People supporting conservation – identifying key actors and roles with network approaches

Flatback Futures – Update 3 - September 2019

The Northwest Shelf Flatback Turtle Conservation Program (NWSFTCP) is coordinated by the Department of Biodiversity, Conservation and Attractions (DBCA) in Western Australia. It has a 30-year contract to increase conservation and protection of the Northwest Shelf Flatback turtle population including:

a) surveying, monitoring and research

b) reducing interference to key breeding and feeding locations

c) establishing information and education programs

Key to the success of the program will be its ability to ensure effective linkages between research and conservation outcomes by integrating and planning research and activities for turtles and the community-at-large. Our four-year project (2018-2021) is undertaking a range of activities, including development of approaches to support long-term adaptation planning.

An assessment of relationships and quality of those relationships is needed to support long-term conservation actions.

A Network Approach for Enhancing Conservation Outcomes

Stakeholder collaboration and communication has been widely acknowledged as an important ingredient for successful conservation programs. This ingredient can be planned and improved if the successful features can be identified. A network approach is one way to measure how individuals and organisations communicate, learn, and share knowledge across complex conservation systems. The approach provides information about patterns in actor relationships across the network as well as metrics that specifically quantify the position and contribution of individuals in achieving conservation action. We have identified more than 130 individuals and 40 organisations will assess how they do, or could, contribute to meeting the goals of the NWSFTCP (Figure 1).

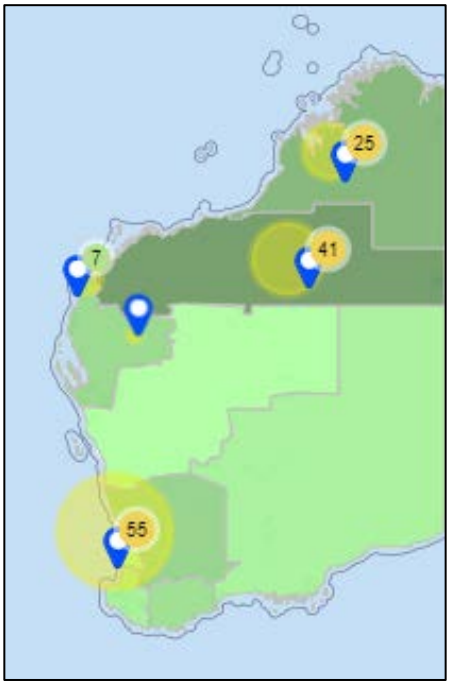

Figure 1: Number and regional location (shades of green) of individuals identified as important for the NWSFTCP as part of the network approach (size of circle is proportional to the number of individuals in five example regions; individuals from other regions outside Western Australia have also been identified).

Benefits of a Network Approach for the NWSFTCP

We do not seek to map an exhaustive NWSFTCP network, rather we identify key actors in the network (e.g. Figure 2). These are people who promote conservation, ensure knowledge is produced and exchanged, and influence on-ground action.

Networks are also static representations of dynamic interactions - current collaborations are not necessarily indicative of future relationships that will contribute to conservation actions and outcomes – but these static representations allow key roles to be identified.

If individuals occupying key roles change, it may take some time to rebuild the quality of the relationships that support conservation actions. These qualities include the spatial, temporal or functional scales of operation, or influence in achieving conservation action.

By identifying the key roles, and the influential qualities of change agents, we can create tools and support mechanisms to facilitate future collaboration among actors across spatial and disciplinary boundaries. This approach will provide insight and a robust approach to safeguard information sharing and collaboration on the decisions, activities, and outcomes of the flatback program.

Examining Relationships Between Actors Can Improve Conservation Outcomes

We have identified a set of relationship metrics to examine the influence of stakeholders in the network. This includes metrics that provide an understanding of structural aspects, such as the presence or absence of links between actors or groups, and on the value or effectiveness of such links. To understand the quality of the connections and quantify formal and informal influence, metrics like individuals' 'trust' in achieving goals of the NWSFTCP can be used (Figure 2).

As an example, trust can contribute to our understanding and identification of;

- the strengths of each actor (e.g. those with high trust) to support specific conservation actions
- qualities that make actors critical in generating conservation decisions, and processes by which other actors might also achieve these qualities.
- actors that can help uncover collaboration gaps that, if addressed, might connect key groups or actors who can enhance conservation success

Other metrics identify important and well-connected actors in the NWSFTCP who could inform the program team about how and where conservation actions can be best directed.

Overall, network tools and analyses provide the evidence base to build productive partnerships and better target communication and engagement efforts.

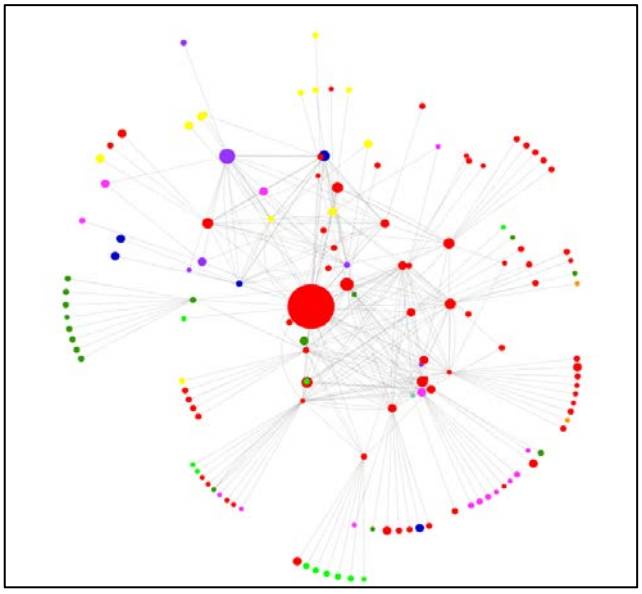

Figure 2 : Illustrative network mapping relationships (lines) between individuals (circles) important for the NWSFTCP. The colour of the circle indicates different stakeholder groups; Educational Institutions (Pink); WA Government (Red); Other Government Bodies (Blue); Indigenous Groups (Light Green); Industry Bodies (Yellow); Science Agencies (Purple); Tourism Industry (Orange); Voluntary Sector/NGOs (Dark Green). The size of the circle indicates individuals' level of trust relevant to the program.

Further information

The Flatback Futures project webpage features regular updates: https://research.csiro.au/teps/current-activities/mapping-and-monitoring- outcomes-and-developing-adaptation-pathways-for-the-northwest-shelf-flatback-turtle-conservation-program-western-australia/

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