Bird Trapping in Cyprus – Spring 2010

Report on the latest findings of BirdLife International's continuing monitoring of illegal bird trapping in Cyprus

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Contents

Summary

1. BirdLife International monitoring of illegal bird trapping activities in Cyprus continued for the 17th season (9th year), with data gathered systematically in the field in the spring (March and April) of 2010 by a trained team of surveyors. All evidence of trapping found was relayed to the relevant enforcement authorities.
2. Survey data showed an increase (32,8%) of illegal bird trapping activity during spring of 2010 compared to spring 2009 but slightly lower trapping levels than for spring 2008.
3. Field data shows an increase of illegal bird trapping activity in all tree jurisdictions, and especially in the "Joint" area where the SBA and the Republic jurisdictions meet (trapping levels have tripled compared to spring 2009 levels). The SBA trapping figures have also gone up despite the major effort undertaken to remove trapping paraphernalia (the notorious trapping 'hot-spot' of Cape Pyla was the main focus of these operations).
4. The one bit of truly encouraging news to come out of the spring 2010 season was the very significant (70% drop compared to spring of 2009) reduction in mist netting levels achieved in the Cape Pyla area as a result of repeated sweeps to remove trapping paraphernalia by the SBA police, with support from the British Army.
5. However, if the negative overall pattern is carried through into the main, autumn trapping season then anyone can image what the "migrants" will have to face arriving from their long journey.

6. An estimated 261,000 birds were trapped during spring 2010, a shocking toll for a season that is not one of the main trapping seasons.
7. Increased involvement from all enforcement bodies (Game Fund, Cyprus Police, and Bases Police) in the anti-trapping effort must be encouraged in order to work closely and effectively together in the anti-trapping effort.
8. The absence of a determined campaign to stop restaurants serving trapped bird delicacies remains a serious concern that has yet to be tackled.
9. The BirdLife monitoring effort must continue, so that the extent of the problem remains well documented and that it is finally being given the extent it deserves by the media.

1. Introduction

1.1. Background

The use of mist nets and limesticks is an illegal but also an indiscriminate practice that threatens a whole variety of bird species that are of conservation priority for the European Union. In spring (as in the autumn), trappers are mainly after blackcaps (*Sylvia atricapilla*) and other small songbirds. During winter months, thrushes are the main targets. The main trapping activity occurs in the autumn season when the largest numbers of birds pass through the Island, gaining lots of fat in order to make the onward journey to Africa. The high fat content of autumn birds provides an extra motive for trappers, but the illegal trapping activity sadly occurs during spring and winter as well.

Unfortunately, both "target and non-target" birds become victims of the trappers and slowly die on the nets and limesticks set. The birds end up for home consumption or being served as expensive *ambelopoulia* delicacies in local restaurants. Overall, some 112 species [1] are known to be vulnerable to trapping, among them the endemic Cyprus warbler *Sylvia melanothorax* and Cyprus wheatear *Oenanthe cypriaca*. Almost half of these vulnerable species are listed in Annex I of the EU Birds Directive (2009/147/EC, former 74/409/EEC) or classified as Species of European Conservation Concern (SPECs) by BirdLife International, or both.

Mist nets have the potential to catch many more birds than limesticks [2] especially with the use of tape lures playing recorded bird songs (usually connected to long-lasting car batteries). Most nets are erected in citrus, olive, fig and/or a mixture of other fruit plantations, although non-native acacia bushes are planted, irrigated and pruned accordingly because they provide good bird trapping habitat, with Cape Pyla, in the British Sovereign Base area, as the most obvious example.

The main motivation behind this illegal trapping activity is the easily made financial gain as thousands of Euros are made each year by determined poachers who sell *ambelopoulia* for home or restaurant consumption. Trappers have in recent years changed their trapping habits in response to increased enforcement; they no longer leave out their nets during daylight hours, some fence their fields, in other fields there are often people present during daylight to guard the nets

[1] See Magnin's 1986 report to the ICBP
[2] One must take into consideration that an experienced limestick user, with expert knowledge of how to prune trees or pushes for optimum placement of the glue sticks, can probably catch as many birds as a mist net user can.

and/or limesticks and in one case there was an electric wire around an enclosure fence. It is generally acknowledged that the remaining trappers are a hard- core of well-organised and often ruthless criminals.

In the autumn of 2002, the Royal Society for the Protection of Birds (the RSPB, BirdLife in the UK) and BirdLife Cyprus (BirdLife in Cyprus) launched a joint project to monitor and record the illegal trapping activity. Monitoring has been carried out every spring and autumn and from 2007, the winter season was also covered.

This report will present the latest findings on trapping activity, those for spring 2010 survey season.

