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Report of the workshop: ‘Setting Favourable Reference Values (FRVs) for Annex I bird species in Cyprus as part of the LIFE project: “Restoration and Management of Oroklini Lake SPA in Cyprus”.

LIFE10 NAT/CY/716

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By Christian Christodoulou–Davies, Dr. Alan Tye and Melpo
Apostolidou
BirdLife Cyprus
Nicosia, 2012

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1. List of Abbreviations:

FCS – Favourable Conservation Status
IBA – Important Bird Area
MVP – Minimum Viable Population
BHD – Birds and Habitats Directives

FRV – Favourable Reference Value
SPA – Special Protection Area
PVA – Population Viability Analysis
SBA – Sovereign Base Area

2) Glossary

Birds and Habitats Directive (BHD) – The BHD refers to two separate directives of the European Union that relate to the conservation of wildlife and nature. These are the Birds Directive (formally ‘Council Directive 2009/147/EC on the conservation of wild birds’) and the Habitats Directive (formally ‘Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora’).

Favourable Conservation Status (FCS) – This term is defined in Article 1(e) of the EC Habitats Directive as when a habitat can be considered stable or increasing, the habitat is functioning as it should and will do so for the foreseeable future and, the species that are intrinsic to the habitat are also considered favourable.

Favourable Reference Value (FRV) – The FRV should be a population size at which the risk of extinction is acceptably low, the species is biologically functional within the ecosystem and there is no contraction or decrease.

Important Bird Area (IBA) – Areas that have been identified through use of international scientific criteria by BirdLife International as internationally important for the conservation of bird populations of one or more species by BirdLife International.

Minimum Viable Population (MVP) – The lowest level at which a population can survive, without going extinct, for a given set of parameters.

Population Viability Analysis (PVA) – A process of assessing the viability of a population through modelling to find the probability of extinction over a set time period with relevant demographic and reproductive data used.

Sovereign Base Area (SBA) – This refers to military bases belonging to the United Kingdom that are on sovereign land that is separated from the ordinary British territory. There are two SBAs within Cyprus, one at Akrotiri and one at Dhekelia.

Special Protection Area (SPA) – Areas that have been classified by Member States under the EU Birds Directive because of their importance for species on Annex I of the BD, or other regularly occurring migratory species. The classification and protection of such sites is an obligation under the EU Birds Directive.

3. Introduction:

This workshop was organised as part of the LIFE+ project “*Restoration and Management of Oroklini Lake*” (LIFE10 NAT/CY/716) in order to set the foundations for setting Favourable Reference Values (FRVs) for Black-winged Stilt (*Himantopus himantopus*) and Spur-winged Lapwing (*Vanellus spinosus*), and other key Birds Directive (2009/147/EC) Annex I species, for which Oroklini Lake has been classified as an SPA.

The beneficiaries of this 3-year EU funded project are the Game and Fauna Service (leading partner), BirdLife Cyprus (coordinator), Environment Department, Department of Forests and Voroklini Community Council. The main objective of the project is to bring the Oroklini Lake SPA to Favourable Conservation Status (FCS) in relation to the species for which the site was designated.

The workshop was organised by BirdLife Cyprus and was held on 21st and 22nd June 2012 in Larnaca, Cyprus. The aim of the workshop was to bring together experts, relevant authorities and stakeholders who work in conservation to formulate a robust methodology for calculating FRVs for birds. This will contribute in setting a clear framework for defining FRVs (or targets) for achieving Favourable Conservation Status (FCS) for the Oroklini Lake. The initial focus will be on Birds Directive Annex I bird species found at Oroklini Lake, including *Himantopus himantopus* and *Vanellus spinosus*, but the methodology adopted could then be applicable to all bird species of Cyprus.

The term ‘Favourable Conservation Status’ (FCS) is a key principle and target of the Habitats Directive (92/43/EEC). It also applies to SPAs designated under the Birds Directive. Setting FRVs is a way of defining the conservation targets that would achieve favourable conservation status for species and thus, indirectly, also for sites. The conservation status of a species can be measured against FRVs that indicate range, habitat, population size and/or other parameters likely to ensure its long-term persistence in all or part of its range. These values may be used to evaluate the conservation status of species or populations and they can aid effective conservation planning because species or populations whose parameters strongly deviate from FRVs may be considered more ‘at risk’.

