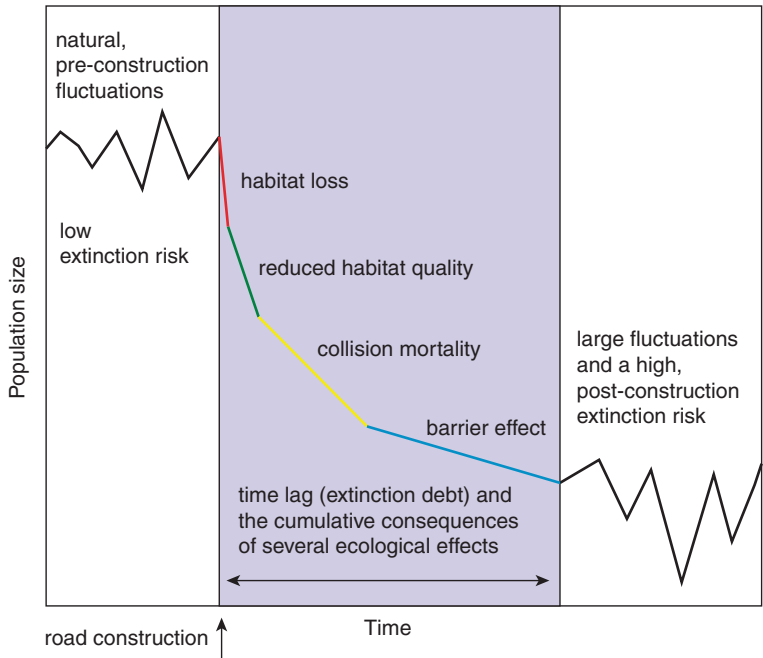


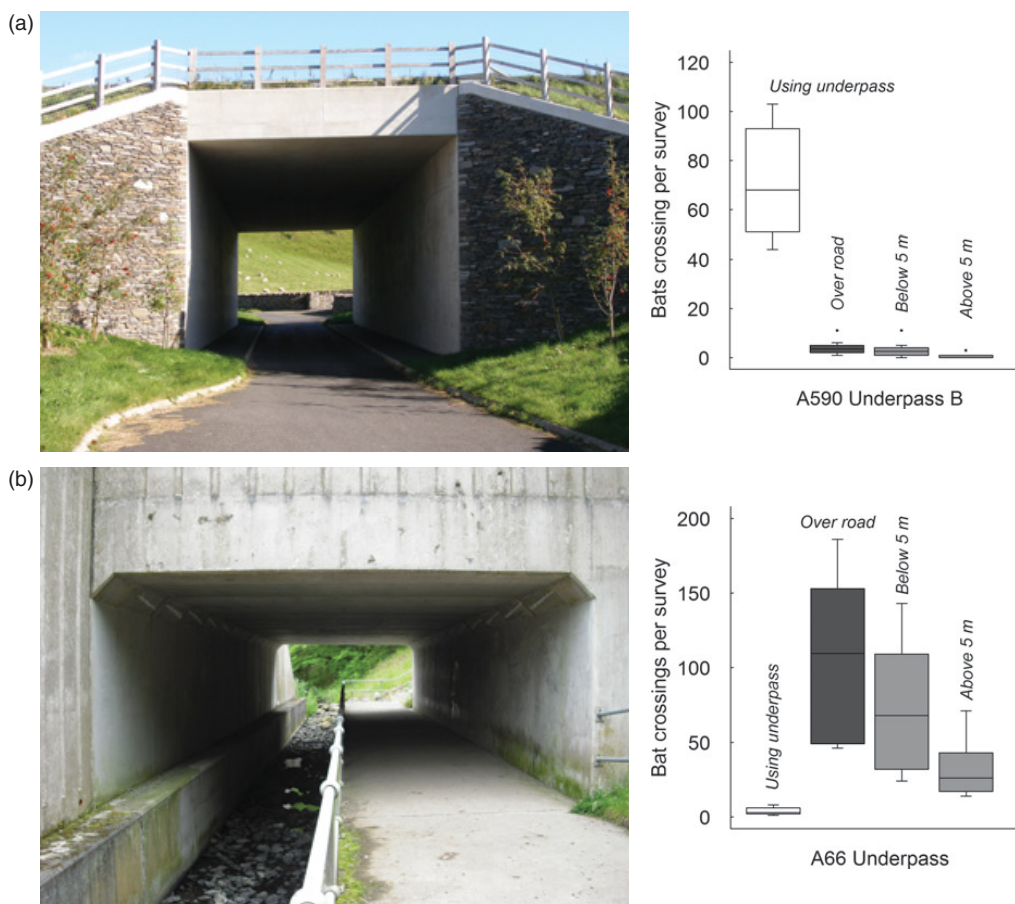
**Figure 3.1** General framework for horizon scanning, reflecting the key steps in the procedure (ovals), inputs and products (rounded rectangles), key outputs (rectangles), actors and end users (triangles), and activities and methods (floating text). Process adapted from Amanatidou et al. (2012). (A black and white version of this figure will appear in some formats.)