1.2. Spring 2010 Surveillance

Two experienced field observers were employed to carry out field investigations aimed at monitoring illegal bird trapping activity around Paralimni, Ayia Napa, Cape Greco and Cape Pyla in the Famagusta District, and the Ayios Theodoros and Maroni Valleys West of Larnaca. The surveillance period started from 8th of March and ended at 3rd of May. One of the aims of the surveillance is to gather the data needed so that accurate reports and reliable estimates can be produced. Comparing fresh data to previous seasons can show us the scale of the trapping problem and the relevant trends. A secondary aim is to be able to estimate the number of birds caught/killed using the banned mist-nets and limesticks.

2. Field Survey Methods

2.1. Survey Area

The area covered under the spring 2010 surveillance programme was the same 406 Km^2 (295 Km^2 for Famagusta area and 111 Km^2 for Ayios Theodoros – Maroni area) covered since 2007. Of the 436 1 Km survey squares [3] in the two areas combined, 301 were classified as 'possible bird trapping area' squares [4].

A total of 93 squares randomly selected from the 301 'possible' trapping squares (31 % of the total) were surveyed for trapping activity during the spring of 2010.

2.2. Survey Method

Surveying consisted of a systematic search for evidence of illegal trapping activity within the 93 randomly selected squares. Each sample square was surveyed only once each season, minimising the risk of our survey team becoming known to the trappers, with the aim of always avoiding any possible confrontation with them.

The time taken to survey each square, the weather conditions and the presence or absence of large numbers of birds was also recorded.

2.2.1. Mist Nets

The aim of the survey team was to record all direct and indirect evidence of mist net and tape lure use. To achieve this, all habitat patches suitable for the setting

[3] The number of 1 Km squares is higher than the total survey area in Km^2 because many squares are located along the coast and cover expanses of the sea.

[4] Classifying a given 1 km square as 'possible' bird trapping area, did not pre-suppose trappers were active within that area but it was rather an indication that the square held the potential for trapping activity due to the vegetation habitat it had suitable for setting nets or limesticks (e.g. lentisc, juniper, pomegranate or acacia bushes and fig, mulberry, citrus, soft fruit or olive trees).

of mist nets (i.e. all areas with bushes and/or trees) within each sample square were searched.

The observers focus on identifying 'active net rides' – cleared corridors within vegetation prepared for the setting of nets due to the change of the trapping habits of determined trappers. They rarely leave nets standing long after dawn, due to the increased clampdown by the authorities that started in the new millennium. Usually, an experienced observer with the knowledge of the trapping habits and methods of trappers can easily identify prepared and active net rides, even in the absence of nets.

The codes used for the various categories of mist net rides and for tape lure use are given below, as are the codes used for recording the type of habitat where trapping activity is detected.

Key to survey codes used in field:

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

2.2.2. Limesticks

Limesticks are relatively hard to see, though trees pruned to hold limesticks are identifiable. The observer's task was to look out for limesticks while surveying for mist net activity and also to search all habitat patches particularly suitable for limestick use within the survey square.

3. Results

3.1. Evidence of trapping found in the field during spring 2010

Evidence of trapping activity was found in 33 (35.5%) of the 93 1 Km sample squares surveyed within the 406 Km^2 study area (see Appendix 1, Table 1). It should also be noted that 32 survey squares could not be fully searched, compared with just 8 such survey squares for spring 2009. The main reason for this was the general pattern of more fenced (and therefore inaccessible) enclosures and the presence of people out in the fields.

A total of 2,335 metres of active net rides were identified within the 93 survey squares. This included 80 metres of set nets (4 nets) and 60 metres of unset nets (3 nets). The total length of active net ride within the two study areas during the survey can be estimated at just over 7,5 km (see Appendix 2, Section 1). No evidence of tape lure use was found within the survey squares but on one occasion a car battery was found indicating that trappers still use them. It is unlikely that this is an accurate indication of levels of tape lure use – as all observers agree this is widespread. It is more likely a case of trappers never leaving such equipment *in situ*.

A total of only 30 limesticks were found in the 93 survey squares, positioned in habitat composed of acacia, olive and eucalyptus trees, but also 5 trees were found pruned (e.g. olive, fig, acacia and eucalyptus trees) to take glue sticks. All

evidence was found in Protaras - Ayia Napa area. The low finds of limesticks can be attributed to the BirdLife survey not focusing on finding these. Other organisations surveying in the field during the spring of 2010, and using a method more focused on locating limesticks, reported very extensive finds of limesticks. A visiting CABS [5] (Committee Against Bird Slaughter) team of 14 conservationists mainly searching for limesticks in the Famagusta and SBA areas, have collected 1,977 limesticks, 9 mist nets and 12 electronic bird calling devises during a period of 8 days (24th of April until 2nd of May of 2010). The majority of the limesticks found were set in the Republic of Cyprus.

Based on our own field data, the total number of birds caught in nets and on limesticks can be estimated at just over 196,000 birds for the Famagusta and Ayios Theodoros–Maroni study areas and just over 261,400 birds for the whole of Cyprus (see Appendix 2, section 2).