Therefore defining reference values for a population, or a part of the range of a target species, will help with the assessment and monitoring of its conservation status (Brambilla *et al.*, 2011).

4. Brief overview of the workshop

The workshop was opened by BirdLife Cyprus Executive Director and Senior Project Coordinator of the LIFE Oroklini project, Dr. Claire Papazoglou, who also chaired the workshop. Participants to the workshop were experts from BirdLife Partners (i.e. BirdLife Italy and BirdLife Greece), BirdLife Europe and BirdLife International, officers from project partners and Cyprus National Authorities (Game & Fauna Service, Environment Department, Department of Forests), and other stakeholders (i.e. Sovereign Base Area (SBA) Environment Department), NGOs (i.e. Terra Cypria), a representative from a Cyprus University and a consultant. Please see *Annex 1* for the full list of attendees.

Presentations were given by several conservation experts such as ornithologists and bird conservation experts. A brief overview of each presentation is given below. The workshop agenda may be found in *Annex 2*.

5. Brief Overview of Presentations:

Presentation 1 – ‘Why this workshop? Setting FRVs for Oroklini Lake’ by Dr Claire Papazoglou, Executive Director of BirdLife Cyprus and Senior Project Coordinator.

Dr. Papazoglou provided a brief outline of the LIFE Oroklini Project’s overall aim; to bring the SPA to favourable conservation status, with special focus on the two bird species that triggered the site’s designation, the Black-winged Stilt (*Himantopus himantopus*) and Spur-winged Lapwing (*Vanellus spinosus*). A further four Annex I bird species have been found to breed at this site and should also be considered in its management, these are Stone Curlew (*Burhinus oedichnemus*), Kentish Plover (*Charadrius alexandrinus*), Little Tern (*Sterna albifrons*) and, Common Tern (*Sterna hirundo*). The elaboration of FRVs for bird species has never been carried out in Cyprus before and these are required for the setting of

quantitative conservation objectives for species. A report on FRVs for these species will be produced by BirdLife Cyprus and will then be adopted by the Game and Fauna Service.

Finally, Dr. Papazoglou presented the agenda for the 1st day of the workshop.

Presentation 2 – ‘Oroklini SPA and Oroklini Life+ Project’ by Mr Nicolaos Kassinis, Head of the Research Section of the Game and Fauna Service and Project Director.

The speaker gave an overview of the Cypriot network of SPAs and highlighted the value of the Oroklini SPA to numerous bird species despite its small size; Oroklini Lake is the smallest SPA in Cyprus at 56ha. Furthermore, he outlined the threats faced by this site and the process leading to its designation, as well as the planned project activities. The threats included disturbance from trespassers and the adjacent highway as well as the spread of invasive species, housing development encroachment and lack of water management. Finally, Mr Kassinis highlighted the benefits of the LIFE Oroklini project such as the fact that Oroklini Lake is amidst urbanised areas where there is an active community who support and engage with the ongoing conservation efforts. The importance of this site is increased therefore by its potential to act as a role model for future conservation projects.

Presentation 3 – ‘BirdLife Vision and Guidance on FRV’ by:

Ms. Sophie Herbert, EU Nature Policy Officer, BirdLife Europe

Ms. Dido Gosse, Internship on FRV work at BirdLife International

Dr Ian Burfield, European Science & Data Manager, BirdLife International

Sophie Herbert gave an explanation of EU member states legal obligations under the Birds and Habitats Directives with regards to achieving favourable conservation status. Whilst no methodology is specified for calculating what Favourable Conservation Status FCS is, the European Court of Justice has indicated through its case law that Member States have an obligation of result with regard to the implementation of the directives. This includes reaching or maintaining FCS, or maintaining bird population levels at certain ‘adequate’ levels. The successful implementation of these obligations will then be assessed at the national level. In this context, the European BirdLife Partnership is aiming to support the Member States in the implementation of their obligations, through the development of a harmonised understanding of FCS across the EU. The role of FRVs in measuring whether or

not FCS has been reached was also described. FRVs provide a quantitative reference, against which progress can be measured. Setting conservation objectives, this is important in both measuring the effectiveness of conservation policies and also holding the EU and its Member States accountable. The speaker also raised several questions that were to be echoed throughout the subsequent presentations and discussions, namely: At what level should FRV be calculated - site, national or international? And, how much is enough - how do we what is an appropriate population/range/habitat size?

