

Guidance for selecting an appropriate conservation strategy

By Clive Hurford

Having identified the conservation priorities and carried out the necessary survey and research to inform future management decisions, we should now consider the most appropriate conservation strategy for conserving these habitats and species in a favourable state into the future. There are several options, three of which are described below.

The resources committed to nature conservation are always limited, so we are never able to do all of the things that we feel we should. Consequently, to ensure that we use our resources to best effect, we must think carefully about the long-term conservation strategies for our protected habitats and species.

In an ideal world, we would know how much funding we have available for nature conservation projects before we start the planning process. In reality, however, we often have to decide what we want to do before bidding for the necessary funding. In either case, there are several conservation strategies that we could consider when outlining our plans for the future, including the options below.

Conservation Strategy 1 (CS1)

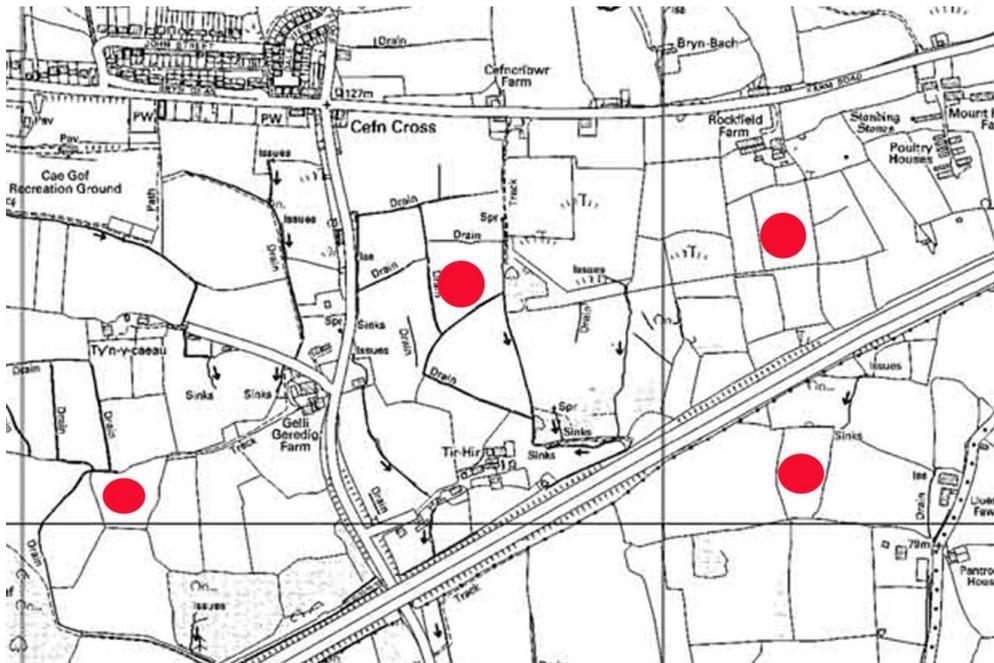


Figure 1 This conservation strategy set out to secure the most important locations (red circles) for a threatened habitat or species. This is the very least that we should aim to do even when resources are severely constrained (adapted from Hurford 2017a and Hurford 2017b).

We do not make any immediate conservation gains in the distribution of a habitat or species by adopting this strategy, but we do ensure that the most important locations are secure into the future. Subsequently, when additional funding becomes available, these locations can be used as a core resource for repopulating other areas nearby. In effect, this is the 'if we can't do anything else then let's hold on to what we have got' strategy.

The main risk attached to this approach is that the strongholds will become increasingly isolated, particularly if they do not all respond positively to the management regime. However, the risks associated with not securing the best and most important examples of a habitat are greater, as we could lose these inadvertently while attempting to restore locations that are already degraded and of considerably less conservation value.

Conservation Strategy 2a (CS2a)