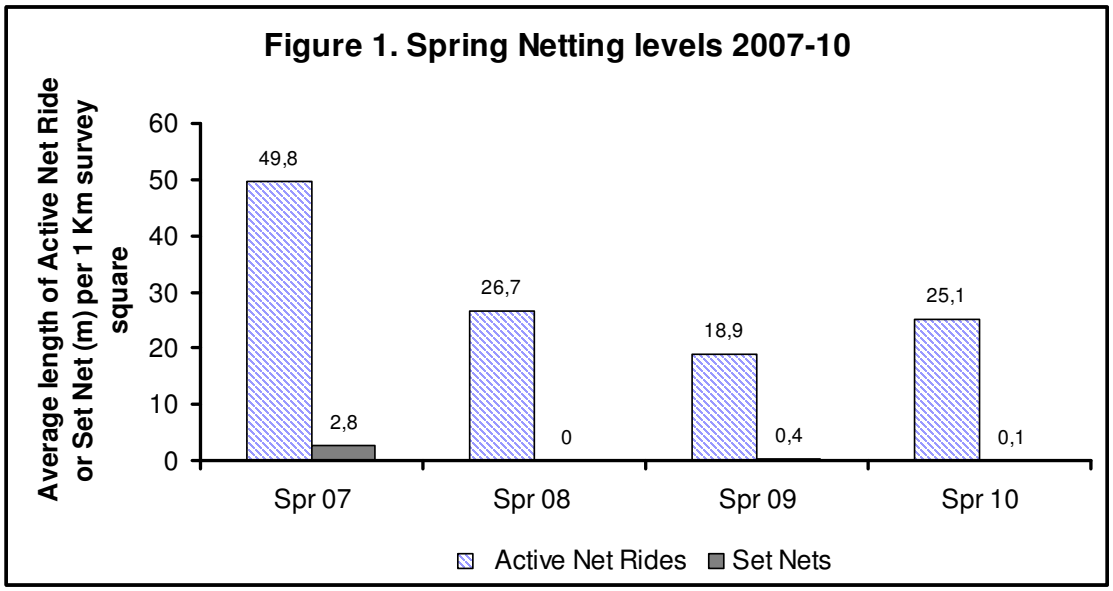
Some 70,2% (1,640 m) of the total of 2,335 metres of active net rides detected was located within fenced compounds.

3.2. Trends in trapping activity

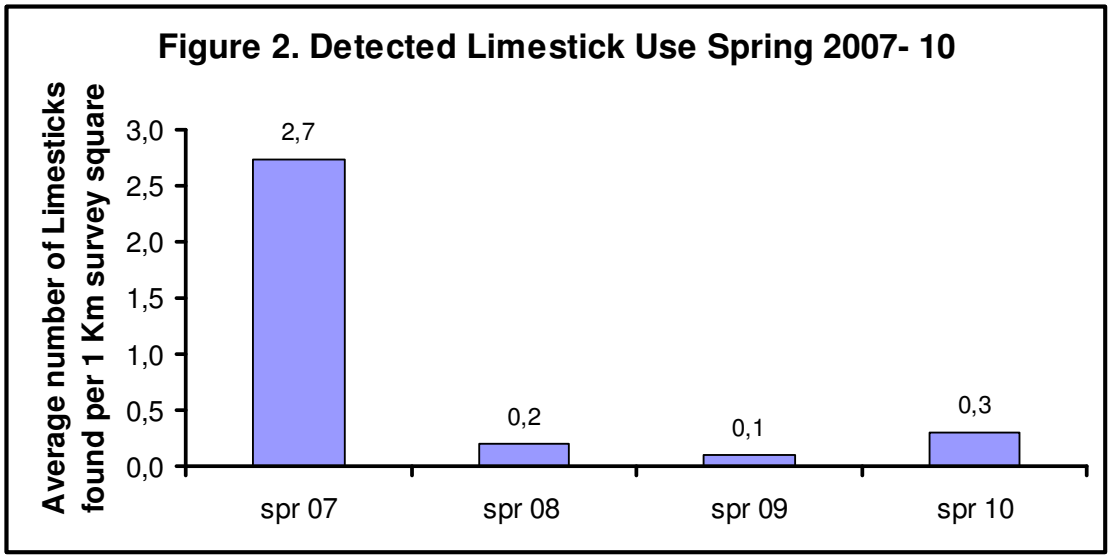
The charts below show how detected levels of mist netting activity (figure 1) and limesticks use (figure 2) have fluctuated over recent years.

Data shown in figures 1 and 2 are taken from the 100 survey squares (93 for spring 2010) monitored since 2007 during spring, autumn and winter seasons but in this case the focus will be for the spring seasons only.