Based on a literature review, Dido Gosse gave an overview of the different methods for calculating FRVs and deciding whether or not a species is at FCS. At present, few countries have developed methodologies, but of those that have two different broad approaches have, become dominant. A brief description of each was provided along with its merits and shortcomings:

Baseline Approach - This approach involves taking a historical figure when it is thought (based on analysis of long-term monitoring data, or failing that expert opinion) that a species population was in a favourable status and using this population figure as the favourable reference value. Through comparing this against current population levels it is decided whether a species is at favourable conservation status. A common constraint to the use of this method is that it is often difficult to agree when to set the baseline. Another is that relatively few European countries have bird-monitoring data going back before the 1980s, by which time many species had already suffered large declines.

Population Viability Analysis / Minimum Viable Population Approach – through the use of population modelling (and relevant software packages), the probability of extinction is calculated for a species, or population over a predefined period of time. The size of the population is then altered in the model so as to find a population size that has an acceptably low risk of extinction, the minimum viable population. This MVP, or ideally a level higher than the MVP (depending on a range of factors to be taken into account) is then taken as the FRV for the species or population.

A third method for calculating the FRV of a species, the *Habitat Approach*, was also described. This method involves calculating the amount of habitat in a given area which is considered suitable for the species under consideration and using this to derive the carrying

capacity of said area. The approach is based on knowledge of breeding densities in optimal habitat. Looking back at changes in land use over time allows assessment of changes in the amount of suitable habitat that was available and estimation of the population size this could have supported. When calculating an FRV by this method it is important to consider that some changes to habitat are irreversible. A major advantage to this method is that it allows modelling predictions that can be valuable in management decision-making. For instance the total area of habitat may be theoretically increased to show potential benefits of restoration work, or decreased to show what effect further development on and fragmentation of existing habitats may have on population size.

With the legal obligations of European countries as well as the approaches various countries are using to fulfil these obligations having been outlined, Dr Ian Burfield gave a presentation explaining BirdLife International's vision of how these obligations might be met. For rarer or more localised species, it was suggested that population FRVs could be derived from PVA, and then amended where possible on the basis of, range and habitat PVAs emerging from a realistic but ambitious "2050 land use scenario" (i.e., how much suitable habitat can we expect to have by 2050). For more common and widespread species, it was suggested that such scenario modelling should be done first, and that population FRVs should then be derived by extrapolating from the current situation (or historical baseline) in line with the 2050 scenario.

It was also stressed that any FRV should have a firm, ideally quantitative base (be defensible), be more ambitious than just preventing extinction (MVP), and aim to protect the species' ecological functions and ability to adapt to climate change. Finally, a warning light system should be implemented for species, which acknowledges and monitors key factors that may prevent a species from achieving its FRV and thus attaining FCS.

A BirdLife International paper on minimum standards in FRV calculations is currently being written.

Presentation 4 – ‘Hellenic Ornithological Society Work on Conservation Objectives and Favourable Reference Values’ by Mr Thanos Kastritis, Conservation Manager, Hellenic Ornithological Society (HOS/BirdLife Greece).

Thanos Kastritis summarised the work on calculating FCS for species that triggered the Greek SPAs – work that has been going on since 2009. Of particular interest was the development, by HOS, of a ‘decision support tool’ that outlines the ecological needs, threats, management requirements and, legislative needs of each species. Moreover, in the framework of the LIFE+ Nature project “*Management of the SPA site of Andros Island to achieve a Favourable Conservation Status for its priority species*”, HOS will define the FRVs for the four target species of the project (Eleonora’s Falcon, Bonelli’s Eagle, Mediterranean Shag and Audouin’s Gull). Finally, the Greek Ministry of Environment has announced a call for tender for the implementation of a National Bird Monitoring Scheme that will include the establishment of conservation objectives and favourable reference values for all bird species within Greek SPAs.

Presentation 5 – ‘Defining Favourable Reference Values for Bird Populations in Italy’ by Claudio Celada, Director of Conservation, BirdLife Italy (LIPU).

