



SNAPSHOT – BACKGROUND, UPDATE & PLAN - FEBRUARY 2023

WHO IS SeDNAs?

People who are passionate about eDNA and are working together to:

Promote eDNA best practice (excellence) through collaboration between science, industry and community groups, to advance methods for government, private and community sectors.

We want to foster the adoption of eDNA across Australia and New Zealand.

HOW DID THIS GROUP EVOLVE?

Mid/late 2019 – The seed.

Establishing a collaborative eDNA group(s) was an idea raised in group discussions during the eDNA industry forums hosted by EIANZ (Environment Institute of Australia and New Zealand) and EnviroDNA in Sydney and Melbourne. There was a shared desire amongst many participants to collaborate and share knowledge. Also highlighted was the importance of developing best practice guidance for industry to help ensure confidence in eDNA methods. Subsequently, interest was sought from a group of eDNA leaders to begin establishing a collaborative group. Initially the scope was Australia with possibilities of spanning across the Tasman to New Zealand.

Nov & Dec 2020 – Does this idea have legs? Online planning workshops.

~25 eDNA leaders facilitated across two workshops by Helen Barclay. Invitations were sent out to the growing database of eDNA leaders who had shown interest in such collaboration, along with requests for people to recommend others who should attend. Key content discussed:

- Map the eDNA landscape in Australia – where is it now and future
- Key priorities & challenges for eDNA adoption in Australia (subsequently focus of groups)
- Group structure options for collaboration

While initial focus was on Australia, Xavier Pochon and Anastasija Zaiko had raised interest in expanding the group across the Tasman. Anastasija provided brief presentation on the eDNA landscape in New Zealand.

Early/Mid 2021 – Decisions on how to collaborate and what we will focus on.

A group that prioritises 'action' was voted upon initially rather than other priorities such as an 'advisory' group (which may evolve) or simply an 'information sharing' group. The Working Groups had a focus on developing and working towards outcomes that help to foster eDNA science and adoption in Australia and New Zealand pending further collaboration with NZ eDNA leaders. A Management Group and Working Groups were informally set up (see figure 1). ~35 people nominated themselves into each of these groups including leadership roles. With the level of interest received, the Standards and Best Practice Working Group required an EOI process to select leaders.

Learnings from DNAqua-Net were also gained from Florian Leese of University of Duisburg-Essen and Kat Bruce of NatureMetrics who shared their insights during a Management Group meeting.

Late 2021/Early 2022 – From seed to a...name, mission and logo.

Management Group undertook ideation and decision on group name and mission. New Zealand was included with intention of broading collaboration. The development of a logo was finished early 2022 with thanks to Illumina for funding the graphic design.

Initial working groups – (now a new structure to be implemented in 2025 Action Plan)

There were approx. ~35 individuals who self-nominated into groups

Management Group

- overseeing direction & working groups
- organising and helping to enable collaboration & outcomes
- coordinating/seeking funding

Initial participants:

Alejandro Trujillo-Gonzalez
Anastasja Zaiko
Andrew Harford
Anthony Chariton
Craig Sherman
Dianne M Gleeson
Helen Barclay (Lead)
Justin McDonald
Mark de Bruyn
Nicole White
Olly Berry
Xavier Pochon (Lead – temporary)

Working group – Communication

Purpose: Developing the voice and brand of the Southern eDNA Society helping to inspire member involvement and increase the understanding and application of eDNA.

What we do:

1. Communicate to and promote the eDNA society, helping foster collaboration and growth of group
2. Communicate, advocate and educate for eDNA techniques to end users
3. Future: support the communication and advocacy for eDNA to government re policy

Leaders – Maarten De Brauwer & Helen Barclay

Working group – Standards & Best Practice

Purpose: Developing up-to-date best practice guidelines for the use of eDNA methods in Australia and New Zealand to improve uptake and quality of eDNA applications.

To develop a management framework to store, maintain and update best practice standards and protocols recognised by the Southern eDNA Society

What we do:

1. Develop, review and communicate eDNA protocols recognised by the Southern eDNA society
2. Communicate, advocate and educate the use of best practice protocols to end users about the appropriate use of eDNA techniques.

Leaders – Alejandro Trujillo-Gonzalez and Maarten De Brauwer

Working group – Data Issues & Management

Draft purpose: Identifying needs & pursuing options for improving data interoperability in industry to help ensure we can leverage the enormity and the evolution of this biodiversity data.