[5] For more information visit CABS website: http://www.komitee.de/en/



Mist netting results for spring 2010 were of a disappointment for BirdLife Cyprus because, half-way through the survey the results were very promising (almost half a month of surveillance with no evidence of trapping activity recorded, see Appendix 1, Table 1), leading us to hope that spring 2010 mist netting activity would follow the decreasing pattern of the proceeding years (2007-08-09). Sadly this was not the case. As seen above (figure 1), spring 2010 netting activity was higher by 32,8% than spring 2009 results (but lower than spring 2007 – 2008 results).

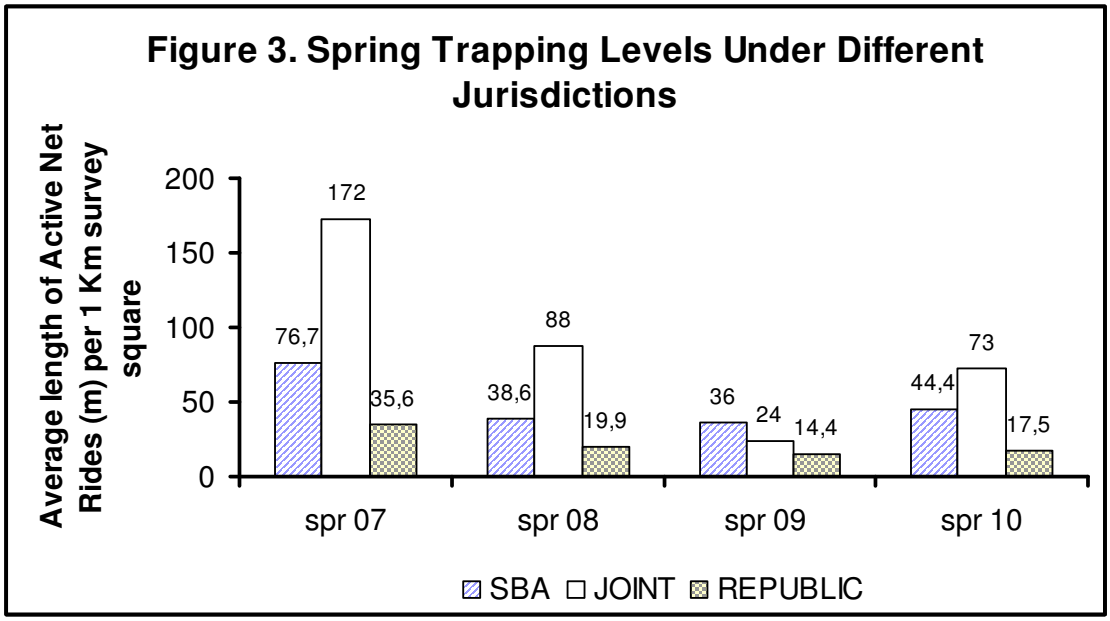


The same scenario as for spring netting activity occurs for limestick use. That is, a decreasing pattern of limestick use from spring 2007 to spring 2009, followed by the increased limestick use in spring 2010 (see Figure 2 above). The variations in detected limestick use over the last three springs are however unlikely to be statistically significant.

Figure 3 below shows that the highest levels of illegal mist net use are found within the 'joint' areas [6], where the jurisdictions of the Cyprus Republic and SBA (Sovereign Base Areas) meet, suggesting that an 'enforcement gap' exists in these areas. Both enforcement bodies (the SBA Police and the Cyprus Game Fund) state that they work well together in such 'joint' areas but trapping figures state otherwise. The illegal bird trapping activity within the 'joint' areas tripled for spring 2010 compared with spring 2009, which is a significant pattern and a source of real concern (despite the small sample size). Figure 3 also shows the decreasing illegal trapping levels of all three jurisdictions from spring 2007 – 08 –

[6] The sample size for such 'Joint' areas is however small, at only 5 survey squares.

09 (comparing same jurisdiction from different spring years), with spring 2010 results going up in all three jurisdictions.



The SBA Police and the British Army jointly carried out two major clean – up operations (2nd of October 2009 and 19th of January 2010) to remove mist netting paraphernalia from the Cape Pyla area – an area well known for intensive mist netting activity in acacia plantations. . A 3rd but hopefully not last large scale operation was carried out on 17th March 2010, again in the Cape Pyla 'hot spot'. The result was the removal of a large volume of trapping paraphernalia once more. Spring 2010 trapping levels for 'hot spot' Cape Pyla show a decrease of 70% compared to spring 2009 levels, due to this intensive enforcement pressure. This represents a significant conservation success, and credit for such an effort is given by BirdLife Cyprus. Despite this success, overall results for the SBA areas for spring 2010 have increased by 23,3% compared to 2009 spring results, as netting levels were higher elsewhere in the SBA jurisdiction, which is

disappointing. The same trend appeared in the Republic of Cyprus with an increase of trapping levels of 21,5%.

