



**eDNA TOOLS ARE SENSITIVE,  
ECONOMICAL, AND SAFE TO USE.**

**WE EMPLOY STATE OF THE  
SCIENCE TECHNOLOGY TO  
DETECT SPECIES IN THEIR  
ENVIRONMENT.**

**OUR SCIENTISTS ARE  
AVAILABLE TO APPLY THEIR  
VAST EXPERIENCE WITH eDNA  
APPLICATIONS FOR YOUR  
NEXT PROJECT.**

# eDNA

Stantec.io

## WE FOCUS ON EFFECTIVENESS AND EFFICIENCY

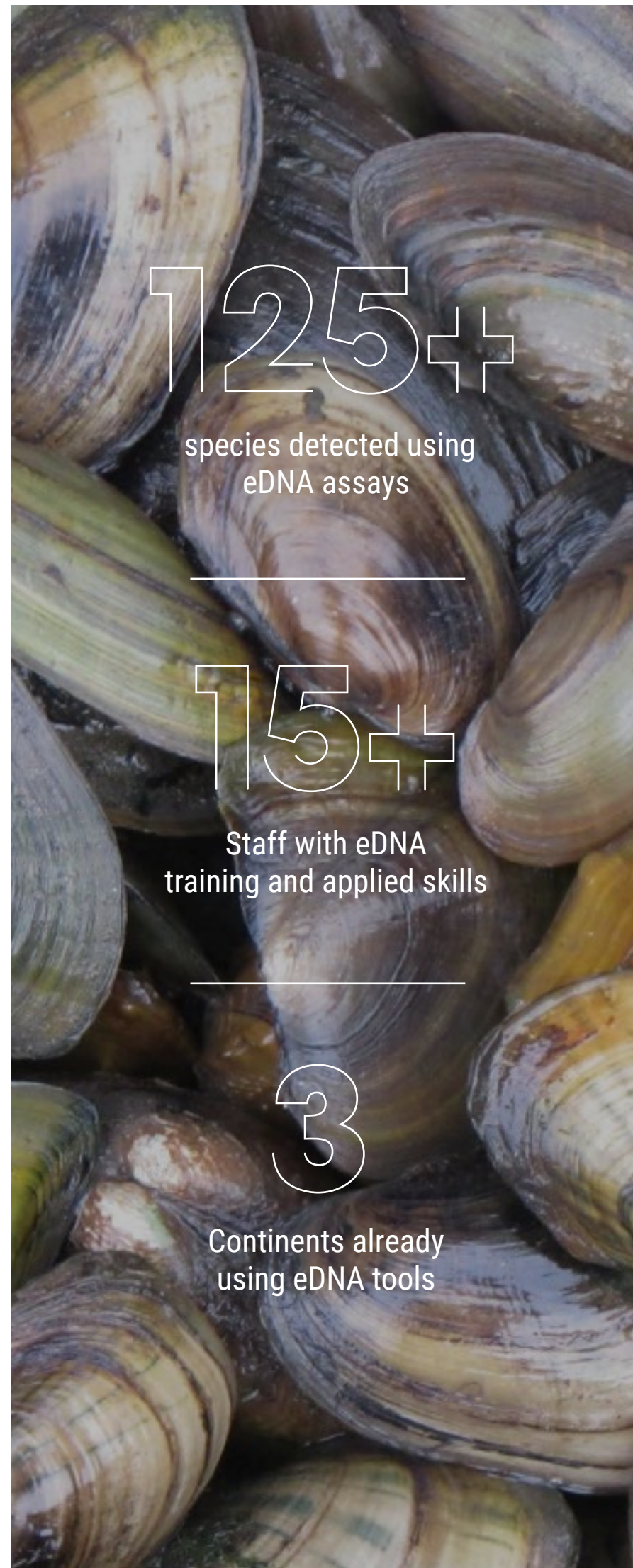
Environmental DNA (eDNA) is DNA that is naturally shed by organisms into their environment, such as streams, rivers, oceans, soils, even in fecal matter. By sampling the habitat in which species live, we can detect their presence without having to capture, handle, or even see the organisms we are looking for.

From conserving biodiversity to aquaculture monitoring, eDNA tools are reliable, sensitive, species-specific, and safe for the organisms being studied and the habitats in which they live.

Compared to conventional survey methods involving capture or observation, eDNA tools are non-injurious to organisms, more cost-effective, and safer for field staff. Methods can also provide rapid results in the field for applications where time is of the essence.

Whether used as another survey tool in the toolbox, or on its own, the applications of eDNA methods are expanding rapidly and the benefits are clear.





125+

species detected using eDNA assays

15+

Staff with eDNA training and applied skills

3

Continents already using eDNA tools

Assessing rare and invasive species – freshwater mussels

### OUR eDNA PRACTITIONERS

Our scientists are using eDNA methods in field programs across the world. We're leading our clients through their planning design, field sampling, analysis, and interpretation of results. We have partnerships with several eDNA laboratories that help our team develop specific eDNA tests, analyze samples, and test kits to use in the field for on-site analysis. Our team has applied eDNA tools for our clients across a variety of sectors, including energy and resources, federal and municipal services, Indigenous groups, power and dams, and transportation.

### eDNA APPLICATIONS

- Monitoring for species at risk
- Early detection of invasive species
- Monitoring of keystone and commercial species of interest
- Characterizing species communities
- Tracking the presence of wildlife
- Assessing terrestrial and aquatic species, plants and animals
- Assessing microbes in water, soil, and sediment



Monitoring for fish species



Assessing rare species – Jefferson salamander



Real-Time Analysis



Sample Processing

### CUSTOM SPECIES TESTS

Our eDNA team works closely with our lab partners around the world to detect individual species and to characterize biological communities.

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**eDNA METHODS PROVIDE A TRULY REVOLUTIONARY APPROACH TO BIOLOGICAL MONITORING, AND HELP OUR CLIENTS SAVE TIME AND MONEY.”**

MARY MURDOCH,  
SENIOR PRINCIPAL,  
ENVIRONMENTAL SERVICES



### RECENT PROJECTS

- [eDNA Leatherside Chub Detection](#)
- [Hydrilla and Zebra Mussel project](#)
- [Atlantic Salmon Environmental DNA Surveys](#)
- [Six Mile Dam](#)
- [Jefferson Salamander Environmental DNA Study](#)

### CONTACT US

Let us design a program that addresses the questions you have and delivers the results you need.

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### CONNECT WITH US



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