

# PIT Tag Technology for Lake Sturgeon Rehabilitation



Henry Quinlan and Jonathan Pyatskowitz - USFWS Ashland, WI  
Robert Elliott - USFWS Green Bay, WI  
Jim Boase - USFWS Alpena, MI

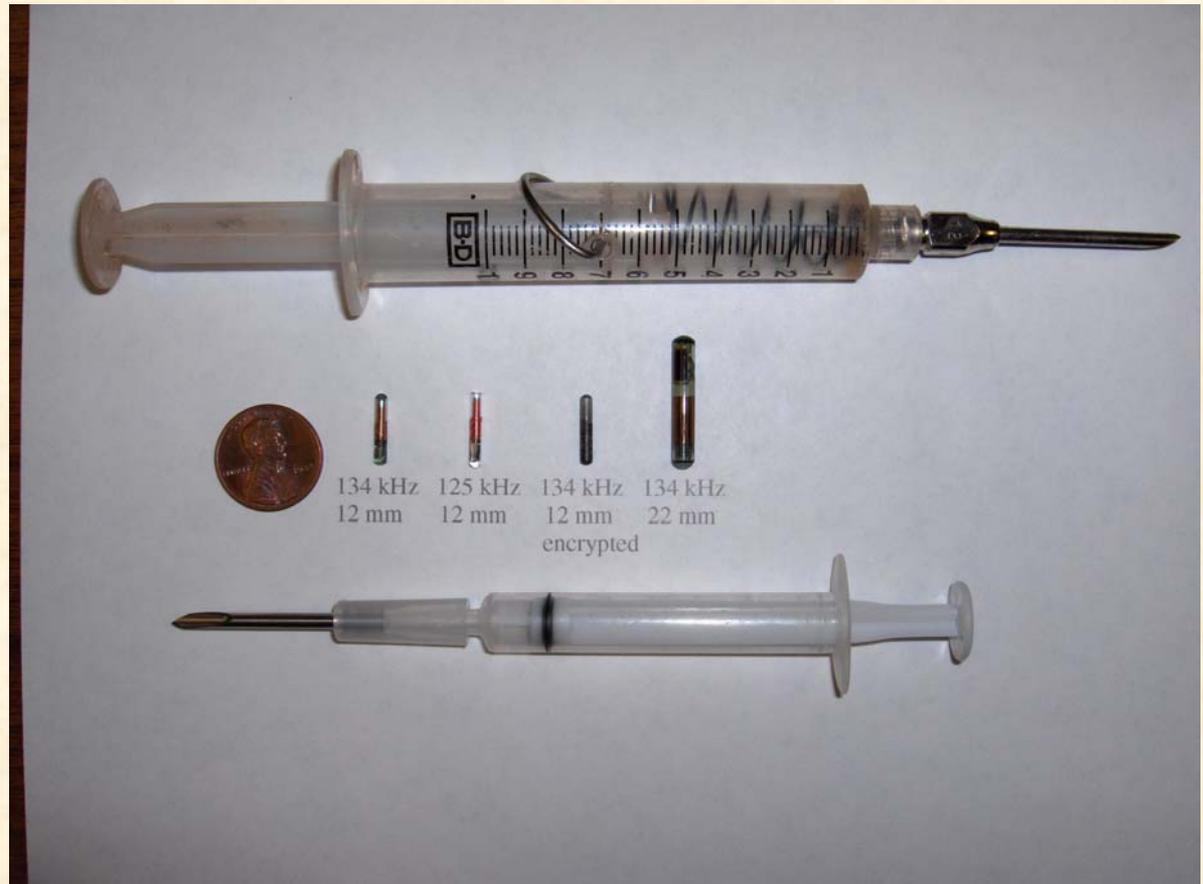


# PIT Tag (+) and (-)

- Advantages
  - Unique ID number
  - Longevity: 50+ years (life of sturgeon)
  - Permanent
  - Fish health: reduce external wound
- Disadvantages
  - No external or visual cue for detection
  - Specialized equipment needed
  - Tag movement or migration may occur
  - Cost of equipment