4. Conclusions & Recommendations

Spring 2010 bird trapping levels have gone up by 32,8% failing to follow the decreasing trend of spring 2007 - 2008 - 2009 levels. While spring is certainly the "quiet" season for illegal bird trapping, the fact that the estimated toll in birds killed was over 260,000 is unacceptable and the failure to maintain the apparent downward trend of the period 2007 to 2009 is a setback. Additionally, bird trapping levels in the 'joint areas' (where the SBA and Republic jurisdictions meet) tripled compared to spring 2009.

These far from encouraging spring 2010 results come after the disastrous trapping trend of the recent winter and autumn seasons (the main bird killing seasons). These negative trends indicate that wide scale trapping is probably returning and that serious ground is being lost in the battle against trappers, undermining the significant enforcement gains made since 2001.

The SBA Police and the British Army jointly carried out three large-scale operations in the area of Cape Pyla trapping 'hot spot'. As a result of these operations, bird trapping in the area has been reduced significantly but overall SBA trapping levels have increased. The effort made by the SBA and the British army should be credited, while it is our belief that there can be no release of enforcement pressure in the Cape Pyla area even if trapping levels have been reduced. Also the same enforcement pressure has to be applied in all areas of the SBA jurisdiction in order to have significantly reduced trapping levels.

At over 261,000 the estimated toll of migrant (and other) birds remains very serious especially if one considers that spring is not the main trapping season. It shows once more the indiscriminate cruelty of trapping, that not only blackcaps are captured on mist nets and/or limesticks but also a variety of other species that are endangered/threatened. All this, is made even worse by the fact that these birds are on migration to their breeding grounds (pre-nuptial migration) and illegal trapping can affect their population size.

Last spring a court in Larnaca imposed the heaviest ever fine (€15,000) for trapping offences. Our belief is that such fines can provide an effective deterrent for those engaged in the highly lucrative bird trapping business.

A determined campaign and decisive action is needed, starting this coming autumn, to stop restaurants from serving illegally trapped birds.

The governments of Cyprus and UK need to devote more resources to the enforcement bodies dealing with the trapping, encouraging a close co-operation between all for better results, especially as 2010 is the UN year of biodiversity.

5. Appendices

Appendix 1. Data gathered in the field during spring 2010

Table 1. Evidence of trapping activity found within survey squares in spring 2010 (in chronological order). Squares in **bold** contained evidence of trapping activity; squares shaded grey are within the SBA areas; squares in *italics* are within both the SBA and Government areas.

