
- Gathering of video/photographic evidence of poaching and making available such evidence to the enforcement authorities.

12.8 During the season, WBRU's Customer Care Branch received a number of calls from hunters wishing to report suspected or alleged irregular activity noticed directly by themselves. All telephonic reports were immediately passed on to enforcement personnel to ensure swift action against crime.

12.9 During inspections, police forces were responsible for ensuring the lawful operation of hunting practices. Police officers were, *inter alia*, instructed to:

- Verify that hunters were in possession of all the required documents;
- Verify that Quail and Turtle-doves caught were being immediately reported in accordance with regulations;
- Ensure compliance with the provisions of the Conservation of Wild Birds Regulations (S.L. 549.42), the Framework Regulations (S.L. 549.57) and the Regulations opening the spring 2022 season (L.N. 116 of 2022);
- Ensure that no species other than Quail and Turtle-dove, were being targeted;
- Ensure compliance with bag limits and time restrictions.

12.10 During the derogation period, between 10 April and 30 April 2022, there was a daily average of 49 officers deployed in Malta and a daily average of 17 officers in Gozo deployed during morning shift[16]. Between 10 April and 30 April 2022 after 12pm, there was a daily average of eight officers deployed in Malta and a daily average of eight officers deployed in Gozo. Any reports received past these shifts (i.e. at night), are attended by District Police, Rapid Intervention Unit or Mobile Squad as necessary.

12.11 In addition to the above complement, throughout the spring hunting season the Wild Birds Regulation Unit deployed four compliance officers with daily deployment consisting of two teams patrolling the countryside from 6:00am till 12:30pm. WBRU officers were tasked with vehicular patrols, foot patrols within public footpaths, stationary observations and surveillance from vantage points. Moreover, 4 Environmental Rangers (Ambjent Malta) conducted patrols in terrestrial Natura 2000 Sites, other protected and scheduled areas and public rural areas. These uniformed officers are tasked with monitoring and action against different types of environmental crime and also act as deterrent against illegal activities relating to hunting. These officers also report all crime detected directly to the EPU.

12.12 During the derogation period, between 10 April and 30 April 2022, when the season was open, field officers from the Environment Protection Unit and Gozo police carried out 1,259 field inspections / patrols (1,095 in Malta and 164 in Gozo). In addition, these officers conducted 803 spot-checks on individual hunters (632 in Malta and 171 in Gozo). The Compliance Team of the Wild Birds Regulation Unit carried out 38 joint inspections with EPU and ten independent patrols and covert observations at 48 locations which resulted in a total of 54 hours of compliance monitoring and inspections during the open season.

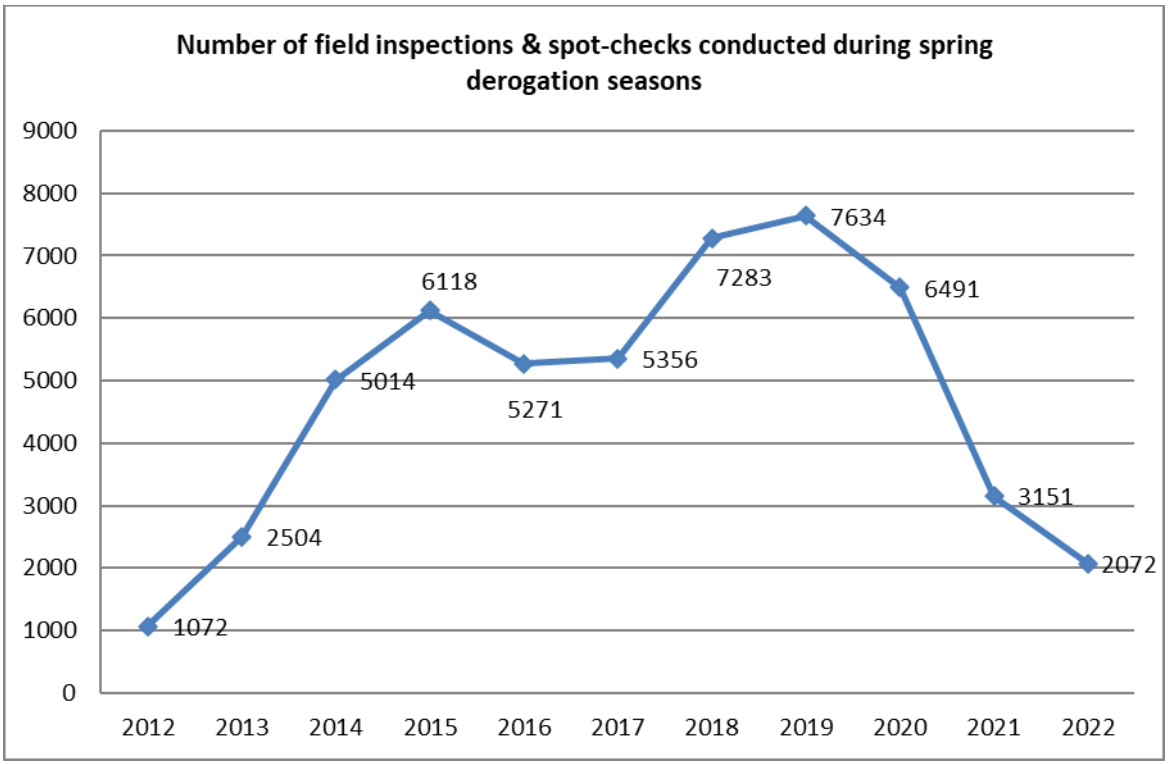
12.13 This enforcement effort cumulatively amounts to **2,072**[17] inspections and spot-checks during the open season (10 April till 30 April 2022). This enforcement effort does not include efforts of District police, Rapid Intervention Unit or Mobile Squad carried out