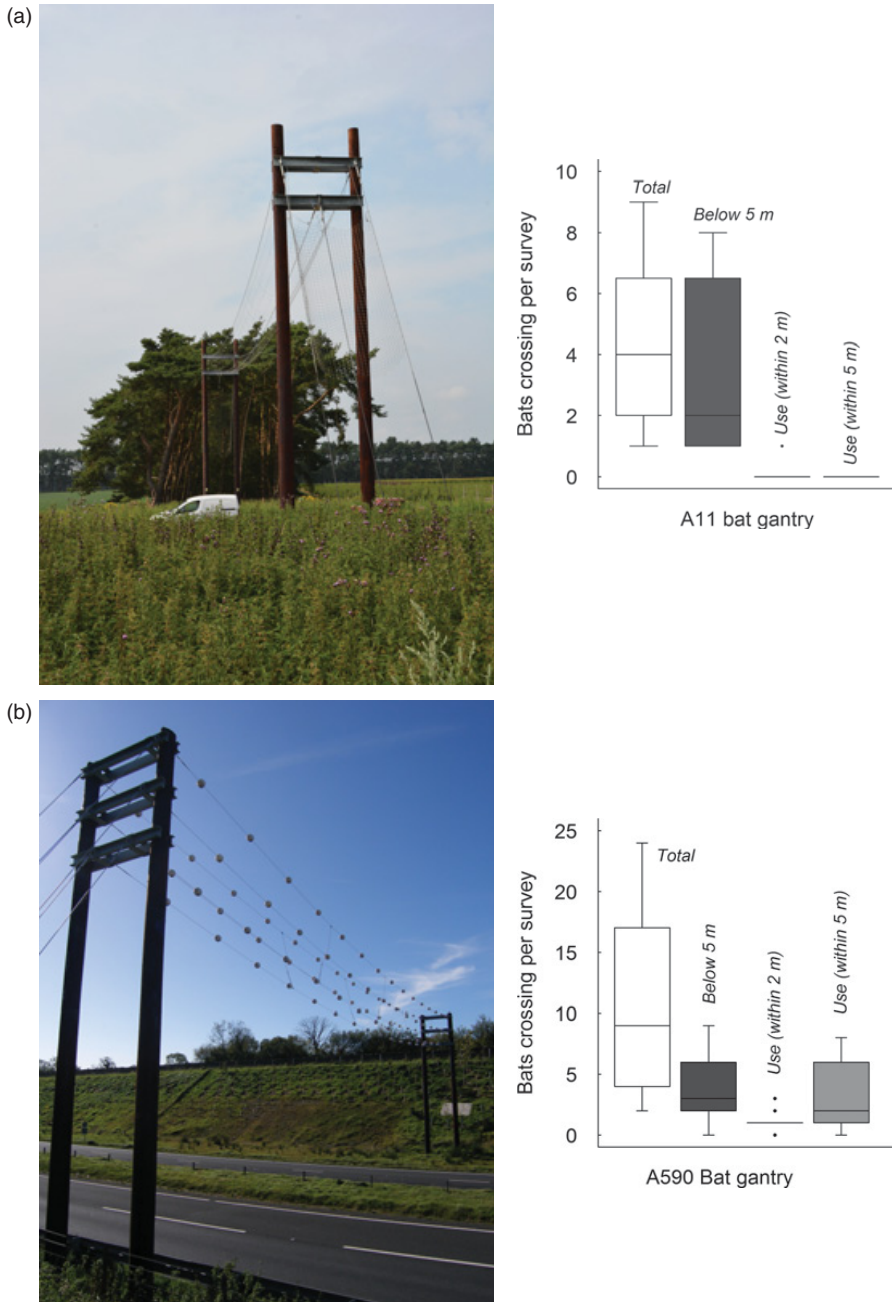
**Figure 3.2** The Delphi-style horizon-scanning approach often used in conservation (Sutherland et al., 2011). Figure reproduced from Wintle et al. (2017), published under the Creative Commons Attribution 4.0 Licence. (A black and white version of this figure will appear in some formats.)



**Figure 4.1** The multiple causes of bat population reduction by road construction and the delayed response (extinction debt). Adapted from Forman et al. (2003). (A black and white version of this figure will appear in some formats.)



**Figure 4.2** Two underpasses found to vary in effectiveness in guiding bats safely under roads. (a) An effective underpass on the A590, Cumbria, UK; (b) an ineffective underpass on the A66, Cumbria, UK. Boxplots show the number of bats crossing per survey using the underpass and crossing over the road above at safe and unsafe heights (above and below 5 m, traffic height). The variable success of underpasses underlines the need to understand the details of conservation interventions; in this example, the location of the underpasses impacted on how effective they were. From Berthinussen and Altringham (2012b). (A black and white version of this figure will appear in some formats.)



**Figure 4.3** Two bat gantry designs: (a) wire mesh design on the A11, Norfolk, UK; (b) wire and ball design on the A590, Cumbria, UK. Boxplots show the results of surveys carried out to test the effectiveness of the gantries in guiding bats safely over the road. Data were recorded for the total number of bats crossing per survey, the numbers crossing at unsafe heights (below 5 m, traffic height) and the numbers using the gantry according to two definitions of ‘use’ (flying within either 2 m or 5 m of the wires above traffic height). The bat gantry story neatly demonstrates the need to test conservation interventions before rolling them out on a wide scale. From Berthinussen and Altringham (2012b, 2015). (A black and white version of this figure will appear in some formats.)



**Figure 5.1** Using the Unmatched Count technique to ask about illegal bushmeat hunting in the Ugalla Wildlife Reserve, Tanzania. Picture by Paulo Wilfred. (A black and white version of this figure will appear in some formats.)