Date	Survey square	Area	Start time	Survey duration (mins)	Metres active net ride	Net code	No. nets	Fenced?	Habitat	Tape lures	Lime-sticks	Notes
8/3/2010	9279	Phrenaros-Paralimni	11:00	65	0						0	
	9077	Phrenaros-Paralimni	12:30	75	0						0	
	9178	Phrenaros-Paralimni	14:30	85	0						0	
9/3/2010	3145	Ay.Theodoros-Maroni	9:45	90	0						0	
	3443	Ay.Theodoros-Maroni	12:00	35	0						0	
	3243	Ay.Theodoros-Maroni	13:50	75	0						0	3 fenced areas could not be fully checked (1 not at all). Limestick-making equipment found
10/3/2010	3348	Ay.Theodoros-Maroni	10:15	75	0						0	
	3244	Ay.Theodoros-Maroni	12:15	70	0						0	
	3647	Ay.Theodoros-Maroni	13:55	95	0						0	
11/3/2010	3546	Ay.Theodoros-Maroni	9:50	75	0						0	
	2648	Ay.Theodoros-Maroni	11:35	85	0						0	
	2857	Ay.Theodoros-Maroni	13:20	45	0						0	
12/3/2010	7176	Ormidhia-Avgorou	10:00	75	0						0	
	7178	Ormidhia-Avgorou	11:45	70	0						0	
	7379	Ormidhia-Avgorou	13:10	100	0						0	
15/3/2010	3746	Ay.Theodoros-Maroni	9:30	110	0						0	
	3346	Ay.Theodoros-Maroni	12:00	50	0						0	
16/3/2010	9074	Phrenaros-Paralimni	9:50	110	0						0	
	8078	Phrenaros-Paralimni	12:30	105	0						0	
	8175	Phrenaros-Paralimni	14:45	75	0						0	
17/3/2010	***7574***	***C.Pyla-Xylophagou***	***9:45***	***135***	***15***	***ANN***		***No***	***O***		***0***	***3 fenced areas could not be fully checked (2 not at all)***
					20	***AUN***	***1***	***No***	***O-F-POM***		***0***	
					60	***ANN***		***Yes***	***O-F-POM***		***0***	
	7477	***Ormidhia-Avgorou***	***13:00***	***125***	***40***	***ANN***		***No***	***O-C-Palm***		*0*	***3 fenced areas could not be fully checked (2 not at all)***
					20	***ANN***		***Yes***	***O-F-C***		*0*	
					40	***ANN***		***Yes***	***O-F***		*0*	
					20	***ANN***		***No***	***O-A-F***		***0***	
18/3/2010	7867	C.Pyla-Xylophagou	9:30	70	0						0	Whole square walked with SBA police. There are now NO active areas.
	7779	**Ormidhia-Avgorou**	**11:10**	**80**	**20**	**ANN**		**Yes**	**O-A**		**0**	**5 fenced areas could not be fully checked (1 not at all)**
					20	**ANN**		**No**	**O-Pom-A**		**0**	
					180	**ANN**					**0**	
					20	**ANN**		**Yes**	**O**		**0**	
	7576	***Ormidhia-Avgorou***	***12:45***	***75***	***60***	***ANN***		***No***	***O-C-C-CYP***		***0***	***Area searched with SBA Police.***
					20	***ASN***	***1***	***No***	***O-C-C-CYP***		***0***	
					20	***P***		***No***	***O-C-C-CYP***		***0***	
19/3/2010	7875	C.Pyla-Xylophagou	9:50	75	0						0	
	7775	C.Pyla-Xylophagou	11:40	95	0						0	
	7874	C.Pyla-Xylophagou	14:00	115	0						0	
22/3/2010	**3050**	**Ay.Theodoros-Maroni**	**11:15**	**90**	**40**	**ASN**	**2**	**Yes**	**Car-C-O**		0	
					20	**ASN**	**1**	**Yes**	**Mix**		0	
	2655	Ay.Theodoros-Maroni	13:15	60	0						0	
6/4/2010	9570	Protaras-Ay.Napa	9:45	50	0						0	
	9372	Protaras-Ay.Napa	11:15	110	0						0	1 fenced area could not be fully checked
	9573	Protaras-Ay.Napa	12:50	120	0						0	2 fenced areas could not be fully checked (1 not at all)
7/4/2010	**7372**	**Ormidhia-Avgorou**	**10:15**	**55**	**60**	**P**		**Yes**	**O**		**0**	**2 fenced areas could not be fully checked (1 not at all)**
	7877	Ormidhia-Avgorou	11:50	110	0						0	4 fenced areas could not be fully checked (2 not at all)
	7780	Ormidhia-Avgorou	14:55	75	0						0	
8/4/2010	**7778**	**Ormidhia-Avgorou**	**9:45**	**125**	**100**	**ANN**		**Yes**	**C-BAM**		**0**	**1 fenced area could not be fully checked**
	8279	**Phrenaros-Paralimni**	**12:35**	**105**	**40**	**P**		**NO**	**O-A-E**		**0**	**3 fenced areas could not be fully checked**
	8580	Phrenaros-Paralimni	15:10	55	0						0	
9/4/2010	3552	Ay.Theodoros-Maroni	10:40	85	0						0	
	3449	Ay.Theodoros-Maroni	12:55	35	0						0	1 fenced area could not be fully checked
	3550	Ay.Theodoros-Maroni	14:30	145	0						0	7 fenced areas could not be fully checked (4 NOT AT ALL)
12/4/2010	9769	Protaras-Ay.Napa	11:50	35	0						0	
	9872	Protaras-Ay.Napa	13:05	55	0						0	
	9471	Protaras-Ay.Napa	14:40	90	0						0	
13/4/2010	**7873**	**C.Pyla-Xylophagou**	**10:45**	**75**	**40**	**P**		**YES**	**O-C**		**0**	**3 fenced areas could not be fully checked (1 NOT AT ALL)**
					40	**P**		**YES**	**O-A**		**0**	
	7774	**C.Pyla-Xylophagou**	**12:25**	**95**	**20**	**P**		**YES**	**O**		**0**	**3 fenced areas could not be fully checked (1 NOT AT ALL)**
					20	**P**		**YES**	**O**		**0**	
					20	**P**		**YES**	**O-C-CY**		**0**	
	7074	Ormidhia-Avgorou	14:30	55	0						0	1 fenced area could not be fully checked (1 NOT AT ALL)
	6971	**Ormidhia-Avgorou**	**15:55**	**45**	**20**	**P**		**YES**	**A-K-O-P**		**0**	**1 fenced area could not be fully checked**
14/4/2010	**9272**	**Protaras-Ay.Napa**	**10:00**	**65**	**20**	**P**		**NO**	**A-O-E**		**0**	**3 fenced areas could not be fully checked**
	9771	Protaras-Ay.Napa	11:30	70	0						0	1 fenced area could not be fully checked (1 NOT AT ALL)
	9672	Protaras-Ay.Napa	13:30	50	0						0	

