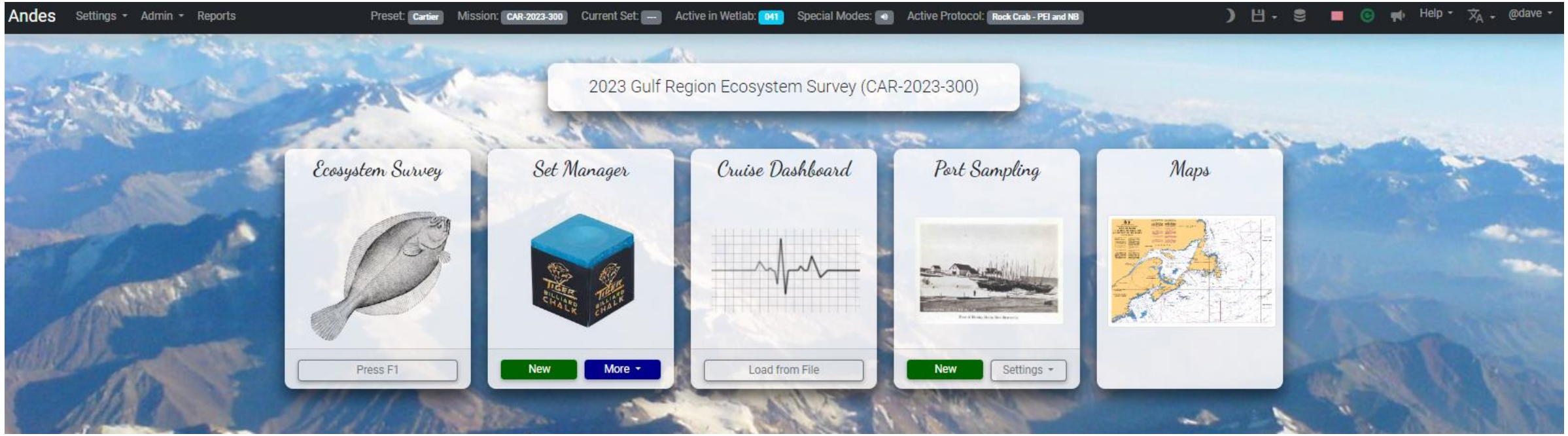
Herring Data Flow

DFO Gulf Region

ANDES

- **AN**other **D**ata **E**ntry **S**ystem
- Used for off-network field data collection
- Multiple modules
- Port sampling vs. at-sea sampling
- Produces various types of reports and exports

ANDES – Home Page



ANDES – Ecosystem App

Atlantic herring — *Clupea harengus* (60)

Set 041 || Station 141 || Stratum 435

View Species Identification Card Ctrl-H

New Basket

Basket weight (kg)	Sample class	Sample → F3 to toggle
	1	yes

Baskets

Basket #	Weight (kg)	Sample class	Sampled?	Specimens, measured	Specimens, unmeasured
1	1.5000	1	Yes	0	0
TOTAL	1.5000 1.5000 (Sampled)	---	---	0	0

Catch Summary:

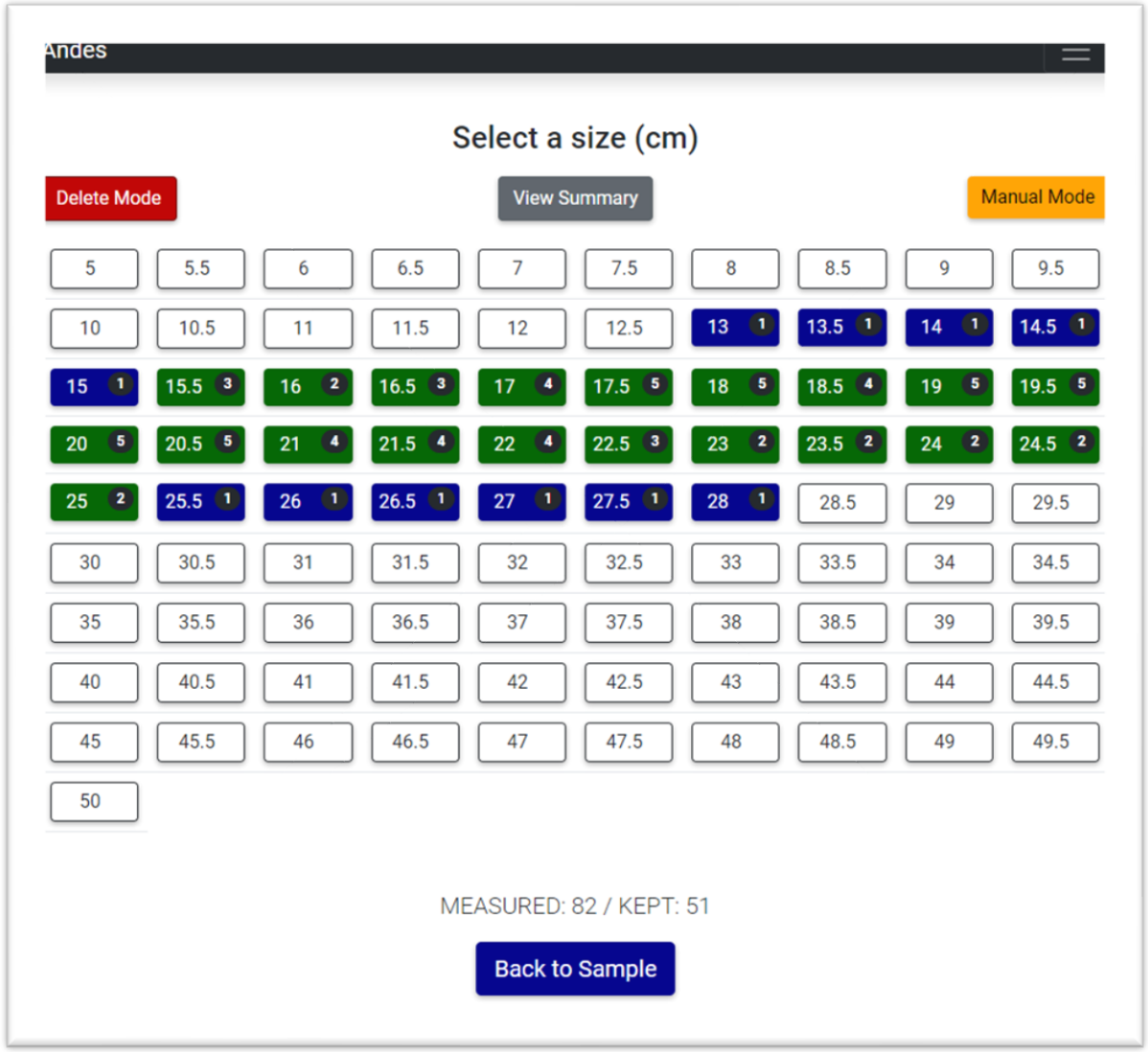
Total basket weight	1.5 kg
Total sampled basket weight	1.5 kg
Total number of unweighed baskets	0
Total specimen count, unmeasured	0
Total specimen count, extrapolated	0
Total specimen count, measured	0
Total specimen weight, measured	0 g
Calculated basket weight	0 g
Calculated specimen weight / sampled basket weight	---
Image filename	
Comments	---

Sampling Requirements

Length: → *Total length, millimeters (mm)*
Weight: → *Total, grams (g)*
Minimum length: → *50 mm*
Maximum length: → *3000 mm*
Mature length: →
Rounding rule: → *round down to the nearest 5 mm*
Always collect sex?: → *No*

There are 4 collections under this requirement.
Press F10 to view the details.