[16] In Malta, enforcement officers operated on a two-shift basis: 0500 – 1330 and 1330 – 2130, whilst in Gozo, shift roster followed different pattern: number of officers varied between 0500–0700, 0700–1800 and 1800–2000 periods

[17] 1,259 field inspections / patrols, 803 spot-checks on individual hunters and ten independent WBRU patrols.

past EPU / Gozo police shifts[18] or enforcement efforts carried out by Ambjent Malta's Environmental Rangers[19].

Figure 19 - Comparison of number of field inspections and spot-checks performed during the spring hunting seasons over the past years.



12.14 Following closure of the spring hunting season, the statutory enforcement deployment was maintained until Sunday 8 May with a minimum of three officers per 1,000 licencees in line with Regulation 6(4) of S.L. 549.57. Between the 1 May and 8 May, police carried out 441 field inspections / patrols (336 in Malta and 105 in Gozo).

12.15 In the course of these inspections and spot-checks, officers disclosed a total of 37 offences (27 in Malta and 10 in Gozo), consisting of 18 hunting offences and 19 trapping offences. Legal action has been taken against 20 persons (ten court action and ten administrative fines). No further action could be taken on the remaining cases due to lack of information on the possible culprits.

12.16 Ten administrative fines were issued to hunters in possession of a spring hunting special licence and thus this shows that 0.13% of the total number of persons with an active spring hunting special licences (7,981 licences) have breached their special licence conditions and fined administratively. Eight of the ten fines issued were duly settled and the rest are in the process of being settled at WBRU office.

12.17 Eight hunting cases have been referred for court action, comprising of six cases committed during open season and two cases during closed season, all cases are still *sub judice.* The cases within the open spring hunting season (six) consist of four cases committed by hunters in possession of a spring hunting special licence which shows that 0.05% of the total number of persons with an active spring hunting special licences (7,981 licences) have breached their special licence conditions and

[18] In Malta, enforcement officers operated on a two-shift basis: 0500 – 1330 and 1330 – 2130, whilst in Gozo, shift roster followed different pattern: number of officers varied between 0500–0700, 0700–1800 and 1800–2000 periods.
[19] Environmental Rangers work from Monday to Friday between 0630 – 1530 and on day-in-day-out shifts from 0630 – 1830.

will be charged in court, whilst the remaining two cases were committed by persons who were not in possession of a special licence which include a minor who is also not in possession of a general hunting licence. On the other hand, the two cases committed during closed season were also committed by persons in possession of a spring hunting special licence. One case involved the accused in possession of a Turtle-dove (*Streptopelia turtur*) carcass when the season for that specific species was closed and the second case involved an individual in possession of a firearm and cartridges in his vehicle when the season was closed for both species.

12.18 Enforcement data shows that between administrative fines and court action, 16 persons have breached their special licence conditions which translates to 0.20% of all active spring hunting special licences (7,981 licences). On the other hand, two persons were hunting illegally during the spring hunting season without a licence.

12.19 Statistics pertaining to daily enforcement deployment, daily number of field inspections and spot-checks conducted and nature of the offences detected are summarised in Table 12.

Table 12 - Enforcement deployment and offences detected during 2022 spring hunting season.