Cont…

Date	Survey square	Area	Start time	Survey duration (mins)	Metres active net ride	Net code	No. nets	Fenced?	Habitat	Tape lures	Lime-sticks	Notes
15/4/2010	8579	Phrenaros-Paralimni	9:35	85	0						0	1 fenced area could not be fully checked
	8472	Phrenaros-Paralimni	11:30	115	0						0	2 fenced areas could not be fully checked
	8378	Phrenaros-Paralimni	13:55	50	20	ANN		YES	A-C-E			1 fenced area could not be fully checked
16/4/2010	8168	C.Pyla-Xylophagou	9:45	95	0						0	Area searched with SBA Police, who had previously removed 95% of trapping equipment. No signs of activity now.
	8068	C.Pyla-Xylophagou	12:00	100	0	O (40)		YES	A-O		0	Area searched with SBA Police, who will now remove all trapping equipment found.
					0	O (100)		YES	A-O		0	
					0	O (40)		NO	A		0	
	8176	Phrenaros-Paralimni	14:00	100	40	AUN	2	YES	A-O		0	Area searced with SBA police to show them our search techniques in the republic
					80	P		YES	A-O-E		0	
					100	P		NO	A-F		0	
	7968	C.Pyla-Xylophagou	15:30	60	0	O (120)		YES	A		0	Area searched with SBA Police.
					0	O (60)		YES	A-O		0	
19/4/2010	9376	Protaras-Ay.Napa	9:50	85	0			YES	E-A-CY		25	5 fenced areas could not be fully checked (2 not at all)
	9275	Protaras-Ay.Napa	11:40	75	20	P		YES	O-C-CY		0	2 fenced areas could not be fully checked
	9072	Protaras-Ay.Napa	13:40	60	0						0	
	7870	*C.Pyla-Xylophagou*	*15:10*	*70*	*30*	*P*		*YES*	*O-F*		*0*	
20/4/2010	8072	C.Pyla-Xylophagou	9:50	100	20	P		YES	A		0	3 fenced areas could not be fully checked (1 NOT AT ALL)
					0	O (20)		NO	O-A-E		0	
					20	AUN		NO	O-C-A		0	
	7972	C.Pyla-Xylophagou	12:10	80	30	P		NO	O		0	2 fenced areas could not be fully checked
	7975	C.Pyla-Xylophagou	14:15	110	40	P		YES	F-A-O-P		0	1 fenced area could not be fully checked
					30	P		NO	O-A		0	
21/4/2010	3846	Ay.Theodoros-Maroni	9:45	120	0						0	2 fenced areas could not be fully checked (2 not at all)
	3147	Ay.Theodoros-Maroni	12:20	105	0						0	1 fenced area could not be fully checked (1 NOT AT ALL)
	3150	Ay.Theodoros-Maroni	14:30	55	0						0	
	3451	Ay.Theodoros-Maroni	15:45	40	0						0	1 fenced area could not be fully checked
22/4/2010	7073	Ormidhia-Avgorou	9:55	75	20	P		NO	O-C-P		0	3 fenced areas could not be fully checked
	7471	Ormidhia-Avgorou	11:30	100	60	P		YES	O-A-F		0	5 fenced areas could not be fully checked
					60	P		NO	O-A-E		0	
					100	P		YES	O		0	
					40	P		YES	O-F-A-C		0	
23/4/2010	7573	C.Pyla-Xylophagou	9:30	90	30	ANN		YES	O		0	3 fenced areas could not be fully checked (2 not at all)
					80	ANN		YES			0	
	9174	Protaras-Ay.Napa	11:30	80	0			NO	O-A		5	2 fenced areas could not be fully checked
					0			YES	O-F-CY		P-2Trees	
					0			YES	A-O-E		P-3Trees	
	8975	Protaras-Ay.Napa	13:30	80	40	P		YES	F-K-C-A-P		0	3 fenced areas could not be fully checked (2 not at all)
					0			NO	A-O-K		0	
					40	P		YES	O-K-P		0	
24/4/2010	9373	Protaras-Ay.Napa	15:30	60	0						0	3 fenced areas could not be fully checked
26/4/2010	8071	C.Pyla-Xylophagou	9:25	105	20	P		NO	O-A		0	3 fenced areas could not be fully checked (2 NOT AT ALL)
	8280	Phrenaros-Paralimni	11:45	30	60	P		YES	O-A		0	Main approach track from road now blocked with boulders
	8172	C.Pyla-Xylophagou	12:30	60	0						0	2 fenced areas could not be fully checked
	6772	Ormidhia-Avgorou	14:45	45	0						0	
27/4/2010	8872	Phrenaros-Paralimni	9:50	40	0						0	
	8772	Phrenaros-Paralimni	*10:50*	50	0						0	
	8377	Phrenaros-Paralimni	12:10	55	0						0	
	8774	Phrenaros-Paralimni	13:45	50	0						0	
	7375	Ormidhia-Avgorou	15:30	60	0						0	1 fenced area could not be fully checked
29/4/2010	7470	Ormidhia-Avgorou	9:30	60	20	P		NO	A-O-C-F		0	4 fenced areas could not be fully checked (1 NOT AT ALL)
					20	P		NO	A-O-E		0	
					60	P		NO	A-O		0	
	7672	C.Pyla-Xylophagou	11:00	55	40	P		YES	O		0	1 fenced area could not be fully checked
					20	P		YES	O		0	
					80	P		YES	O-F		0	
	8673	Phrenaros-Paralimni	12:45	105	40	P		NO	O-A		0	
					20	P		YES	O		0	
30/4/2010	*7970*	*Protaras-Ay.Napa*	*9:40*	*90*	*20*	*P*		*YES*	*A-E-O*		*0*	*4 fenced areas could not be fully checked*
	9075	Protaras-Ay.Napa	11:30	75	20	P		YES			0	1 fenced area could not be fully checked
	9276	Protaras-Ay.Napa	13:05	65	20	P		YES	O-E		0	4 fenced areas could not be fully checked (1 NOT AT ALL)
	9371	Protaras-Ay.Napa	14:25	50	0						0	5 fenced areas could not be fully checked
3/5/2010	7872	C.Pyla-Xylophagou	10:00	55	0						0	3 fenced areas could not be fully checked
TOTALS	93			7230	2335		7				30	
Average					25,1		0,1				0,3	