# PIT Tag Technology

- Tags
  - Types
- Injectors
- Readers
  - Hand held
  - Racket
  - Loop

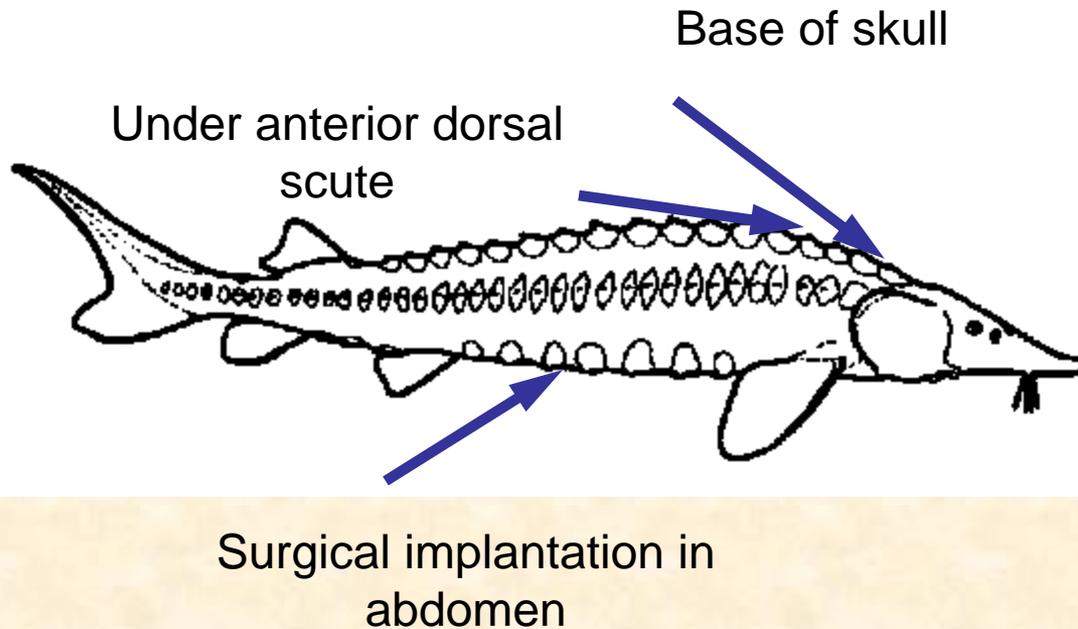


# Detection Factors



- Frequency
  - 125.3 kHz, 134.2 kHz
- Programming
  - Encrypted, Full/Half Duplex
- Reader
  - Brand and surface area/power
- Tag size
  - length and diameter
- Tag orientation
  - – relative to reader
- Conflicting / multiple tags

# Tag Insertion Locations

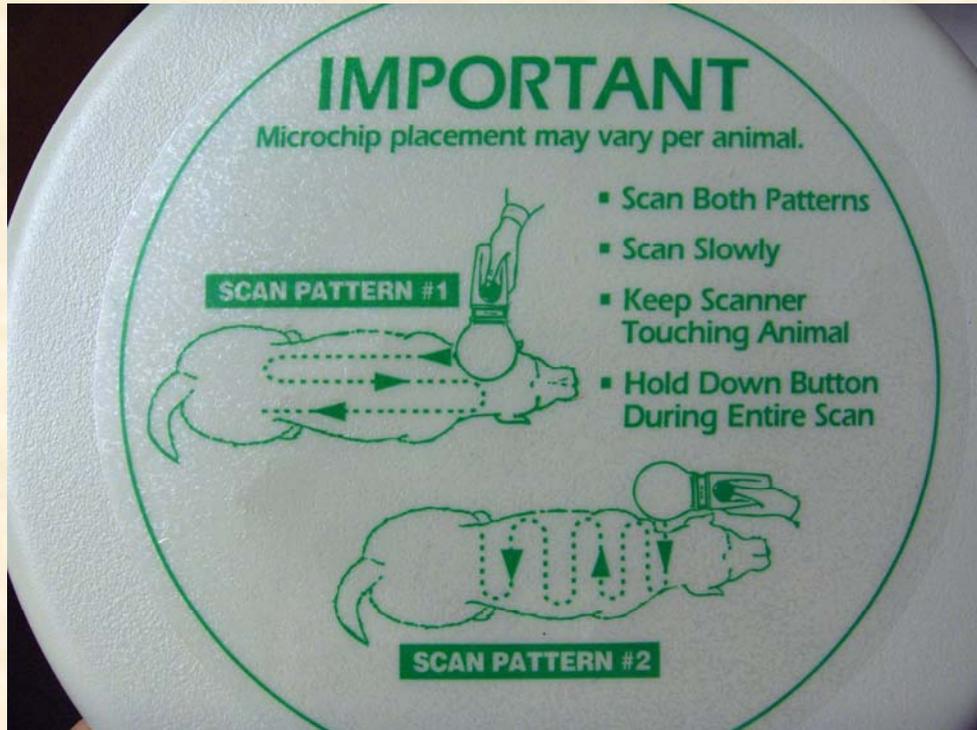


# Tag Insertion Procedure

- Insert implanter just under scute or skull
- Needle essentially horizontal
- Deposit tag in cavity while removing the needle



# Tag Detection





# After Detection



<http://www.glfc.org/sturgeontag/>

## Great Lakes Lake Sturgeon Tag Identification Database

Introduction

Data Submission

PIT Tag Search

External Tag Search

Participants

Contact Us

### Introduction

The Great Lakes Lake Sturgeon Tag Identification Database (TID) is intended to facilitate communication between people who tag and those who recapture lake sturgeon across the Great Lakes. The database provides managers, researchers, and other interested parties the ability to determine who should be contacted when they encounter a tagged lake sturgeon. Development of the TID was initiated by the U.S. Fish and Wildlife Service's Great Lakes Lake Sturgeon Committee in 2001. The structure of the database was developed through a peer review process that involved fishery professionals from several agencies that tag lake sturgeon in the Great Lakes. Completion of the database and development of this web accessible version was made possible through funding provided by the Great Lakes Fishery Trust in 2005. The database is managed by the Alpena Fishery Resource Office (Alpena FRO) and will be posted on the Great Lakes Fishery Commission web site. The USFWS Lake Sturgeon Committee provides oversight of the project.

# Database Search

## Great Lakes Lake Sturgeon Tag Identification Database

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### Lake Sturgeon PIT Tag Search

Enter PIT Tag Number

Go

Sample PIT Tags to test database - Enter: **421E14181E** or **421D7F2901**

Enter the 10 or 15 character PIT tag number above to generate a list of contact information for people or agencies that have either tagged or re-captured the fish.

# Summary

- Multiple types of tags in use
  - Important to know tag capability and limitations
- Readers that detect 125 kHz and 134 kHz tags
- Scan fish multiple directions and at different angles
- Important to provide new tag numbers annually for entry into database
- Search tag number field to get contact info

# Show'em the love