Date	Number of officers deployed 0500-1500 (EPU / District / AFM)		Number of officers deployed 1500-2100 (EPU / District / AFM)		Number of field inspections conducted (visits to specific areas)		Number of spot-checks on individual hunters[20]		Offences detected (number of cases and nature of offence)		Number of persons charged and action taken	
	Malta	Gozo	Malta	Gozo	Malta	Gozo	Malta	Gozo	Malta	Gozo	Malta	Gozo
10/04/2022	48	16	7	5	43	5	15	5	0	0	0	0
11/04/2022	47	16	9	7	55	7	19	7	1 Use of illegal means[21]	0	1 Administrative Fine	0
12/04/2022	48	18	9	11	46	8	22	3	0	0	0	0
13/04/2022	48	17	9	11	57	12	15	7	1 Use of illegal means[22]	0	0	0
14/04/2022	48	16	8	9	35	11	29	4	0	0	0	0
15/04/2022	48	17	8	5	57	9	23	13	0	0	0	0
16/04/2022	47	16	7	6	63	9	30	8	1 Illegal Hunting of Turtle-dove during closed season [23]	0	1 Court Action	0
17/04/2022	49	16	8	5	49	9	24	7	1 Failure to report game caught[24] 1 Firearm irregularity[25]	0	1 Administrative Fines 1 Court Action	0
18/04/2022	49	17	7	11	53	5	34	4	1 Firearm irregularity[26] 1 Illegal Trapping[27]	0	2 Court Action	0
19/04/2022	49	17	8	12	66	5	16	7	1 Failure to report game caught[28] 2 Illegal Trapping [29]	0	1 Administrative Fine 1 Court Action	0
20/04/2022	48	17	9	11	25	7	27	3	0	2 Use of illegal means[30] 8 Illegal Trapping[31]	0	0
21/04/2022	49	18	7	12	47	2	32	3	0	0	0	0
22/04/2022	49	17	7	11	38	7	29	6	0	0	0	0
23/04/2022	49	17	9	11	43	4	37	5	3 Hunting within prohibited distances[32]	0	3 Administrative Fines	
24/04/2022	49	17	11	8	68	12	39	11	1 Use of illegal means[33]	0	1 Administrative Fine	0
25/04/2022	49	17	9	10	43	2	25	1	1 Failure to report game caught[34]	0	1 Administrative Fine	0

[20] Including road checks.
[21] Case refers to an individual caught hunting with a firearm with magazine capable of carrying more than two shots. The hunter was issued with an administrative fine of €250.
[22] Case refers to the discovery of an unattended birdcaller. The birdcaller was seized by police however no legal action could be taken because the culprit remained unknown to the police.
[23] Case refers to a person found in possession of a Turtle-dove (*Streptopelia turtur*) carcass during a closed season for the hunting of this species. Police seized a firearm, cartridges and the Turtle-dove carcass and initiated legal action against the person.
[24] Case refers to an individual who failed to report a hunted Turtle-dove (*Streptopelia turtur*) through the legally binding Game Reporting System. The hunter was issued with an administrative fine of €50.
[25] Case refers to an individual found using an unregistered firearm. The police seized the firearm and initiated legal action against the individual.
[26] Case refers to an individual who allowed a minor to use his firearm. The police seized the firearm and issued charges against the individual.
[27] Case refers to an individual who was caught trapping finches with pre-recorded calls. The police seized all trapping paraphernalia including the birdcaller and initiated legal action against the individual.
[28] Case refers to an individual who failed to report a hunted Common Quail (*Coturnix coturnix*) through the legally binding Game Reporting System. The hunter was issued with an administrative fine of €50.
[29] Cases refer to an individual who was caught trapping Quail (*Coturnix coturnix*) using nets and pre-recorded calls which led to the seizure of all trapping paraphernalia and legal action against the individual, and a case of an unattended trapping site of unknown owner where police seized all trapping paraphernalia however no further legal action could be taken because the culprit remained unknown to the police.
[30] Cases refer to two unattended mist nets of unknown owner where police seized all trapping paraphernalia however no further legal action could be taken because the culprit remained unknown to the police, and a case of a large cage trap containing three Turtle-doves (*Streptopelia turtur*) which led to the release of the birds but no further legal action could be taken because the culprit remained unknown to the police.
[31] Cases refer to six separate unattended trapping sites of unknown owners for which police seized all trapping paraphernalia, a case of two unattended nets of unknown owner targetting Quail which led to the release of four Common Quails (*Coturnix coturnix*) and another case of an unattended net and pre-recorded calls targeting Quail which led to release of a Common Quail (*Coturnix coturnix*). For all cases police seized all trapping paraphernalia however no further legal action could be taken because the culprits remained unknown to the police.
[32] Cases refer to three individuals caught carrying a firearm that was not in its case while within 200 meters from an inhabited area. Each hunter were issued with an administrative fine of €250.
[33] Case refers to an individual caught using pre-recorded Quail calls. Police seized the birdcaller and the hunter was issued with an administrative fine of €250.
[34] Case refers to an individual who failed to report a hunted Turtle-dove (*Streptopelia turtur*) through the legally binding Game Reporting System. The hunter was issued with an administrtative fine of €50.