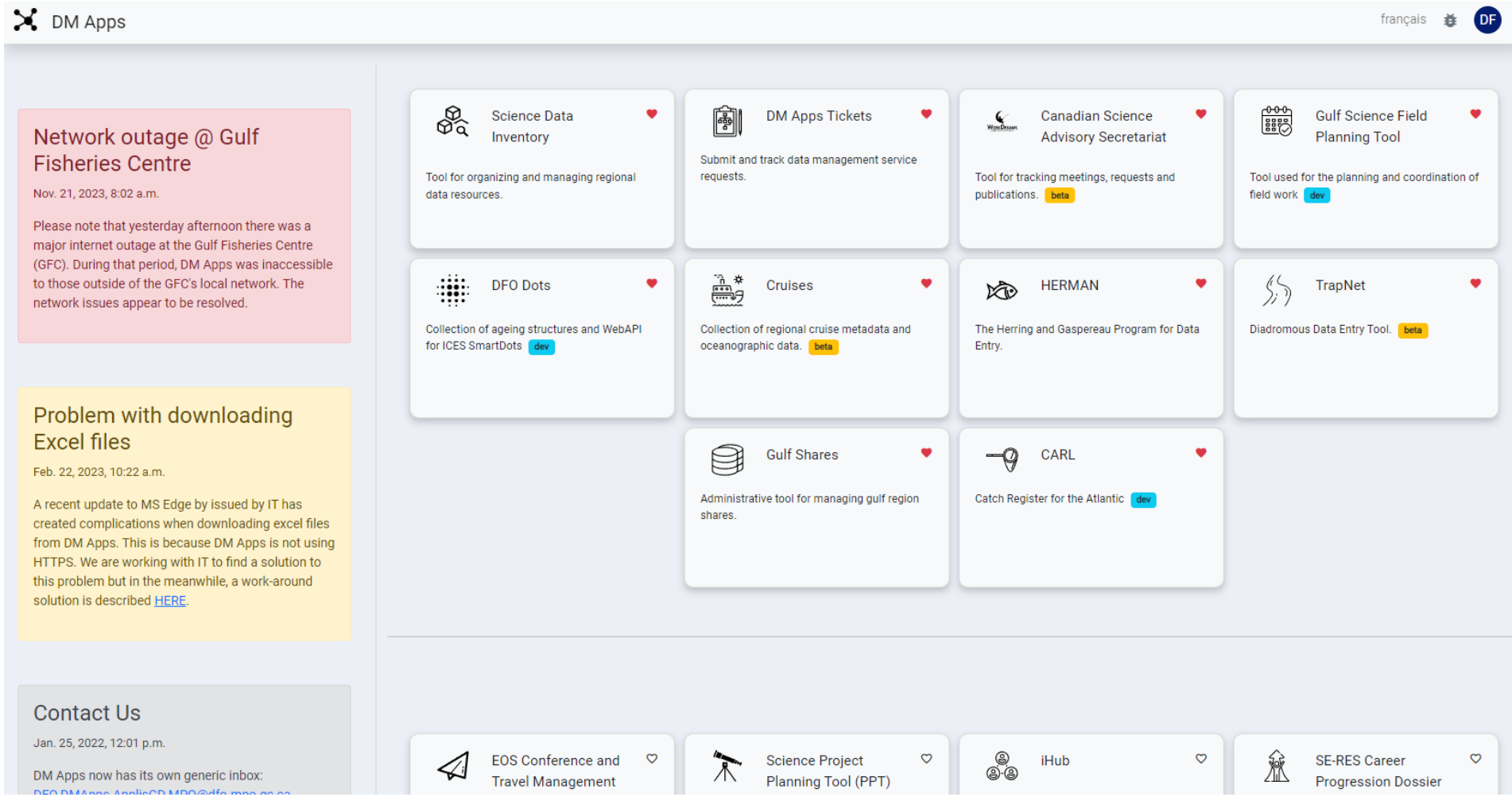
Andes – Port Sampling App



HERMAN

- **He**rring and Gaspereau P**r**ogra**m** for D**a**ta E**n**try
- Part of DM Apps platform (DFO Network)
- Ingest reports from Andes
- Supports manual data entry of field sheets
- Stores length frequency and fish detail data
- Used with electronic fish measuring board

HERMAN – DM Apps



HERMAN – Sample Detail Page

Home / Samples / Port Sample 13948 - Herring

Port Sample 13948 - Herring

Lock Sample | Edit | Delete | Enter Length Frequencies | Enter Lab Measurements

Move to Next Sample Id

Sample Details:

Catch	Herring
Sample type	Port
Sample date	April 7, 2018
Field reference number	1
Sampler	QGSAC
Port	UNKNOWN PORT/DISTRICT, QC (49998)
Survey identifier	---
Latitude	---
Longitude	---
Fishing area	4TN
Gear	GNS - Gillnets and entagling nets: Set gillnets (anchored)
Experimental net used	No
Vessel CFVN	176151
Mesh size	2.25" / 57 mm
Catch weight (lbs)	122.0
Sample weight (lbs)	40.0

Progress Report:

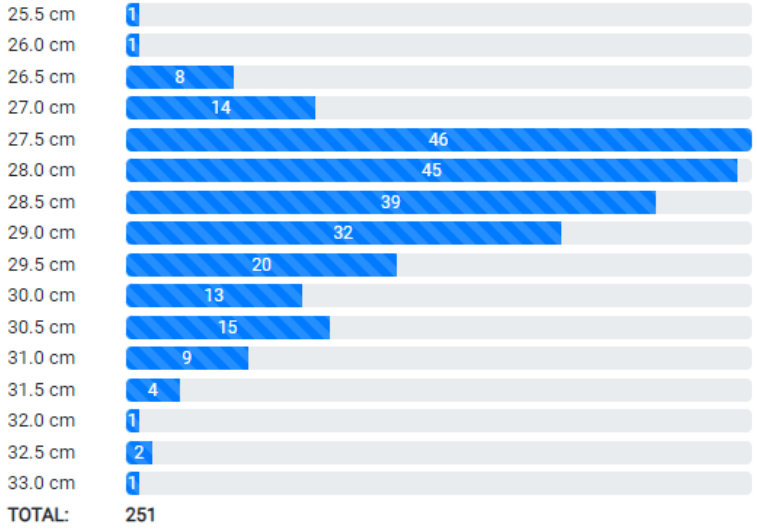
Description	Status
all mandatory fields in sample are completed	passed
declared number of measured fish equal to sum of length frequency histogram	passed
declared number of preserved fish equal to number of processed fish	passed
all preserved fish have been processed in the lab	passed
all required eggs have been counted	passed
all preserved fish have had their otoliths processed	passed

Fish Details:

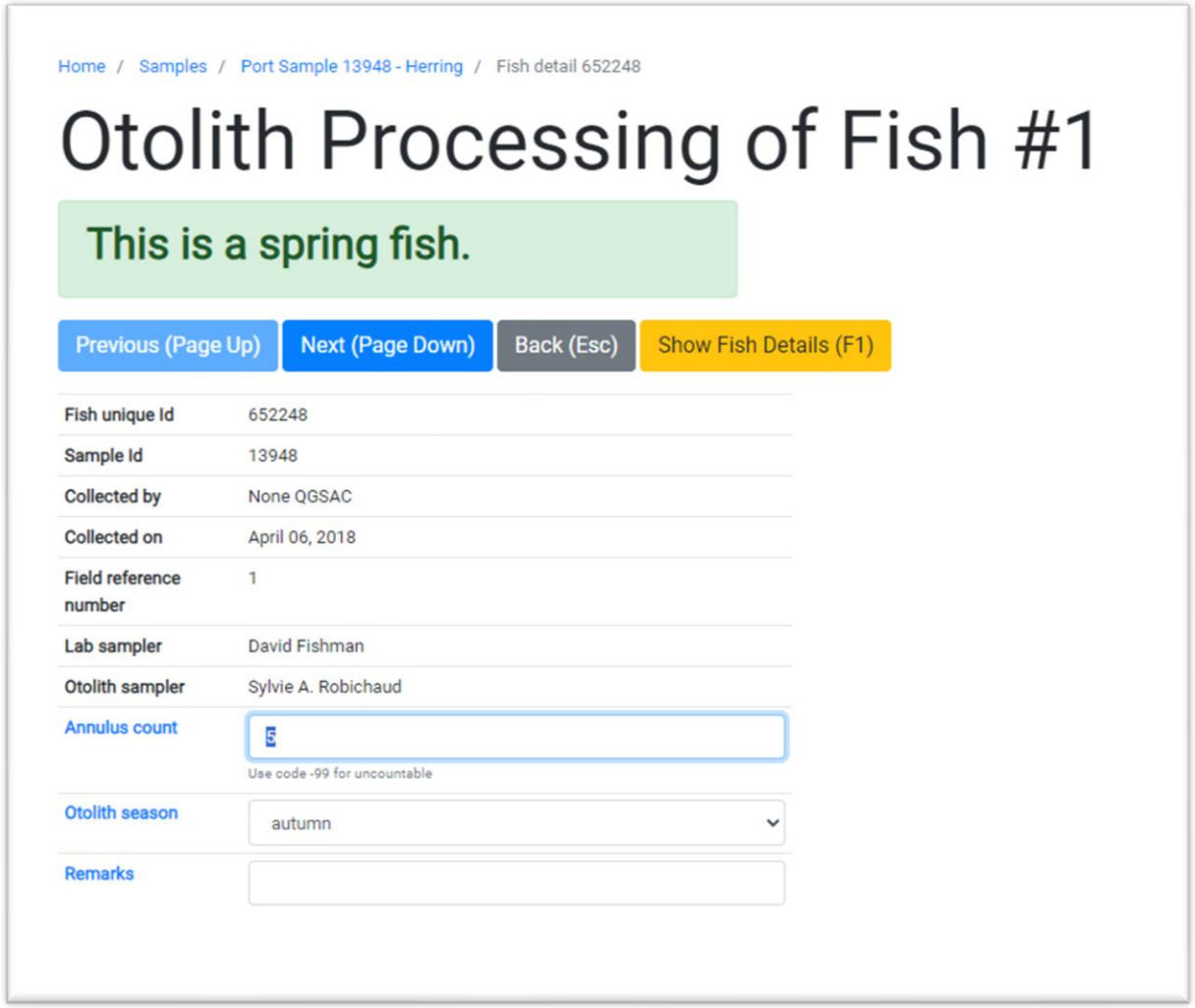
Fish number	Unique Id	Lab	Eggs	Otoliths
Fish 1 (overview)	652248	✓		✓
Fish 2 (overview)	652249	✓		✓
Fish 3 (overview)	652250	✓		✓