Note – group being reconceptualised / reconsidered.

Leaders – Olly Berry and Reid Tingley

Working group – Comparisons with Traditional Methods

Draft purpose: Undertaking or pulling together comparisons of eDNA against traditional methods to help industry understand its value and how it fits in a wildlife survey toolkit.

Note – group in early phases, no clear actions.

Leaders – Craig Sherman and Tom Mooney

WHERE ARE WE NOW - Feb 2023

- Management Group - supporting establishment of structures and collaboration. ~8 online meetings held since June 2021. We were very excited to meet face to face for the first time in Sept 2022 in New Zealand!
- Standards and Best Practice Group – finalisation of first set of best practice guidelines in 2022 – led by Maarten De Brauwer and Alejandro Trujillo Gonzalez with funding support from Australia’s Depart. Agriculture, Fisheries & Forestry facilitated through the University of Canberra/EcoDNA. Contributions from more >150 people.
- Communication Group – establishing initial website and logo (with thanks to Illumina for funding the logo design). Also working alongside the eDNA Conference committee to run an online eDNA seminar series throughout 2022 with facilitation by Maarten de Brauwer and Clare Adams.
- Comparisons with Traditional Methods Group – an initial meeting held with group to discuss ideas for comparison projects and communication.
- Data Management Group – there was a ‘reconceptualisation’ of the group. Olly Berry has since been running a number of projects that already addressed core objectives of this group e.g. DNA barcode database, remodelling repository databases to better serve eDNA data/reusing eDNA data. Thus, the impetus for this group lessened.
- NZ based workshop held in September 2022 for Management Group and NZ colleagues with thanks to Illumina for funding support. It was an opportunity to forge connections with NZ colleagues and seek to extend SeDNAs beyond Australia. It was our first chance to meet face to face given COVID. Discussions focused on: setting up a society/formalising; how we will operate; ideas for our collaboration efforts.
- One of the key outcomes at the NZ workshop was agreement to formally incorporate as a Company Limited by Guarantee and to seek Charity status. Further legal advice has confirmed this direction. Moores Lawyers will assist with incorporation matters, and cost will be paid for by profit from the eDNA conference.
- Helen Barclay, Xavier Pochon and Anastasija Zaiko as organisers of the NZ workshop, continued to collaborate on the leadership of workshop actions regarding incorporation and planning including running the SeDNAs online general meeting 1st Feb 2023.
- Amongst a number of other NZ workshop actions, was one action about the importance of indigenous people involvement in SeDNAs and learning how we can best help eDNA adoption to occur with respect to indigenous people and culture in Australia and New Zealand. Alejandro Trujillo Gonzalez has been leading a draft statement of commitment regarding this in Australia. Discussions amongst Neil Gemmell, Mike Bunce and Susie Wood have been undertaken from a New Zealand perspective with more progress to be made.
- Meeting on 1st Feb 2023 for all people who have participated in SeDNAs to date. Overview of incorporation status/constitution/structure; call for nominations for SeDNAs board positions; introduction of draft action plan; introduction of initial membership and launch of SeDNAs at conference.

GREAT JOB EVERYONE WHO HAS BEEN INVOLVED IN THE COLLABORATION OF SeDNAs SO FAR!

DRAFT GOALS FOR UPCOMING YEARS

- **PURPOSE GOAL 1:** We will involve First Nations people to guide the direction of SeDNAs and to help foster eDNA adoption with respect to Country and Culture.
- **PURPOSE GOAL 2:** We will further develop an online knowledge hub to raise awareness of eDNA generally across government, industry and community in Australia and New Zealand.
- **PURPOSE GOAL 3:** We will upskill eDNA researchers, enabling and inspiring them to be the best.
- **PURPOSE GOAL 4:** We will build linkages with people in industry, government and community through education/upskilling and best practice guidelines.
- **PURPOSE GOAL 5:** We will run an engaging and exciting 2nd eDNA conference.

WHAT NEXT

We now find ourselves at the first eDNA Conference. It's an exciting opportunity for SeDNAs to increase its participation with likeminded people, and offer opportunities for involvement. We will be presenting a draft action plan and inviting membership sign ups, and further board nominations.

We envisage the eDNA Conference to be a regular key meeting opportunity for SeDNAs, and look forward to organising the eDNA Conference 2.0 in New Zealand!

WE ARE EXCITED TO INVITE YOU TO JOIN US 😊

www.SeDNAsociety.com