26/04/2022	49	16	9	7	41	4	30	8	1 Hunting within prohibited distances[35] 1 Use of illegal means[36]	0	1 Admnistrative Fine	0
27/04/2022	49	15	7	7	50	8	48	12	1 Hunting without a Special Licence[37] 1 Use of Illegal Means[38]	0	1 Court Action	0
28/04/2022	49	17	6	8	70	8	33	4	1 Failure to report game caught[39] 1 Firearm Irregularity[40] 1 Hunting within prohibited distances[41] 1 Hunting without a Licence[42] 1 Use of Illegal Means[43]	0	1 Administrative Fine 2 Court Action 1 Juvenile Court	0
29/04/2022	49	17	9	5	67	16	49	32	2 Illegal Trapping[44]	0	0	0
30/04/2022	49	17	10	6	79	14	56	21	0	0	0	0
CLOSED SEASON												
01/05/2022	35	11	7	7	39	6	2	0	1 Firearm irregularity[45]	0	1 Court Action	0
02/05/2022	33	11	8	7	57	13	0	0	0	0	0	0
03/05/2022	30	10	7	7	39	21	0	0	0	0	0	0
04/05/2022	28	10	6	6	33	12	0	0	0	0	0	0
05/05/2022	27	10	7	6	40	17	0	0	0	0	0	0
06/05/2022	27	10	6	5	45	11	0	0	0	0	0	0
07/05/2022	25	9	9	5	33	17	0	0	0	0	0	0
08/05/2022	32	10	7	5	50	8	0	0	0	0	0	0
Total					**1,431[46]**	**269[47]**	**634[48]**	**171[49]**	**27**	**10**	**20**	**0**
					1,700[50]		**805[51]**		**37**		**20[52]**	

[35] Case refers to an individuals caught carrying a firearm that was not in its case while within 200 meters from an inhabited area. The hunter was issued with an administrative fine of €250.
[36] Case refers to an abandoned cage trap containing a live Common Quail (*Coturnix coturnix*). Police seized the cage trap and released the Quail however no further legal action could be taken because the culprit remained unknown to the police.
[37] Case refers an individual caught hunting without a Special Licence. Police seized his firearm, hunting paraphernalia and a Turtle-dove (*Streptopelia turtur*) carcass and in initiated legal action against the perpetrator.
[38] Case refers to the discovery of two unattended birdcallers. The police seized the birdcallers however no legal action could be taken because the culprit remained unknown to the police.
[39] Case refers to an individual who failed to report a hunted Turtle-dove (*Streptopelia turtur*) through the legally binding Game Reporting System. The hunter was issued with an administrative fine of €50.
[40] Case refers to an individual who allowed a minor to use his shotgun. Police initiated legal action against the individual.
[41] Case refers to an individual caught hunting within less than 150 meters from an inhabited area. Police initiated legal action against the individual.
[42] Case refers to a minor caught hunting without a general licence. Police initiated legal action against the perpetrator.
[43] Case refers to the discovery of an unattended birdcaller. The police seized the birdcaller however no legal action could be taken because the culprit remained unknown to the police.[44] Cases refer to two separate unattended trapping sites both of unknown owner. Police seized all trapping paraphernalia however no further legal action could be taken because the culprits remained unknown to the police.[45] Case refers to an individual found in possession of a firearm and cartridges in a vehicle during closed season.
[44] Cases refer to two separate unattended trapping sites both of unknown owner. Police seized all trapping paraphernalia however no further legal action could be taken because the culprits remained unknown to the police.[45] Case refers to an individual found in possession of a firearm and cartridges in a vehicle during closed season.
[45] Case refers to an individual found in possession of a firearm and cartridges in a vehicle during closed season.
[46] 1,095 during open season and 336 during closed season.
[47] 164 during open season and 105 during closed season.
[48] 632 during open season and two during closed season.
[49] All during open season.
[50] 1,259 during open season and 441 during closed season.
[51] 803 during open season and 2 during closed season.
[52] Ten court action and ten administrative fines.

12.20 Table 13 below compares the number and nature of the offences detected on which legal action was taken during 2022 spring hunting season with the corresponding statistics for the previous seasons. Figure 20 and Figure 21 illustrate the trends pertaining to detection and legal action of minor (Figure 20) and major (Figure 21) offences during the period of spring hunting derogation over the past ten years.

Table 13 - Comparison of offences detected on which legal action was taken during 2012 – 2022 spring hunting seasons.