This presentation provided an in depth explanation of how FRVs for populations, habitats, and range were calculated at the national scale. Using the PVA/MVP approach, the Habitat approach and also another method, the Range approach, for Italian birds. The PVA approach was used for birds with populations of less than 2500 pairs. Although PVA results are expressed in terms of risk of extinction of a given population in a certain time period, population size at the FRV can be altered because input parameters obtained from literature can vary across a range of values. For populations greater than 2500 pairs, for which PVA does not provide reliable results, density at different spatial scales can be used. Next, habitat availability and quality can be obtained from species/habitat modelling to obtain a population size and an FRV for the Habitat component. These models, when applied at the large scale, can also help define a FRV for the range component, if a rough estimate of dispersal distribution for the target species is known. It was also shown how the Habitat and Range approaches could be used to predict the impacts of habitat change or fragmentation on a species. For more detail on the approaches used by LIPU in their FRV calculations one may consult the paper by Brambilla *et al.*, 2011.

Presentation 6 – ‘Waterbird Monitoring Data in Cyprus: Past to Present’ by Mr Nicolaos Kassinis, Head of the Research Section of Game and Fauna Service and Project Director

On the second day of the workshop Mr Kassinis provided a brief background on the history of the breeding/presence status of the two trigger species for Oroklini Lake, the Black-winged stilt and Spur-winged plover, in Cyprus. The presentation continued, explaining the level of surveying work carried out by the Game and Fauna Service for waterbirds and other key species and provided relevant quantitative information.

Following the morning presentations on the second day the floor was opened to discussion of the various methods, issues and ideas that had been raised. Cypriot bird species were suggested to be used as examples in trial FRV calculations, and to permit the identification of problems that may arise in calculating FRVs for Cyprus. The discussions of each potential bird species focused on its life-history traits, the data available for it and the proposed method for calculating its FRV. The main points raised, and subsequent discussion around them, are summarised in the following section.

Note: All the presentations are available from BirdLife Cyprus upon request

6. Discussion:

Topics of discussion were as follows;

1) *In regard to the baseline approach, how is the baseline year decided upon, and how is it known this is a biologically valid population size?*

This question highlights the main criticism of the baseline approach, namely that no government or organisation can provide a truly scientifically defensible justification as to why the historical population size used should be considered favourable. Furthermore, in most cases the population size of a species, before humans are thought to have had a profound effect on it, is unknown and even if it were known, irreversible habitat changes often mean it would be impossible to re-establish such a population level (Mehtala and Vuorisalo, 2007). The use of historical populations as a baseline is, therefore, only viable when the primary reason for a population's decline is not habitat loss but some other human influence that may be reduced or reversed (Scholes and Biggs, 2005). One such example is the dramatic decline of vulture species across the Indian subcontinent as a result of human use of the veterinary drug Diclofenac (Oaks *et al.*, 2004). Subsequent banning on the use of this drug has reduced the rate of vulture decline to 40% of pre-ban levels and this is expected to reduce further with wider control on the use of the drug (Cuthbert *et al.*, 2011).

2) *Where do you place your FRV, somewhere that is just above the MVP or a higher level that may be more biologically relevant - where is the boundary between amber and green in the BirdLife 'warning lights' system?*

Cyprus's legal obligation under the Birds and Habitats Directives is to maintain bird populations at favourable conservation status, a level that has no fixed value. Whilst some countries have decided to use population levels at the time when their country entered the EU as their FRV value, this was decided against as a strategy for Cyprus. This, it was agreed, is an unambitious and arbitrary target and could result in attempts being made to maintain certain species at population levels not sufficient for long-term survival; which in turn would not be sufficient for reaching favourable conservation status. Whilst this approach has been adopted to varying degrees by some countries, for those who entered the EU in 2004 (e.g., Cyprus), it is not a viable option. Similarly, it was generally agreed that using the MVP as an FRV would not be acceptable, because an MVP might not be highly vulnerable to extinction

