



Innovative Biopsy Harvesting Tools & Systems
Custom Tag Head & Tether Solutions to Increase Retention



Why TISSUEGRAB™?

Reliable tissue samples are the foundation of genetic, isotopic, and physiological research. Yet conventional metal biopsy devices often fail: low yields, contamination*, repeated attempts, and high costs reduce sample quality and increase stress on animals.

TISSUEGRAB™ solves these challenges:

- Sterile, gamma-irradiated, single-use tips
- Consistent yield of ~1.5 cm³ tissue (suitable for multiple assays and long-term archiving)
- Minimally invasive design reduces animal stress and avoids repeated sampling
- Compatible with harpoons, spearguns, crossbows, and other platforms via a universal M8 bolt (M7 with thread tape)

*References: Evans et al. (2021, FRDC Project No. 2016/018); Anderson et al. (2023, Frontiers in Marine Science); Righton et al. (2025, Scientific Reports).



Pre-assembled dart tip and base can be separated after sample acquisition or bagged and frozen intact



TISSUEGRAB™ Biopsy Dart include dart tip and base mounted to an M8 bolt.

P.O. Box 10243 • Honolulu, Hawai'i 96816 USA
Phone: +1-808-620-2903 • TISSUEGRAB@gmail.com
www.pelagicresearchgroup.com

Proven Base Model — Ready to Scale:

Our patented TISSUEGRAB™ biopsy dart is more than a tool: it's a platform for future innovation.

- Current model validated across species and sampling environments
- Scalable design accommodates different species sizes and challenges (e.g., sharks, billfishes, tunas)
- Future development pipeline: cutting/piercing accessories to enhance penetration in species with dense dermal denticles

With directed investment, the TissueGrab™ system can set global best-practice standards for tissue sampling.

Cost-Effectiveness & Reliability:

Each biopsy tip is \$30 USD - a fraction of the cost of traditional devices, which are often reused at the risk of contamination.

- Single-use design eliminates cross-sample contamination
- No hidden sterilization costs — every tip arrives ready for deployment
- Higher yield = fewer attempts = less time on the water and less stress on study animals

Compared to vessel costs (often \$30,000/day for large expeditions), ensuring one-strike, one-sample success makes TISSUEGRAB™ the most cost-effective option for marine researchers.

Technical Features:

- Flared chamber for tissue expansion
- Barbed chamber & rough interior to “grab and hold” tissue securely
- Recessed cutouts prevent positive pressure buildup
- Sharpened tapered tips produce clean exit wounds (insignificant compared to natural injuries such as cookiecutter shark bites)
- Tip + base assembly can be separated or frozen intact for transport and archiving
- Sample ID can be written directly on the tip for documentation

Sustainability & Reinvestment:

We are committed to reinvesting in fisheries science. A portion of proceeds from TISSUEGRAB™ product sales support conservation initiatives and capacity-building in international fisheries research.

Ordering Information:

- Price: \$30 USD per biopsy tip
- Delivery: Typically, 1–2 weeks (U.S. and international shipping available)
- Guarantee: 30-day money-back guarantee on unopened devices
- TissueGrab@gmail.com

P.O. Box 10243 • Honolulu, Hawai'i 96816 USA
Phone: +1-808-620-2903 • TISSUEGRAB@gmail.com
www.pelagicresearchgroup.com