Offences detected on which legal action was taken during 2012 – 2022 spring hunting seasons											
Offences	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Hunting within prohibited distances	2	11	11	2	2	0	0	0	0	0	5
Administrative and bag reporting irregularities	4	11	22	4	1	0	0	2	0	1	4
Firearm irregularities	22	7	21	4	1	0	4	2	1	5	4
Use of illegal means	2	0	2	1	0	0	0	0	0	10	2
Illegal trapping of protected birds	11	3	5	2	2	4	4	0	0	8	2
Illegal shooting of protected birds	2	3	2	3	1	1	2	1	4	7	0
Possession of protected species	5	1	1	2	0	0	3	0	0	0	0
Hunting in protected areas	0	4	2	0	0	0	0	0	0	0	0
Hunting without a valid licence	10	10	2	0	1	0	1	1	6	2	2
Hunting during the closed season	6	3	1	0	1	0	2	0	2	1	1
Conspiracy of breaking the law	0	0	0	0	0	0	1	0	0	0	0
Total offences against which legal action was taken	**64**	**53**	**69**	**18**	**9**	**5**	**17**	**6**	**13**	**34**	**20**

Figure 20 - Analysis of the trends pertaining to detection and legal action on relatively minor offences during the period of spring hunting derogation over the years.

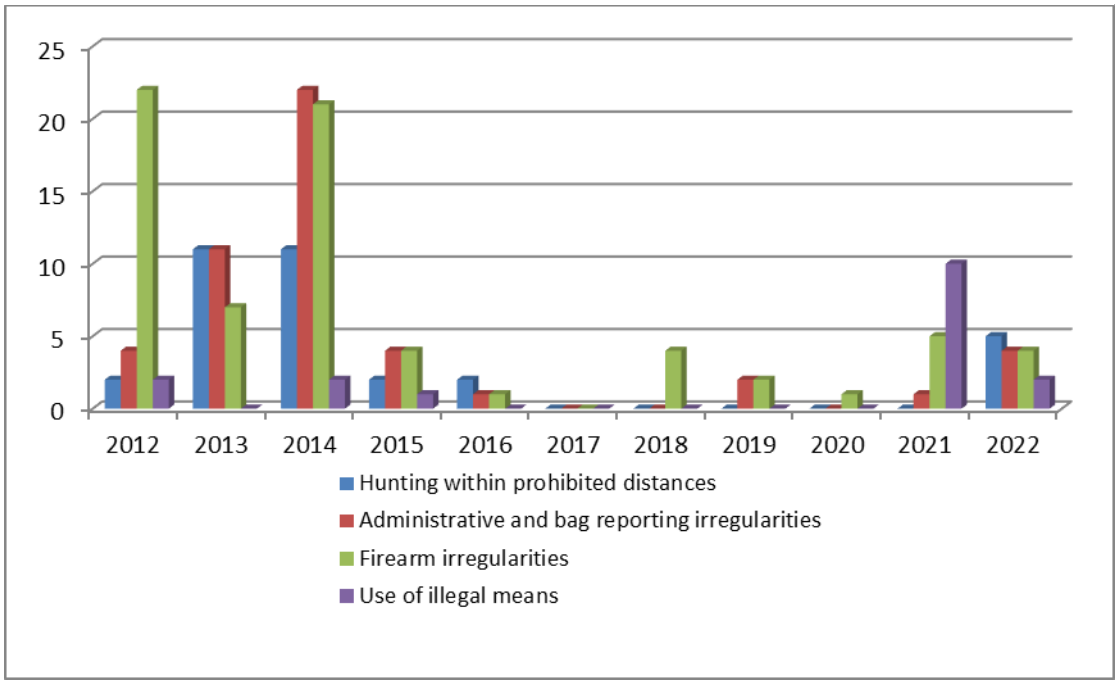
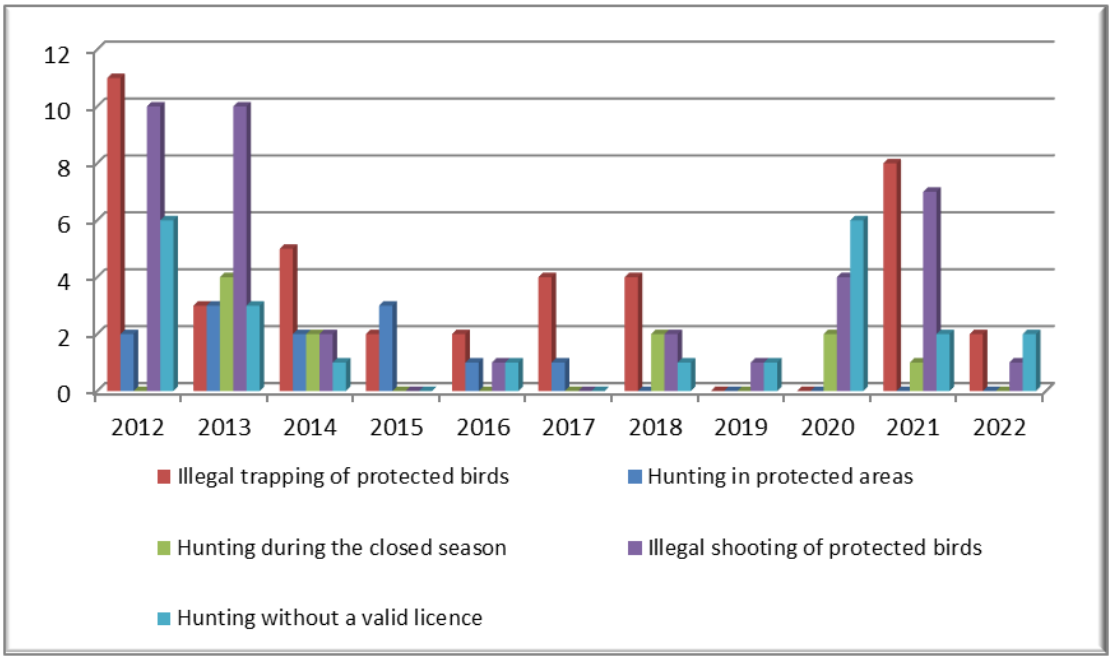