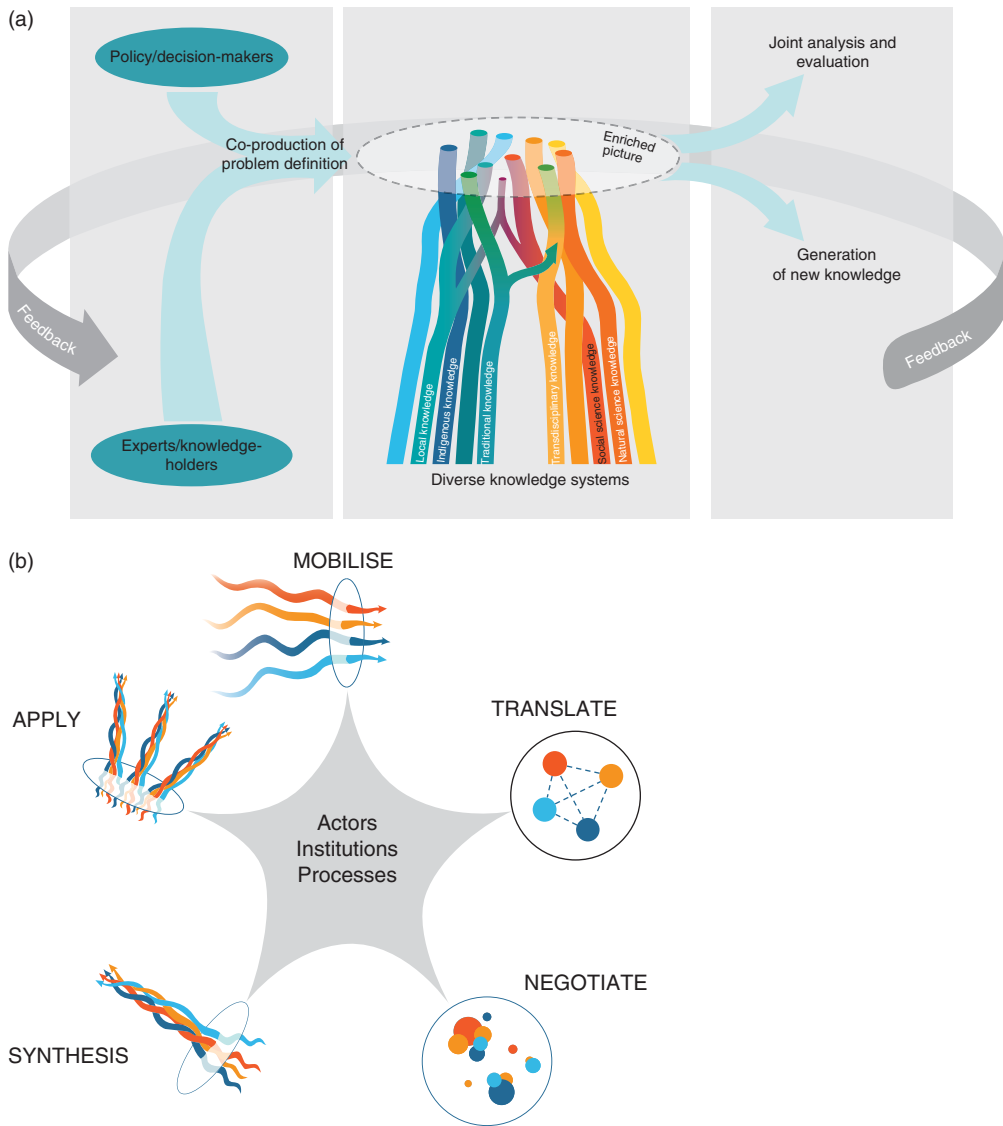
**Figure 5.2** Paulo Wilfred and his research assistant recording an illegal meat smoking rack in Ugalla Wildlife Reserve. (A black and white version of this figure will appear in some formats.)



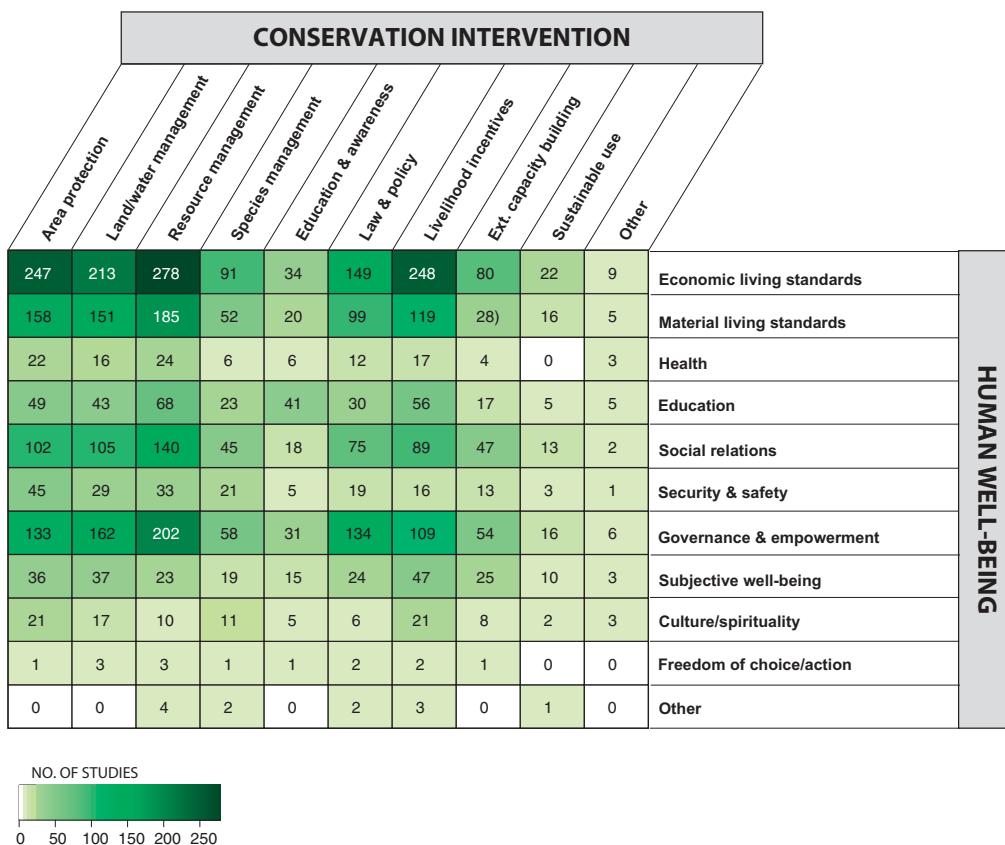
**Figure 5.4** Hans Cosmas Ngoteya (second from right) setting up a beehive with local youths, as an alternative livelihood project. (A black and white version of this figure will appear in some formats.)



**Figure 5.7** WCS Indonesia team members measuring guitarfish at Tanjung Luar port. Photo provided by WCS-Indonesia. (A black and white version of this figure will appear in some formats.)