in the short term (calculations to 100 years) but such a small population may not be viable in a longer term, and may not be fulfilling its function in the ecosystem, such as seed dispersal or pest control (Conner, 1988). As such it was decided that the MVP should be taken as the lowest population figure acceptable for a species, and by using the traffic light system mentioned above, the MVP could form the boundary between Red and Amber. This is in line with the use of PVA made by LIPU: PVAs can be used to obtain an MVP for the rarest species (eg Egyptian vulture in Italy), or for setting intermediate conservation targets' (i.e. milestones) rather than long-term or ultimate FRVs (Brambilla *et al.*, 2011). However, by altering input parameters (according to the range of variations reported in the literature), PVA can also be used to obtain a population size that is large enough to be viable under unfavourable conditions, thus in effect these populations are greater than the MVP. Defining the boundary between Amber and Green, the value at which the FRV would be set, was less clear and no definite solution was decided upon. One such method discussed was the use of the habitat approach. This method would allow one to calculate the maximum number of individuals an area could hold, either at site or national level, if the area of available habitat is known. This number would then be taken as the FRV and boundary between Amber and Green. Several issues arose with the habitat availability approach, of which the main were:

- When calculating available habitat to what extent do you factor expected losses due to development or, alternatively, gains due to habitat restoration?
- Species that share habitat types could have conflicting preferences, what is optimal habitat (or habitat management) for one species might not necessarily be optimal for another. How does one decide how to balance those preferences?
- Estimating the carrying capacity or potential breeding density of an area is a complicated process, with the methods for its calculation and interpretation of results still open to debate and criticism (Goss-Custard *et al.*, 2002).
- The creation of detailed habitat maps requires the collection of large amounts of data and so requires substantial resources.

3) What if MVP requires an area larger than that which your country can provide, how will it ever come out of 'Red' status?

No definite answer was found to this question but rather a realisation was arrived at that this is an unavoidable issue that Cyprus and other countries will have to accept. Many national populations of birds contribute to a metapopulation that may span several countries, or, on a smaller scale several SPA / IBAs. Therefore for some species it will not be possible to maintain an MVP within the limits of a country or site. In such a case, there should still be a defined goal (or target population level) for a country or site, and the method used for calculating FRVs should be able to generate the number of birds that should 'always' be present in the country or site. This may be done using the habitat density approach to estimate the number of individuals or breeding pairs an area is able to accommodate provided the habitat is well maintained/managed. This is subject to the same problems discussed earlier.

4) PVA models require the use of large amounts of demographic data that we currently do not possess for most Annex I bird species. As we can't afford to wait for all these data to be collected, can this approach still be used?

Having acknowledged the danger of waiting until there is a perfect data set for analysis, the discussion moved to what can be done using the imperfect data currently available. A 'whip round' of the organisations present at the workshop showed there to be useful data that could be used to contribute to PVA modelling, going back several decades, though the data before 1990 are mostly unsystematic reports. Post-1990 the collection of data became more systematic though large amounts come from winter surveys and so breeding data from Cyprus pertinent to PVA calculations are lacking for most species. A notable exception is that of wetland birds, for many of which, including the Oroklini SPA trigger species, there are records of total population size, number of breeding pairs and also limited data on breeding success. Relevant waterbird data have been collected at wetland sites across the island since 2004 and provide a strong base from which the health/state of populations can be calculated. There is little more than crude population estimates for widespread and endemic species populations. Whilst collection of data specific to Cyprus's bird populations is vital, in the interim, data for reproductive parameters can be used from studies on the same species in other countries with relatively little error introduced. Data about the age and sex structure and mortality rates of Cyprus bird populations is a more pressing need and as such collection of this should be prioritised. This could be provided to some extent by targeted

bird ringing. This would also help provide information as to what extent some species have discrete populations in Cyprus, or instead form one metapopulation across the island.

5) *The need to know the general biology of your species in more detail, warning lights e.g. flyway routes crossing dangerous areas or adult / juvenile breeding pairs, should not be overlooked.*

The differing life histories of different species will make them susceptible to different threats that may increase their risks of extinction. For instance some birds of prey are particularly prone to increased mortality at wind farms (Orloff and Flannery, 1992 and Barrios and Rodriguez, 2004). Similarly, long-lived species with a stable population size may enter a dramatic decline if their breeding success drops below a critical limit, which may go undetected for some time (Ristow *et al.*, 1989). No central database exists that lists such threats faced by individual species so instead it will be the responsibility of the pertinent authority, within Cyprus the Game and Fauna Service, to gather information for the species they protect. In carrying this out it may be of use to utilise outside resource from project partners (i.e. BirdLife Cyprus). This will allow for effective monitoring for population changes and may provide information as to why a population may be declining despite appropriate habitat being available; as may be the case with species that utilise flyways passing through areas that are high risk due to human harvest for example (Alisauskas *et al.*, 2006).