Figure 21 - Analysis of the trends pertaining to the detection and legal action on major offences during the spring hunting seasons over the past years.



12.21 Table 14 provides a comparison between the total number of birds confirmed to have been illegally shot during the 2021 and 2022 spring hunting seasons.

Table 14 - Birds confirmed to have been illegally shot during the 2021 and 2022 spring hunting seasons.

2021 spring hunting season (10/04/2021 – 30/04/2021)			2022 spring hunting season (10/04/2022 – 30/04/2022)		
Date of retrieval	**Species**	**Retrieved from**	**Date of retrieval**	**Species**	**Retrieved from**
10/04/2021	Common Kestrel (*Falco tinnunculus*)	Kirkop	10/04/2022	Eurasian Marsh Harrier (*Circus aeruginosus*)	Siġġiewi
	Common Kestrel (*Falco tinnunculus*)	Siġġiewi			
11/04/2021	-	-	11/04/2022	-	-
12/04/2021	-	-	12/04/2022	-	-
13/04/2021	Yellow-legged Gull (*Larus michahellis*)	Baħar Iċ-Ċagħaq	13/04/2022	Common Kestrel (*Falco tinnunculus*)	Santa Luċia
	Eurasian Marsh Harrier (*Circus aeruginosus*)	Żurrieq			
14/05/2021	-	-	14/04/2022	-	-
15/04/2021	Common Cuckoo (*Cuculus canorus*)	Binġemma	15/04/2022	-	-
16/04/2021	Turtle-dove (*Streptopelia turtur*)	Mġarr	16/04/2022	Common Kestrel (*Falco tinnunculus*)	Xagħra - Gozo
	Turtle-dove (*Streptopelia turtur*)	Mellieħa		Common Kestrel (*Falco tinnunculus*)	Rabat - Malta
	Common Kestrel (*Falco tinnunculus*)	Xagħjra		Turtle-dove (*Streptopelia turtur*)	Siġġiewi
17/04/2020	Common Kestrel (*Falco tinnunculus*)	Chadwick Lakes	17/04/2022	-	-
	Pallid Harrier (*Circus macrourus*)	Żebbuġ, Gozo			
18/04/2021	Black Kite (*Milvus migrans*)	Qrendi	18/04/2022	Collared-dove (*Streptopelia decaocto*)	Qala, Gozo
	Eurasian Marsh Harrier (*Circus aeruginosus*)	Bidnija			
	Eurasian Marsh Harrier (*Circus aeruginosus*)	Bidnija		Eurasian Hoopoe (*Upupa epops*)	Miżieb

2021 spring hunting season (10/04/2021 – 30/04/2021)			2022 spring hunting season (10/04/2022 – 30/04/2022)		
	Eurasian Marsh Harrier (*Circus aeruginosus*)	Bidnija			
	Eurasian Marsh Harrier (*Circus aeruginosus*)	Bidnija			
	Eurasian Marsh Harrier (*Circus aeruginosus*)	Bidnija		Common Kestrel (*Falco tinnunculus*)	Xagħra, Gozo
	Eurasian Marsh Harrier (*Circus aeruginosus*)	Bidnija			
	Eurasian Marsh Harrier (*Circus aeruginosus*)	Bidnija			
	Common Kestrel (*Falco tinnunculus*)	Rabat, Malta			
	Montagu's Harrier (*Circus pygargus*)	Gozo			
19/04/2021	Lesser Kestrel (*Falco naumanni*)	Qormi	19/04/2022	Eurasian Marsh Harrier (*Circus aeruginosus*)	Delimara
				Eurasian Marsh Harrier (*Circus aeruginosus*)	Delimara
				Eurasian Marsh Harrier (*Circus aeruginosus*)	Delimara
				Eurasian Marsh Harrier (*Circus aeruginosus*)	Delimara
	Common Kestrel (*Falco tinnunculus*)	Fomm ir-Riħ		Eurasian Marsh Harrier (*Circus aeruginosus*)	Delimara
				Common Kestrel (*Falco tinnunculus*)	Xagħra, Gozo
				Yellow-legged Gull (*Larus michahellis*)	Qala, Gozo