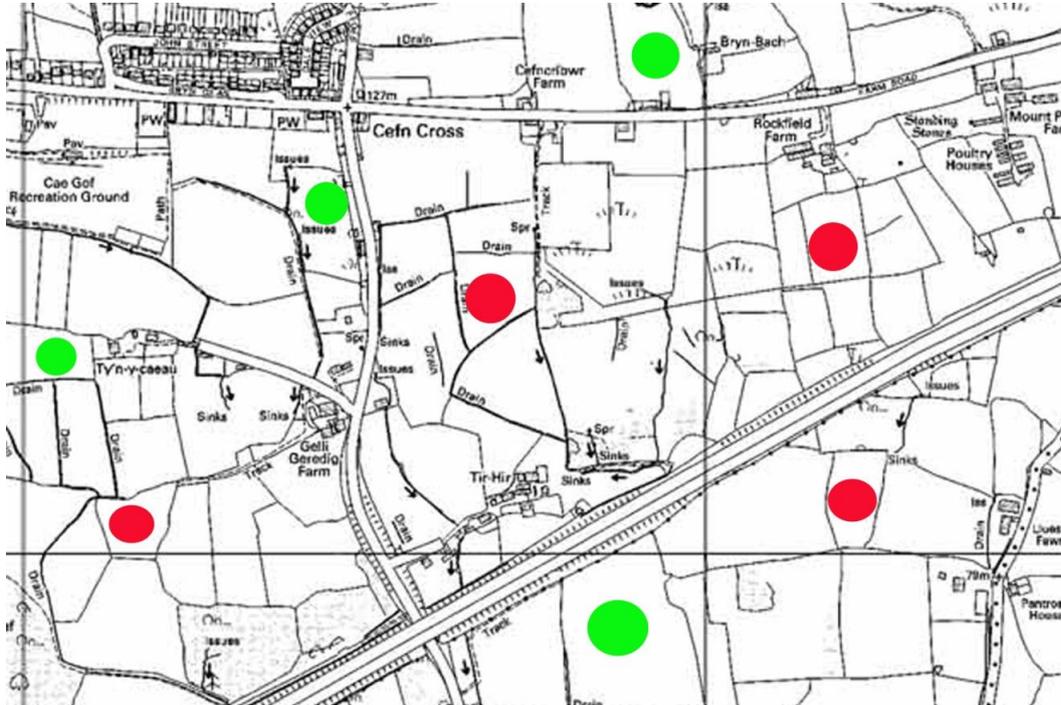


Figure 2 This conservation strategy builds on CS1 by committing resources to securing a second tier of locations (green circles) and bring the ‘next best’ locations under appropriate management (adapted from Hurford 2017a and Hurford 2017b).

Figures 2 and 3 illustrate options for building on CS1 when the management of the most important locations has been secured and additional funding becomes available. In CS2a (Fig 2.) we bring the ‘next best’ tier of locations for the habitat / species into the management scheme, and apply maintenance or restoration management as appropriate. Note, however, that before we can decide whether maintenance or restoration management is appropriate, we must define how to recognise if the habitat at each location is in a ‘favourable state’, i.e. requires maintenance management or if it is in an ‘unfavourable state’ and in need of restoration management. A process for developing these definitions can be found in the section on ‘Condition Indicators’ in the Chapter on ‘Management monitoring of habitats’.

Assuming that the appropriate management regime has been applied, the obvious advantage of this strategy is that it increases the extent and distribution of high quality examples of a rare or threatened habitat that is under appropriate management and secure into the future. The main risk is that the locations are still relatively isolated and that the potential for repopulating the surrounding landscapes is limited.

Conservation Strategy 2b



Figure 3 Conservation strategy 2b builds on CS1 by bringing the parcels of land adjacent to the most important locations under restoration management. It is likely that these 'habitat blocks' will be built up one by one over a period of time as sufficient funding becomes available (adapted from Hurford 2017a and Hurford 2017b).

Conservation strategy 2b is designed to allow expansion of high quality habitat by bringing suitable parcels of land adjacent to the core sites under appropriate management. In time, this will allow species from the core sites (red) to expand into the surrounding land parcels (green) and increase the area of core habitat. The long term conservation strategy would be to continue to expand out from these increasingly large core areas until there is connectivity between them. This will provide the more vulnerable species associated with the habitat to expand into other land parcels and reduce the risk of a stochastic event having catastrophic consequences.

On balance, I believe that this type of conservation strategy has the strongest likelihood of success in the medium and long-term. However, in the first instance, CS1 will probably be necessary to secure the core sites, because if we lose these there will be no resource to expand out from.

In summary

At the outset of any conservation management project, we should dispassionately identify the conservation priorities. Ideally, we would not only identify the conservation priorities for the protected sites, we would also check to see how these are represented within our region and country.

Most sites of high conservation value will already have some form of survey data available. Often, enough site-specific survey data exists to inform responsible management decisions, so before committing resources to collecting additional survey information, we should decide whether this would make our decisions any easier, or whether it would be an expensive displacement activity to avoid taking responsibility.

If we do decide to collect new survey data, then the survey should focus simply on filling the critical gaps in our knowledge that will allow us to make informed management decisions.



As soon as we are in a position to start making conservation management decisions, we should consider the most appropriate conservation strategy to ensure that our priority habitats and species can persist into the future. This will be determined by the availability of resources, and it could be that, initially, we will only be able to secure the core locations, but we should also consider how to expand on this in the future and, if so, where.

References

Hurford C (2017a): Decision making and prioritisation for nature conservation. Opera Corcontica 54, Suppl. 1. [in Czech].

Hurford C (2017b): Developing management aims for nature conservation. Opera Corcontica 54, Suppl. 1. [in Czech].