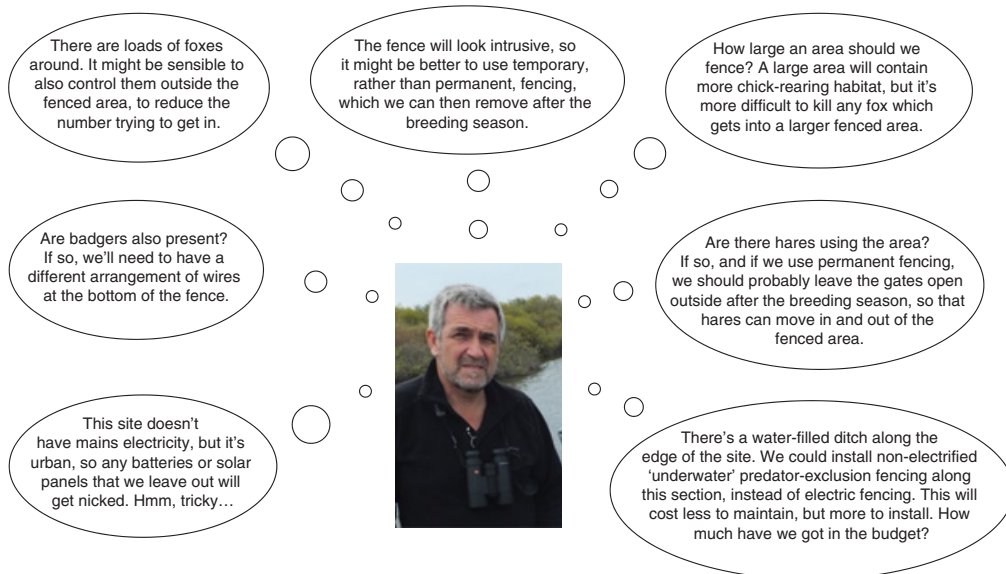


**Figure 6.1** The Multiple Evidence Base approach in action. (a) The three phases of a MEB approach: joint problem formulation, generating an enriched picture with contribution from multiple sources of evidence and joint analysis and evaluation of knowledge (Tengö et al., 2014). (b) Actors, institutions and processes are at the core of the five tasks required for successful collaboration across diverse knowledge systems. The different colours of the lines and dots in parts (a) and (b) represent different knowledge systems, or streams of knowledge within knowledge systems (Tengö et al., 2017). (A black and white version of this figure will appear in some formats.)

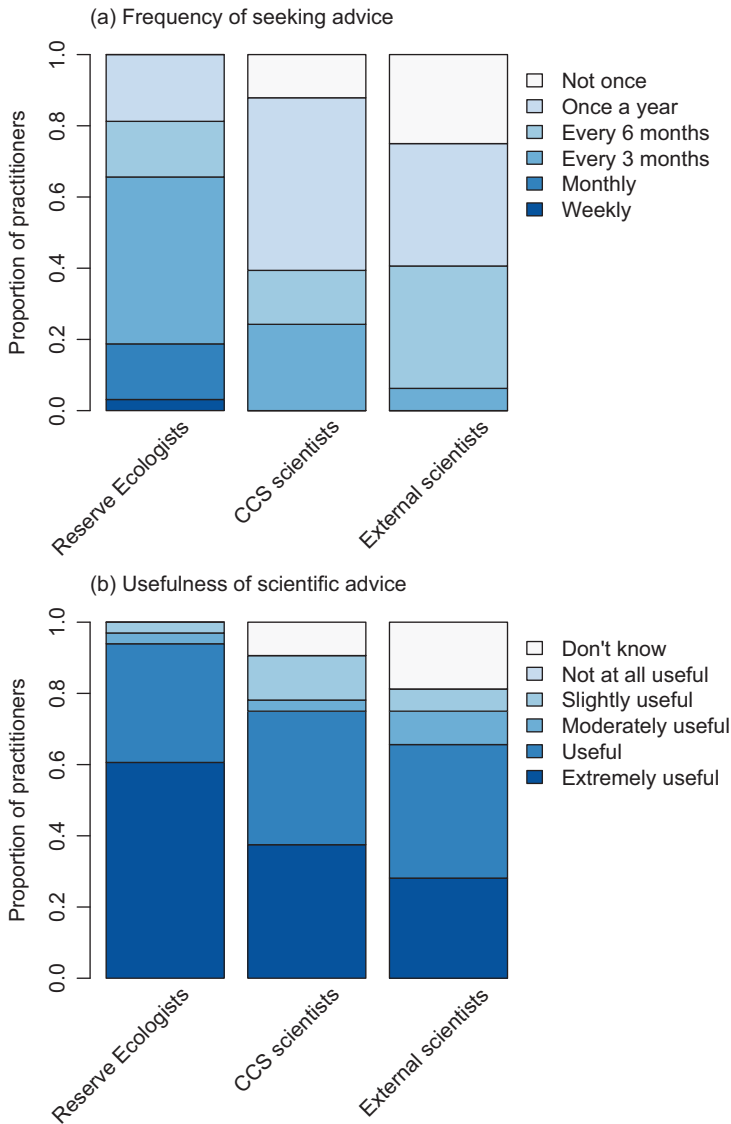


**Figure 7.1** An example of an evidence ‘heat map’ linking conservation interventions with human well-being outcomes. The map allows the user to assess the evidence base for gaps and gluts as well as clicking on each box to further examine the relevant studies (after McKinnon et al., 2016). (A black and white version of this figure will appear in some formats.)