2021 spring hunting season (10/04/2021 – 30/04/2021)			2022 spring hunting season (10/04/2022 – 30/04/2022)		
20/04/2021	Turtle-dove (*Streptopelia turtur*)	Għaxaq	20/04/2022	Collared-dove (*Streptopelia decaocto*)	Selmun
21/04/2021	Collared-dove (*Streptopelia decaocto*)	Delimara	21/04/2022	-	-
	Collared-dove (*Streptopelia decaocto*)	Delimara			
	Black-winged Stilt (*Himantopus himantopus*)	Delimara			
	Common Redshank (*Tringa totanus*)	Delimara			
	Common Woodpigeon (*Columba palumbus*)	Delimara			
	Common Kestrel (*Falco tinnunculus*)	Gozo			
	Yellow-legged Gull (*Larus michahellis*)	St. Julians			
	Eurasian Marsh Harrier (*Circus aeruginosus*)	Burmarrad			
22/04/2021	Barn Swallow (*Hirundo rustica*)	Riviera Beach	22/04/2022	Eurasian Marsh Harrier (*Circus aeruginosus*)	Delimara
	Turtle-dove (*Streptopelia turtur*)	Wardija		Eurasian Marsh Harrier (*Circus aeruginosus*)	Delimara

2021 spring hunting season (10/04/2021 – 30/04/2021)			2022 spring hunting season (10/04/2022 – 30/04/2022)		
	Common Kestrel (*Falco tinnunculus*)	Mosta		Eurasian Marsh Harrier (*Circus aeruginosus*)	Delimara
	Common Kestrel (*Falco tinnunculus*)	Żebbuġ		Eurasian Marsh Harrier (*Circus aeruginosus*)	Delimara
	Squacco Heron (*Ardeola ralloides*)	Ħas-Saptan		Eurasian Marsh Harrier (*Circus aeruginosus*)	Delimara
23/04/2021	Common Kestrel (*Falco tinnunculus*)	Gozo	23/04/2022	Common Cuckoo (*Cuculus canorus*)	Għargħur
	Common Kestrel (*Falco tinnunculus*)	Gozo			
	Turtle-dove (*Streptopelia turtur*)	Rabat, Gozo		European Honey-buzzard (*Pernis apivorus*)	Delimara
24/04/2021	-	-	24/04/2022	Night Heron (*Nycticorax nycticorax*)	Luqa
25/04/2021	Eurasian Marsh Harrier (*Circus aeruginosus*)	Bidnija	25/04/2022	European Bee-eater (*Merops apiaster*)	Żurrieq
				Eurasian Hobby (*Falco subbuteo*)	Siġġiewi
				Common Kestrel (*Falco tinnunculus*)	Sannat, Gozo
				Eurasian Marsh Harrier (*Circus aeruginosus*)	EPU Office
26/04/2021	Common Kestrel (*Falco tinnunculus*)	Gozo	26/04/2022	-	-
	Squacco Heron (*Ardeola ralloides*)	Miżieb			
	European Bee-eater (*Merops apiaster*)	Nadur, Gozo	27/04/2022	European Bee-eater (*Merops apiaster*)	Żurrieq

2021 spring hunting season (10/04/2021 – 30/04/2021)			2022 spring hunting season (10/04/2022 – 30/04/2022)		
27/04/2021	European Honey-buzzard (*Pernis apivorus*)	Miżieb			
	Turtle-dove (*Streptopelia turtur*)	Miżieb/ Lo Mellieħa			
	Turtle-dove (*Streptopelia turtur*)	Ta' Xbiex			
28/04/2021	Common Kestrel (*Falco tinnunculus*)	Żebbuġ	28/04/2022	Red-footed Falcon (*Falco vespertinus*)	Qormi
				Osprey (*Pandion haliaetus*)	Mġarr, Gozo
29/04/2021	Short-eared Owl (*Asio flammeus*)	Luqa	29/04/2022	Eurasian Golden oriole (*Oriolus oriolus*)	Cospicua
				Yellow-legged Gull (*Larus michahellis*)	Rabat, Malta
				Purple Heron (*Ardea purpurea*)	Mġarr ix-Xini, Gozo
30/04/2021	Common Kestrel (*Falco tinnunculus*)	Nadur, Gozo	30/04/2022	-	-
Total	**49**		**34**		

12.22 As shown in Table 14 above, 49 illegally shot birds were reported during the previous spring hunting season (10 April – 30 April 2021) whilst during the 2022 spring hunting season, there were 34 illegally shot birds. The ratio of illegally shot birds for the open seasons during both years, that is, from the 10 to 30 April, is 0.69:1 (2022:2021). The Common Kestrel constituted the majority of casualties in spring 2021, however the Eurasian Marsh Harrier was the most illegally shot species during the 2022 spring hunting season.