Appendix 2

Estimating level of total trapping activity within the study areas and the number of birds caught

The data recorded by the observers in the field can be used to arrive at an estimate of the total level of trapping activity within the survey area and an estimate of the numbers of birds caught.

1. Estimating level of total trapping activity within the study areas

The total number of limesticks set each day and total length of active net ride in the survey area as a whole can be estimated as follows:

Limesticks:

Estimated total number of limesticks set per day in survey area = [total number of fresh (new) limesticks recorded in survey squares] x [total number of 'possible bird trapping area' squares/ number of squares surveyed]

For spring 2010: Estimated total number of limesticks set per day in survey area = [30] x [301/ 93] = **97,1**

Active net rides:

Estimated total length of active net rides in survey area = [total length of net rides in categories P, ANN, AUN and ASN recorded in survey squares] x [total number of 'possible bird trapping area' squares/ number of squares surveyed]

For spring 2010: Estimated total length of active net rides in survey area = [2,335] x [301/93] = **7,557 m**

2. Estimating the number of birds caught

It is also possible to estimate the numbers of birds caught by trappers within a given season.

According to accounts from trappers recorded in Magnin's 1986 report to the ICBP, a standard 12 m long mist net catches 20 birds a day on average, while limesticks catch a bird every other day (½ bird per day).

Limestick catch:

Total number of birds caught on limesticks in the survey area =
Estimated total number of limesticks set per day in survey area x ½ x length of trapping season in days

For spring 2010: Total number of birds caught on limesticks in the survey area = 30 x ½ x 45 = **675**

Mist net catch:

Prepared (P) net rides are assumed to have been in use only every other day during the trapping season, while net rides in the ANN, ASN and AUN category are assumed to have been in use every day.

Total numbers of birds caught in nets in the survey areas = {((Total length of P category net rides/2) + (Total length of ANN+AUN+ASN rides)) x (total number of 'possible bird trapping area' squares/ number of squares surveyed)}/12 [length of average net][7] x 20 birds per net per day x length of trapping season in days [8]

For spring 2010: Total numbers of birds caught in nets in the survey areas = {((1,450/2) + (885)) x (301/93)}/12 x 20 x 45 = **390,815**

For the spring and winter seasons, the estimate is halved to account for spring and winter netting activity being much lower than that during autumn. This halving of the activity estimate also allows for the fact that there are fewer birds around in the winter or spring (compared to autumn) and thus fewer birds are likely to be caught.

Therefore, for spring 2010, the total catch can be estimated at **195,407** birds.

[7] Based on Magnin's data and data gathered in the field by BirdLife since 2002, actual net length can vary, typically between 10 and 20 m, but 12 m represents an average figure.
[8] The trapping season is usually taken to be 60 days long for spring and autumn (but 90 days is a more reasonable estimate for the winter season)

An estimate for the Island-wide trapping toll can be arrived at, based on the assumption that the extended Famagusta and Ayios Theodoros – Maroni survey areas account for 75% of trapping activity across the island.

Therefore, for spring 2010, the total, Island-wide catch can be estimated at **260,543** birds.

Though the above estimates may, arguably, be inflated by the assumptions about frequency of use of net rides and by the fact that, beyond a certain (unknown) point, catch rate per net is in practice likely to decline as the number of nets set increases (non-linear relationship), it is worth noting that that there are also two possible sources of underestimate:

a) Not all limesticks or mist netting activity will have been detected within survey squares (especially where trapping within enclosures is concerned);

b) More recent statements from trappers in local newspapers suggest the catch rates suggested by Magnin (1987) for limesticks and, in particular, for nets, are underestimates.