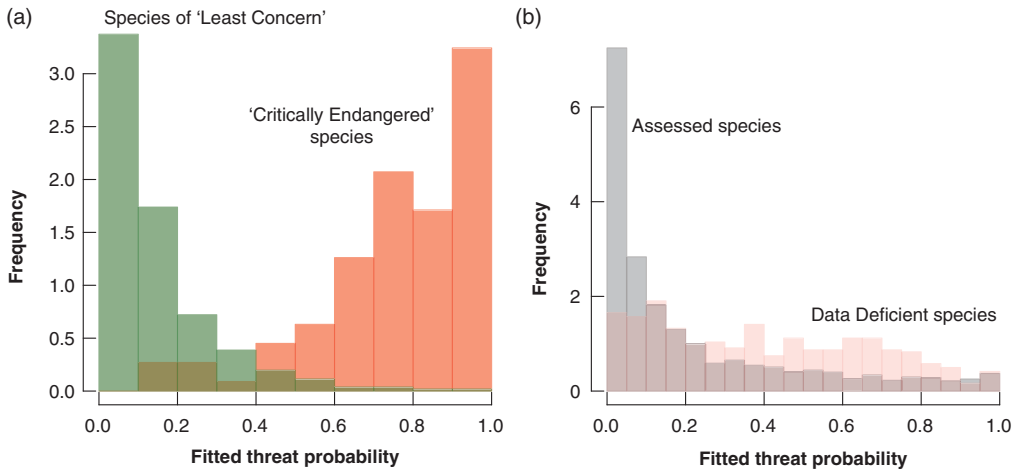




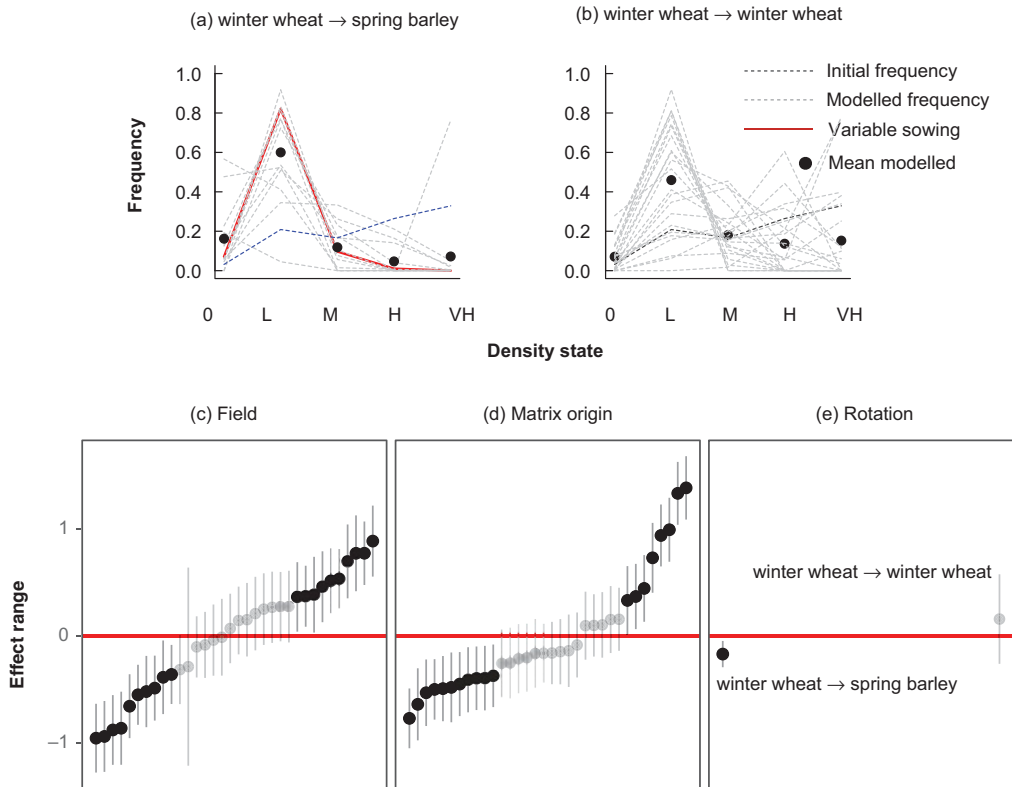
**Figure 9.1** Decision-making at sites often involves taking account of a range of site-specific factors. Here, an ecological adviser ponders over details of the design of predator-exclusion fencing used to protect ground-nesting waders. Photo by Malcolm Ausden. (A black and white version of this figure will appear in some formats.)



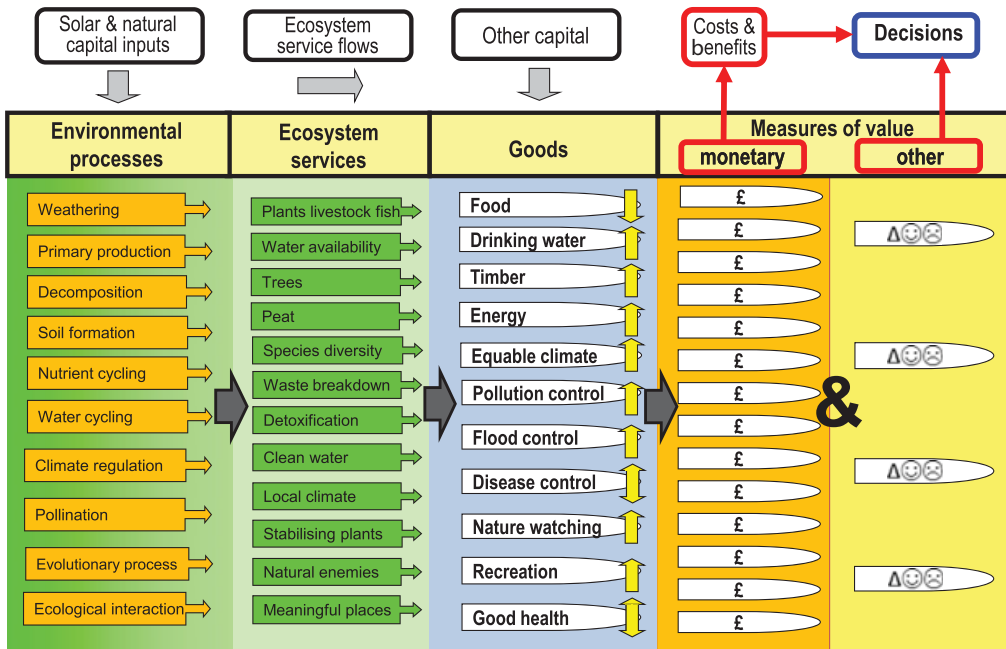
**Figure 9.2** The frequency with which 36 RSPB practitioners (mainly site managers and conservation officers) seek scientific advice from Reserve Ecologists (in-house ecological advisers), Centre for Conservation Scientists (CCS, in-house conservation scientists) and external scientists, and their perceived usefulness of this scientific advice from each source. There was a 78% response rate (46 practitioners were invited to participate) and survey methods are described in Walsh (2015; Chapter 4). (A black and white version of this figure will appear in some formats.)