12.23 In addition to enforcement deployment by the authorities, around 24 hunting marshals were deployed by the Federation for Hunting and Conservation – Malta (FKNK) to assist the authorities in surveillance, whilst Kaċċaturi San Ubertu (KSU) deployed around 18 observers to assist the authorities in the detection and reporting of any observed illegalities. Furthermore, various volunteers from the Committee Against Bird Slaughter (CABS) and BirdLife Malta maintained a close watch for irregularities throughout the season.

12.24 On 18th April, BirdLife Malta reported the massacre of a roosting flock of Marsh harriers (*Circus aeruginosus*) in the Delimara area overnight. The illegal shooting of

birds was caught on film through night-vision optics. The following morning a search was done in the area and five Marsh harriers were retrieved. Four were injured but still alive, whilst one was dead. They were taken by EPU to the government appointed veterinarian[53]. In the following days, police continued to search the area and found another five dead Marsh Harriers (*Circus aeruginosus*) which were taken to the government appointed veterinarian. BirdLife Malta also published a video summarising the illegalities filmed from public places throughout the season[54]. The video alledges that Turtle-doves (*Streptopelia turtur*) were under target during the first week of the spring hunting derogation for Quail because the season coincided with the peak migration of Turtle-dove (*Streptopelia turtur*). The footage mostly shows a number of hunters in stationary areas on elevated platforms and hides surrounded by trees. The NGO stated that it has recorded hunters shooting illegally for Turtle-doves (*Streptopelia turtur*) almost everyday during the spring hunting season. Other infringements described in the video included the use of electronic callers for Quail (*Coturnix coturnix*), Turtle-dove (*Streptopelia turtur*) and European Nightjar (*Caprimulgus europaeus*).

12.25 As detailed in Table 13, in respect of the offences detected during the 2022 spring hunting season, court action is being taken against ten persons. A person for hunting a Turtle-dove (*Streptopelia turtur*) during a closed season for this species, a person for using an unregistered firearm, two persons for permitting minors to use a firearm, a person for hunting without a special licence, a minor for hunting without a licence, a person for hunting within less than 150 metres from an inhabited area, a person for illegally trapping finches, a person for illegally trapping quail, and a person for possession of a firearm and cartridges in his vehicle during a closed season for both species. In addition, 10 administrative fines were issued, one for the use of firearm with magazine capable of holding more than two cartridges in its magazine, one for failure of reporting a Quail caught during open season, three for failure to report Turtle-doves caught during open season, one for the illegal use of bird caller, and four for carrying of loaded/unloaded firearm that is not in its case within 200 metres from any town or village or other inhabited area.

12.26 The minimum enforcement deployment as set out in S.L. 549.57 was not only met but also exceeded. Additionally, notwithstanding that the number of spot-checks have decreased when compared to 2021, the majority of offences detected have been effectively investigated and prosecuted.

[53] https://timesofmalta.com/articles/view/tens-of-protected-marsh-harriers-massacred-enforcement-out-of-control.949195.

[54] https://www.youtube.com/watch?v=rrBehCbEBKs&t=1s.

13. Conclusions

13.1 The application of the 2022 spring hunting derogation was preceded by a series of analyses that considered all relevant legal, scientific and technical aspects pertaining to this derogation, as well as by an open and transparent discussion with stakeholders.

13.2 As a result of these processes, the decision to apply the derogation was made after ascertaining that there is no other satisfactory solution, and that the following critical prerequisites will be met:

- The derogation will satisfy all the relevant requirements of the Birds Directive, and specifically the parameters stipulated in Article 9 (1) (c);
- The actual implementation of the derogation on the ground will ensure that the relevant legal parameters will be respected in the field through an elaborate and robust enforcement regime.

13.3 Throughout the period of this derogation, the priority of the Maltese authorities was to ensure that all parameters of the derogation were met in practice. Although the number of illegally shot protected birds decreased slightly from the 2021 spring season, targeting of protected species, both during and on the margins of the spring hunting season remains a significant concern and a concerted effort is needed to fully address this issue. In this regard, the Maltese authorities are actively working to address this issue by, inter alia, ensuring effective enforcement to deter, detect and prosecute bird-related crime and by addressing the key motives for IKB-related crime, including illegal taxidermy.