6) *At what level should FRVs be calculated – Local, National, International, Global?*

The relatively small size of Cyprus heavily influences the level at which FRVs may be calculated. The vast majority of species on Cyprus will form metapopulations rather than discrete populations that require individual FRV calculations. It was acknowledged that the island might not be large enough to support populations that reach the calculated MVP, at site or national level. Therefore, it was decided that FRVs/MVPs should initially be calculated at national level and then at site level within the country, with each site e.g. Oroklini Lake having an expected number of individuals. This means that an individual site may not contain a MVP but will contribute toward the island wide MVP, where this is attainable.

A further advantage of this 'top down' approach is that potential conflicting requirements of different species can be resolved – e.g. by management at some sites focusing on one

species, and management at other sites focusing on the other species, so that overall both species thrive and meet their FRVs at national level.

7. Conclusions:

The presentations given, and the discussion that followed, provided an overview of the various methods that other countries and organisations are implementing to calculate FRVs. Potential problems with these methods and their implementation within Cyprus, either at the Oroklini Lake site level or at national level, were highlighted. It was decided that the use of a baseline approach was not appropriate in Cyprus due to its lack of scientific basis and resulting uncertainty around the values used. The use of PVA, MVP and Habitat Density approaches was considered more appropriate due to their flexibility in scale and more thorough and transparent methodology that takes into account numerous variables that may affect population sizes. The lack of data for many Cyprus bird species was acknowledged though it was decided that this may not be an insurmountable obstacle to moving forward with initial FRV calculations whilst more data are collected. In the case of the Oroklini trigger species, *H.himantopus* and *V. spinosus*, there is little information available, globally, on breeding (e.g., reproductive success and productivity) or mortality parameters. Fortunately, within Cyprus, data for both species on total population size and yearly breeding numbers exist for the last eight years and may be utilised in the generating of FRVs.

It was decided the actions below would be carried out to allow for quantification of FCS for the Oroklini Lake SPA:

- Collect all pertinent data for Cypriot bird species from the various different sources, namely Game and Fauna Service, BirdLife Cyprus, published literature, grey literature and, academic sources such as doctoral theses.
- Conduct an extensive literature review for the two trigger species for the Oroklini Lake SPA (*H. himantopus* and *V. spinosus*) followed by those other Annex I species known to breed on the SPA, then the remaining Annex I species that have been recorded at Oroklini. The longer-term aim should be to perform the analysis for all bird species known to breed in Cyprus.

- A selection of Cyprus species representative of the different population groups used by LIPU for Italy will be chosen and subjected to analysis through the various methods discussed to try and ascertain their merits and weaknesses and recommend a final methodology to be used in Cyprus, though this will most likely closely follow the LIPU approach.
- Look at the species on the Annex I list to see which FRV calculation method they would best fit into according to the LIPU approach so it can be seen what data are still required. This will provide guidance for the future collection of bird data.
- A decision will be made on how to decide on the boundaries of Red to Amber and Amber to Green - how ambitious will Cyprus be?

BirdLife Cyprus would like to thank all those who attended the conference for their cooperation and input towards adopting a sound and robust methodology for calculating FRVs in Cyprus.

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ANNEXES

ANNEX 1 – List of attendees

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Workshop for setting Favourable Reference Values (FRVs) for ANNEX I species in Cyprus as part of the project:
 "Restoration and Management of Oroklini Lake", LIFE10NATCY716

21-22 June 2012
 Lordos Beach Hotel, Larnaca, Cyprus

PARTICIPANTS			
AGENCY	NAME	SIGNATURE - 21 June 2012	SIGNATURE - 22 June 2012
GAME FUND	Nikos Kassinis		
	Panicos Panayides		
	Michalis Antoniou		
	Haris Xatzistillis		
BIRDLIFE CYPRUS	Clairie Papazoglou		
	Martin Hellicar		
	Meipo Apostolidou		
	Vasiliki Anastasi		
	Alan Tye		
	Christian Christodoulou-Davies		