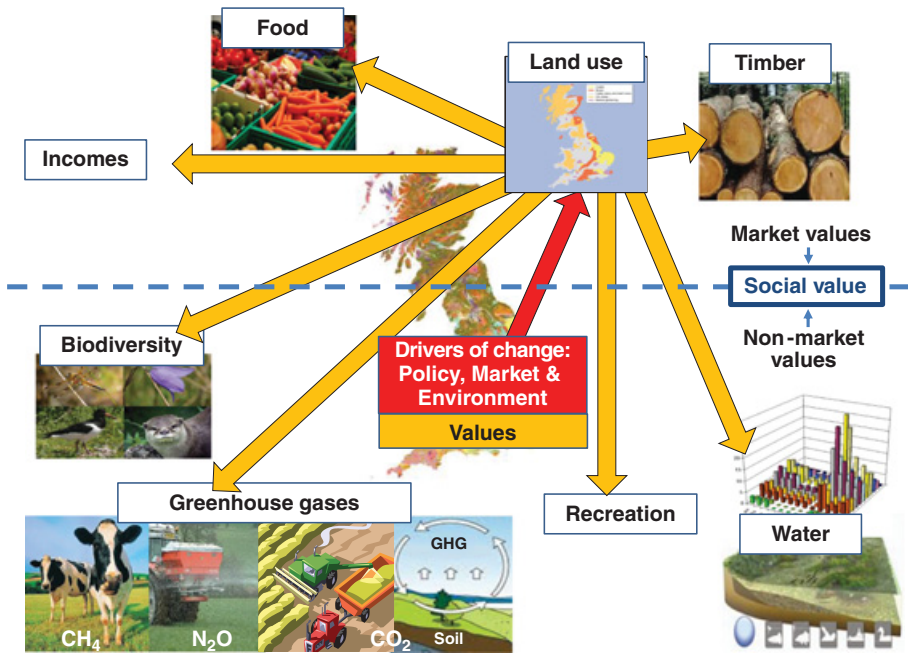
**Figure 11.1** The importance of dealing with uncertainty in conservation assessments. We used models to generate threat probabilities for mammals. (a) These probabilities do an effective job of distinguishing species that are Least Concern (green bars) from those that are Critically Endangered (orange bars); (b) our models were used to predict threat probabilities for species that were Data Deficient (DD) (pink bars) compared to species that were assessed (grey bars) (i.e. to reduce uncertainty in assessment). (A black and white version of this figure will appear in some formats.)



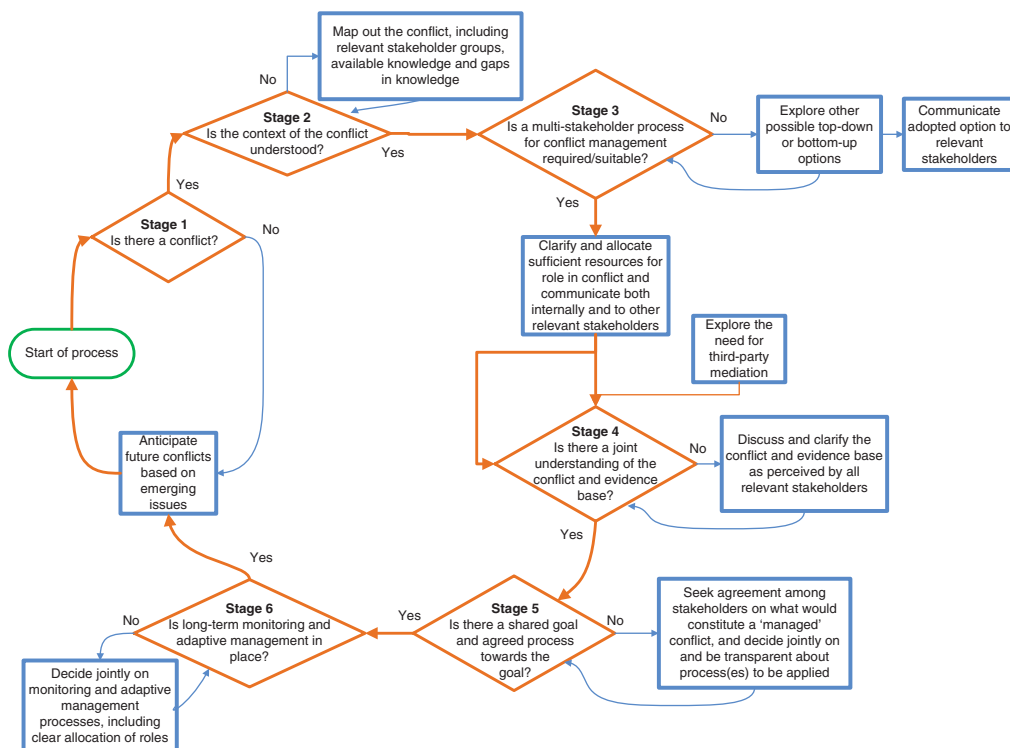
**Figure 11.2** Uncertainty and benchmarking in weed control. (a,b) Predicted responses of populations of the weed *Alopecurus myosuroides* to rotational management. The initial frequency of weeds at each sowing density was the same in each case (dashed blue line). Each grey line represents a matrix generated from a different field following two forms of management. (a) What *would have been* the density (0 = zero, L = low, M = medium, H = high and VH = very high) of an average field *had* it been planted with spring barley. This is compared with (b) the predicted response from maintaining winter wheat. The red line in (a) represents a single field that was managed with variable sowing densities. Figures (c–e) compare the observed effect of management with difference sources of background variation to disentangle the uncertainty in management. We generated models for each field: 22 in winter wheat and 12 rotated from winter wheat to spring barley, and their results are presented in rank order. The effect range is the estimate of the random effect for each field, location or rotation. (A black and white version of this figure will appear in some formats.)



**Figure 12.1** Decision-making and the environment: from natural capital to decisions. The yellow arrows illustrate the multiple effects typical of a change in natural capital, in this case those arising from an investment to establish woodland on a currently farmed area. (A black and white version of this figure will appear in some formats.)



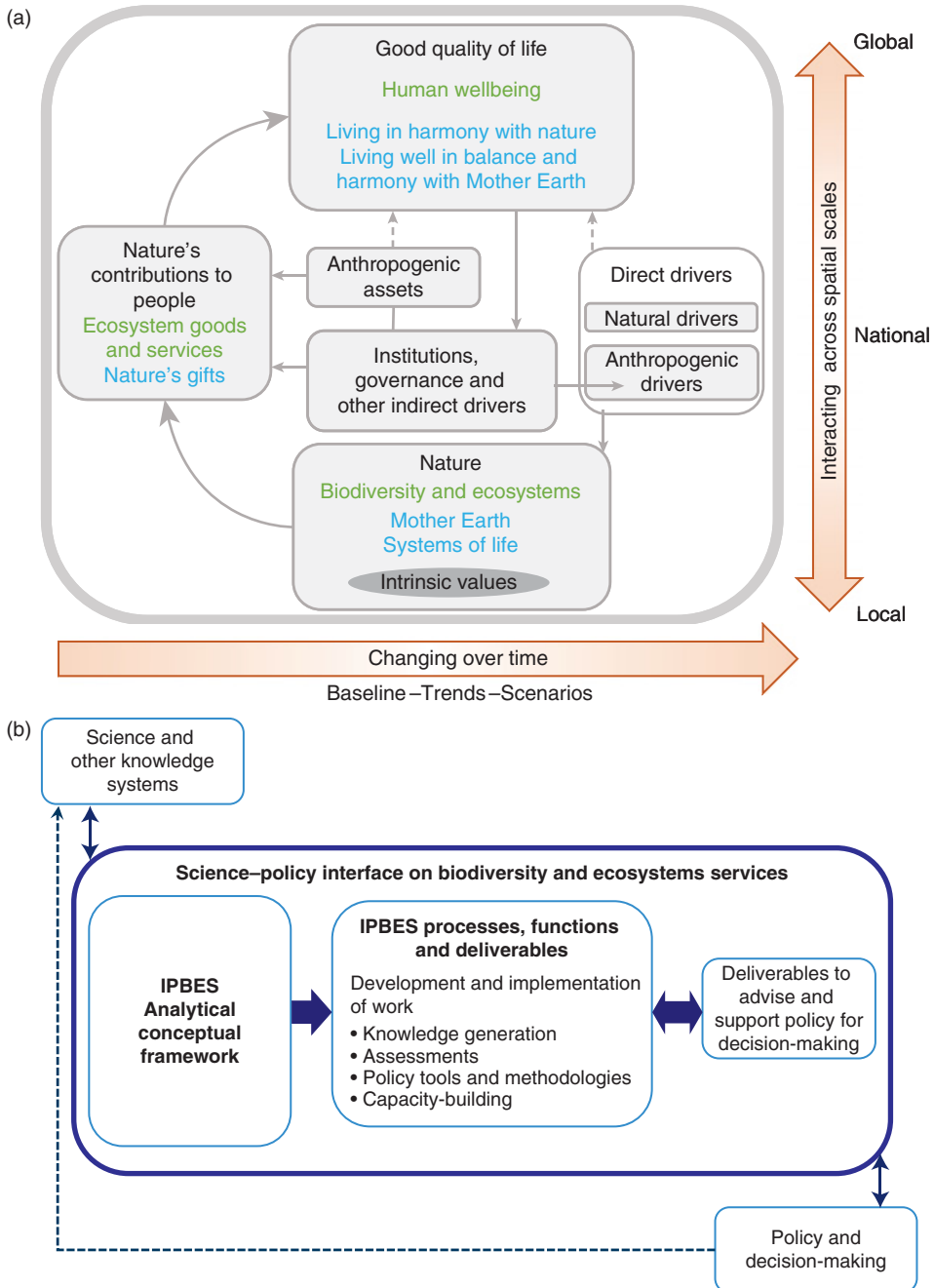
**Figure 12.2** The drivers, consequences and values of land-use change, associated with agricultural land use in Great Britain and incorporated within the conceptual framework of the National Ecosystem Assessment (Mace et al., 2011). (A black and white version of this figure will appear in some formats.)



**Figure 14.1** Stepwise approach aimed at enabling decision-makers to identify, manage and monitor conservation conflicts. Diamond shapes indicate the six key decision stages. Squares state what needs to happen to go from one decision stage to the next. Adapted from Young et al. (2016a). (A black and white version of this figure will appear in some formats.)



**Figure 15.1** The 20 Aichi Biodiversity Targets. Image: Copyright BIP/SCBD. (A black and white version of this figure will appear in some formats.)



**Figure 15.2** (a) IPBES operational model of the Platform (adapted from IPBES, 2014), (b) analytical conceptual framework of assessments (adapted from Díaz et al., 2015). (A black and white version of this figure will appear in some formats.)