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ANNEX 2 – Workshop Agenda

*Workshop for setting Favourable Reference Values (FRVs)
for ANNEX I species in Cyprus as part of the project:
“Restoration and Management of Oroklini Lake”, LIFE10NATCY716*

*21-22 June 2012
Lordos Beach Hotel, Larnaca, Cyprus*

AGENDA

As part of the LIFE+ project “*Restoration and Management of Oroklini Lake*” (LIFE10 NAT/CY/716), BirdLife Cyprus -as one of the partners to the project- is inviting you to a two day workshop that will be held on **21 and 22 June 2012** in Lordos Beach Hotel, Larnaca in order to work on setting Favourable Reference Values (FRVs) for Black-winged Stilt *Himantopus himantopus* and Spur-winged Lapwing *Vanellus spinosus* and other key Annex I species for which Oroklini Lake has been classified an SPA.

Background Information

This FRV workshop is foreseen as part of the LIFE+ project “*Restoration and Management of Oroklini Lake*”. The beneficiaries of this 3-year LIFE project are the Game Fund (leader partner), BirdLife Cyprus (coordinator), Environment Department, Department of Forests and Voroklini Community Council.

The main objective of the project is to bring the Oroklini Lake SPA to Favourable Conservation Status (FCS) in relation to the species for which the site was selected. The main target species are Black-winged Stilt and Spur-winged Lapwing, both qualifying species for the SPA and the IBA of Oroklini Lake, as well as another four Birds Directive Annex I species that regularly nest or have nested at the site (Stone-curlew *Burhinus oedicephalus*, Little Tern *Sterna albifrons*, Common Tern *Sterna hirundo*, Kentish Plover *Charadrius alexandrinus*). The site is also important for 58 Annex I species that stage during spring or autumn migration or spend the winter, and another 36 regularly occurring non-Annex I species most of which we expect will benefit from the actions of the LIFE project.

Workshop Objectives

The methodology elaborated from this workshop will contribute to setting a clear target framework in the form of Favourable Reference Values (FRVs) for achieving Favourable Conservation Status (FCS) for the site.

The workshop will be a great opportunity to bring experts on this topic together, to exchange experiences and examples and a chance to decide on the methodology for setting FRVs for Oroklini Lake and Cyprus more widely.

Working Languages

English

Organisers

BirdLife Cyprus

Participants

Around 25 people. Experts from BirdLife partners, officers from project partners and Cyprus National Authorities, and other relevant authorities.

Time & place

Time: 21&22 June 2012

Location: Lordos Beach Hotel, Larnaca

Contact person

Melpo Apostolidou, LIFE Oroklini project coordinator, BirdLife Cyprus

Email: melpo.apostolidou@birdlifecyprus.org.cy, Telephone: 22 455 072

Setting FRVs for ANNEX I species workshop - 21&22 June 2012, Lordos Beach Hotel, Larnaca Agenda

Day 1 (Thursday 21 June 2012)

<i>When</i>	<i>What</i>	<i>Who</i>
8:30 - 9:00	Registration and coffee	
9:00 - 10:30	Introduction	
	Welcome	BirdLife Cyprus and Game Fund
	Why this workshop	BirdLife Cyprus
	Setting the scene: - The concept of FCS, link to Habitats and Birds Directives - BirdLife International methodology	Ian Burfield (BirdLife International) Dido Gosse (BirdLife International) Sophie Herbert (BirdLife International)
10:30 - 10:45	Coffee break	
10:45 - 13:00	Experience and examples from other countries	Claudio Celada (LIPU/BirdLife Italy), Thanos Kastritis (HOS/BirdLife Greece)
13:00 - 14:30	Lunch	
16:00 – 18:00	Oroklini Lake visit	

Day 2 (Friday 22 June 2012)

8:45 - 9:00	Coffee	
9:00 - 10:00	- Historical data and data availability in Cyprus	BirdLife Cyprus, Game Fund
	- Objectives of the LIFE Oroklini project	
10:00 - 11:00	Discussion on real data	Input from invited experts and participants
11:00 - 11:15	Coffee break	
11:15 - 13:00	Worked example on Spur-winged Lapwing / Methodology / Biological-Legal framework (dates of reference)	
13:00 - 14:30	Lunch	
15:00 – 17:00	Adoption of a methodology for Oroklini project and report	
17:30	End of workshop	