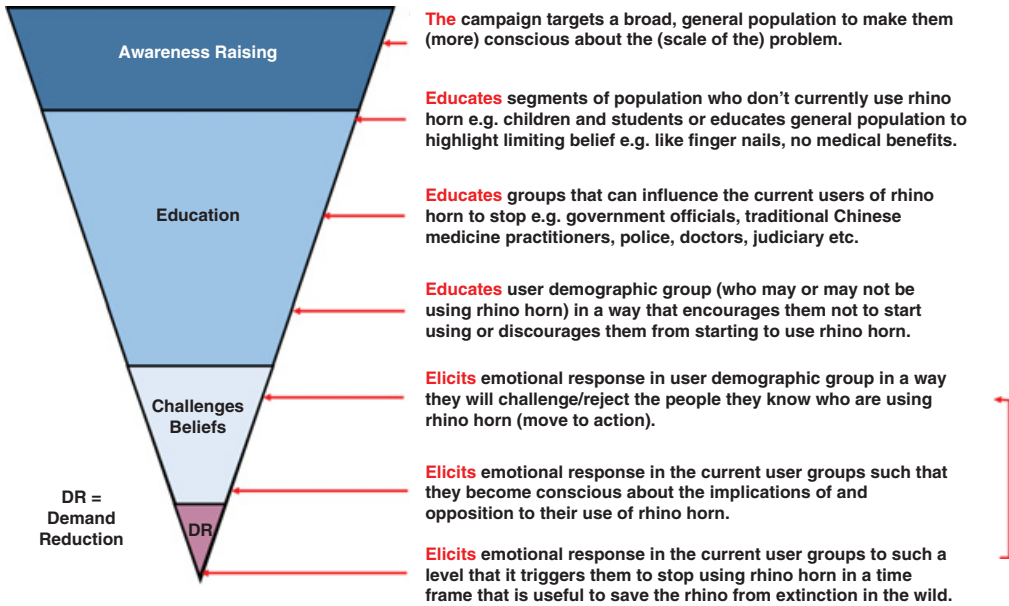


**Figure 15.3** Structures of IPBES (a) science-policy platform, (b) intergovernmental plenary (IPBES, 2018b). (A black and white version of this figure will appear in some formats.)

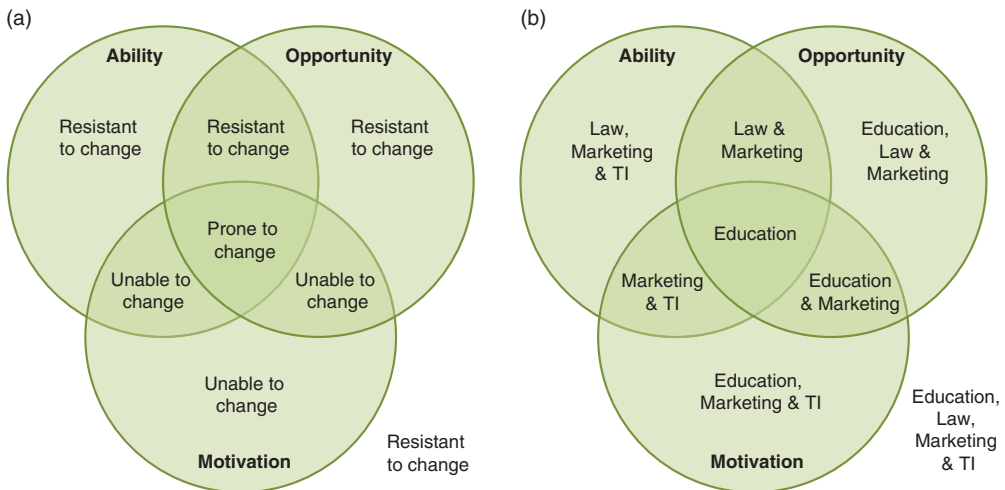


**Figure 15.4** The Sustainable Development Goals 'wedding cake' (source/credit: Azote Images for Stockholm Resilience Centre, Stockholm University). (A black and white version of this figure will appear in some formats.)

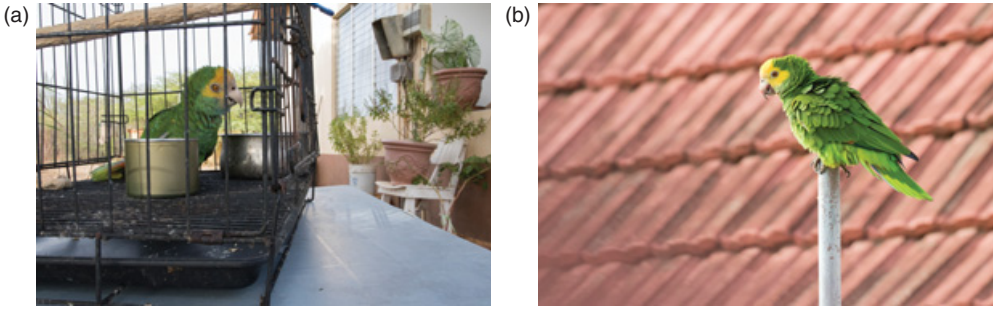
**Basic Test to Differentiate Demand Reduction from Awareness Raising and Education**



**Figure 17.1** Model showing differences between behaviour-change and awareness-raising campaigns developed by Nature Needs More Ltd for its Breaking The Brand RhiNo Campaign (Breaking The Brand, 2016). (A black and white version of this figure will appear in some formats.)



**Figure 19.1** Diagram showing how a person's ability, opportunity and/or motivation determines (a) whether they are prone, unable or resistant to change and (b) the appropriateness of the four different behaviour change approaches of education, law, marketing and technical intervention (TI) under these different conditions (adapted from Rothschild, 2000; Santos et al., 2011). (A black and white version of this figure will appear in some formats.)



**Figure 19.2** The lora or yellow-shouldered Amazon parrot (*Amazona barbadensis*) that was the focus of a social marketing campaign on the Caribbean island of Bonaire. (A black and white version of this figure will appear in some formats.)

**Protect Your Waters**



**STOP AQUATIC HITCHHIKERS!**

To help protect Florida's lakes, rivers and springs from invasive species, be sure to:

- CLEAN** plants off and dispose of them on dry land or in the trash.
- DRAIN** standing water from your boat.
- DRY** your boat to prevent the transport of aquatic hitchhikers.

For more information, visit:  
[www.plants.ifas.ufl.edu](http://www.plants.ifas.ufl.edu) or [www.protectyourwaters.net](http://www.protectyourwaters.net)



**Figure 19.3** Promotional material encouraging boat owners in the Greater Yellowstone Area to adopt practices that will reduce the spread of invasive species. (A black and white version of this figure will appear in some formats.)