Fish 4 (overview)	652251	✓		✓
Fish 5 (overview)	652252	✓		✓
Fish 6 (overview)	652253	✓		✓

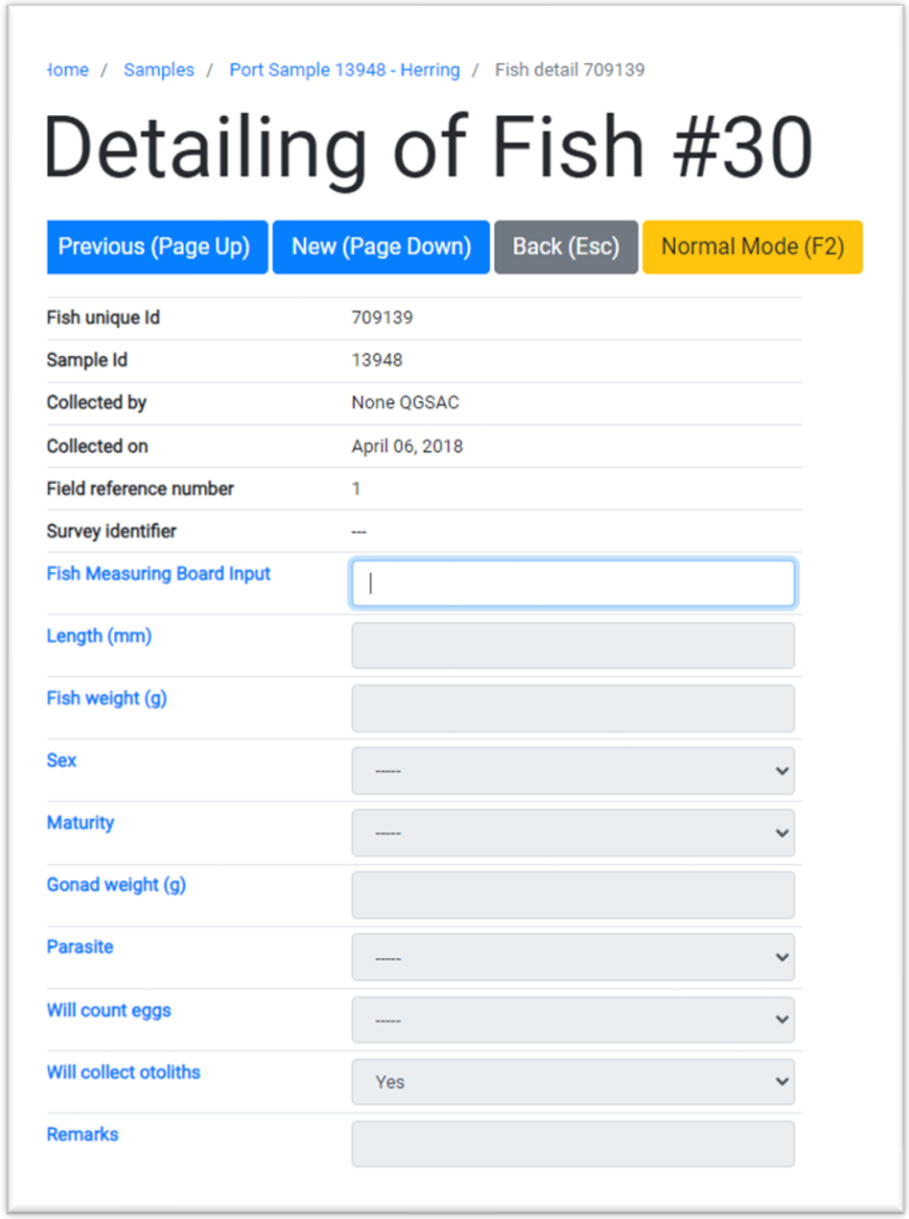
Length Frequencies:

From Sample:



HERMAN – Fish Detailing



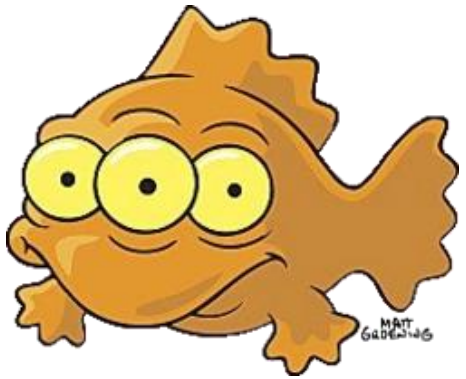


HERMAN – Progress Report

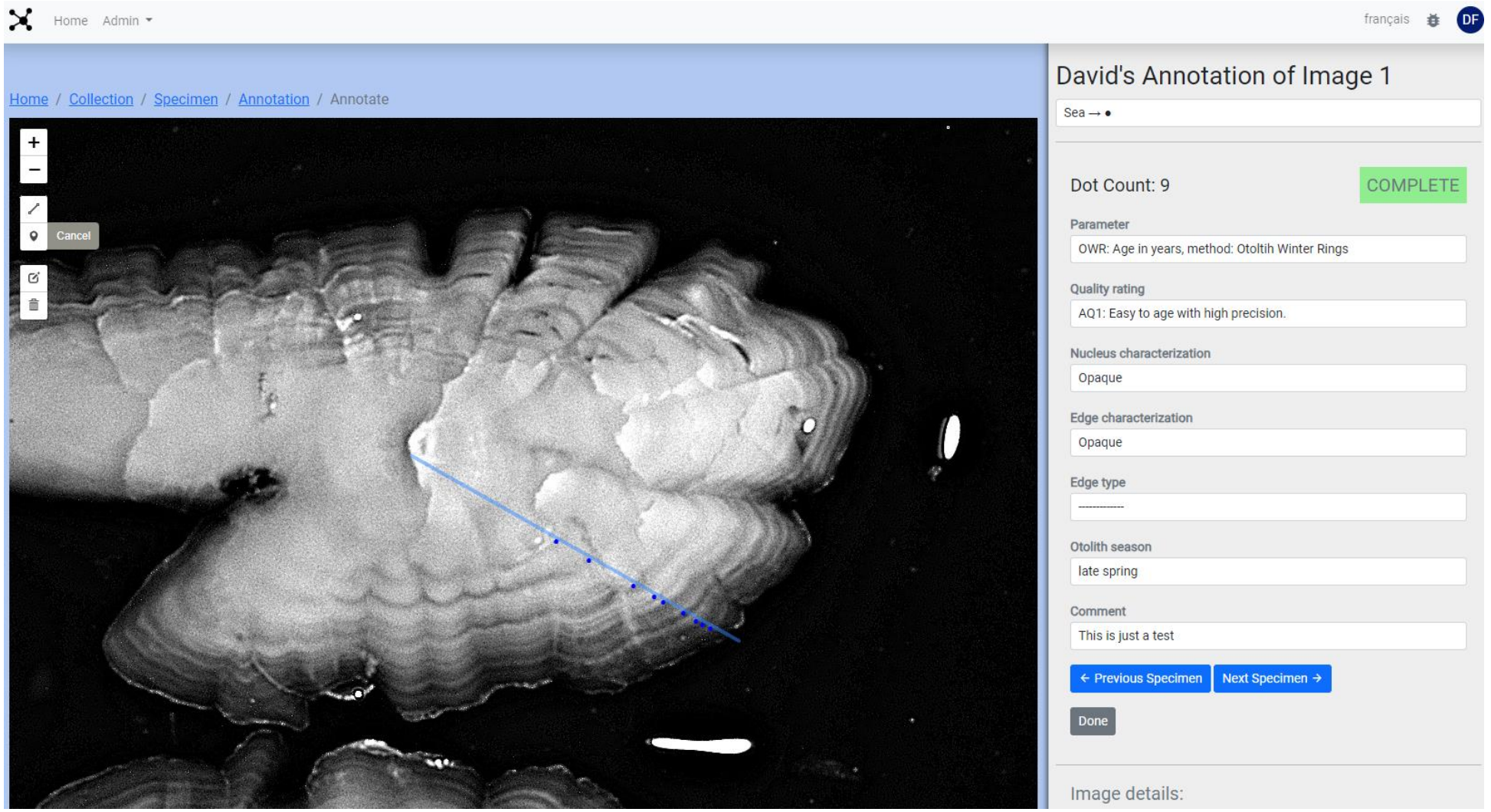
Year	Sample Id	Sample type	Sample date	Field reference number	Sampler	Lengths (measured vs. histogram)	Lab processed date	Lab progress	Eggs processed date	Eggs progress	Otoliths processed date	Otoliths progress
2023	30782	Sea	2023-01-17	2	UNKNOWN	9 vs. 9		0 of 0				0 of 0
2023	30783	Sea	2023-01-17	3	UNKNOWN	2 vs. 2		0 of 0				0 of 0
2023	30784	Sea	2023-01-18	5	UNKNOWN	2 vs. 2		0 of 0				0 of 0
2023	30785	Sea	2023-01-18	8	UNKNOWN	3 vs. 3		0 of 3				0 of 3
2023	30786	Sea	2023-01-18	11	UNKNOWN	6 vs. 6		0 of 0				0 of 0
2023	30787	Sea	2023-01-19	12	UNKNOWN	18 vs. 18		0 of 0				0 of 0
2023	30788	Sea	2023-01-19	13	UNKNOWN	4 vs. 4		0 of 0				0 of 0
2023	30789	Sea	2023-01-19	15	UNKNOWN	23 vs. 23		0 of 19				0 of 19
2023	30790	Sea	2023-01-19	16	UNKNOWN	34 vs. 34		0 of 27				0 of 27
2023	30791	Sea	2023-01-19	17	UNKNOWN	2 vs. 2		0 of 2				0 of 2
2023	30792	Sea	2023-01-19	18	UNKNOWN	32 vs. 32		0 of 26				0 of 26
2023	30793	Sea	2023-01-19	19	UNKNOWN	1 vs. 1		0 of 0				0 of 0
2023	30794	Sea	2023-01-20	20	UNKNOWN	8 vs. 8		0 of 0				0 of 0
2023	30795	Sea	2023-01-20	22	UNKNOWN	1 vs. 1		0 of 1				0 of 1
2023	30796	Sea	2023-01-20	23	UNKNOWN	19 vs. 19		0 of 15				0 of 15

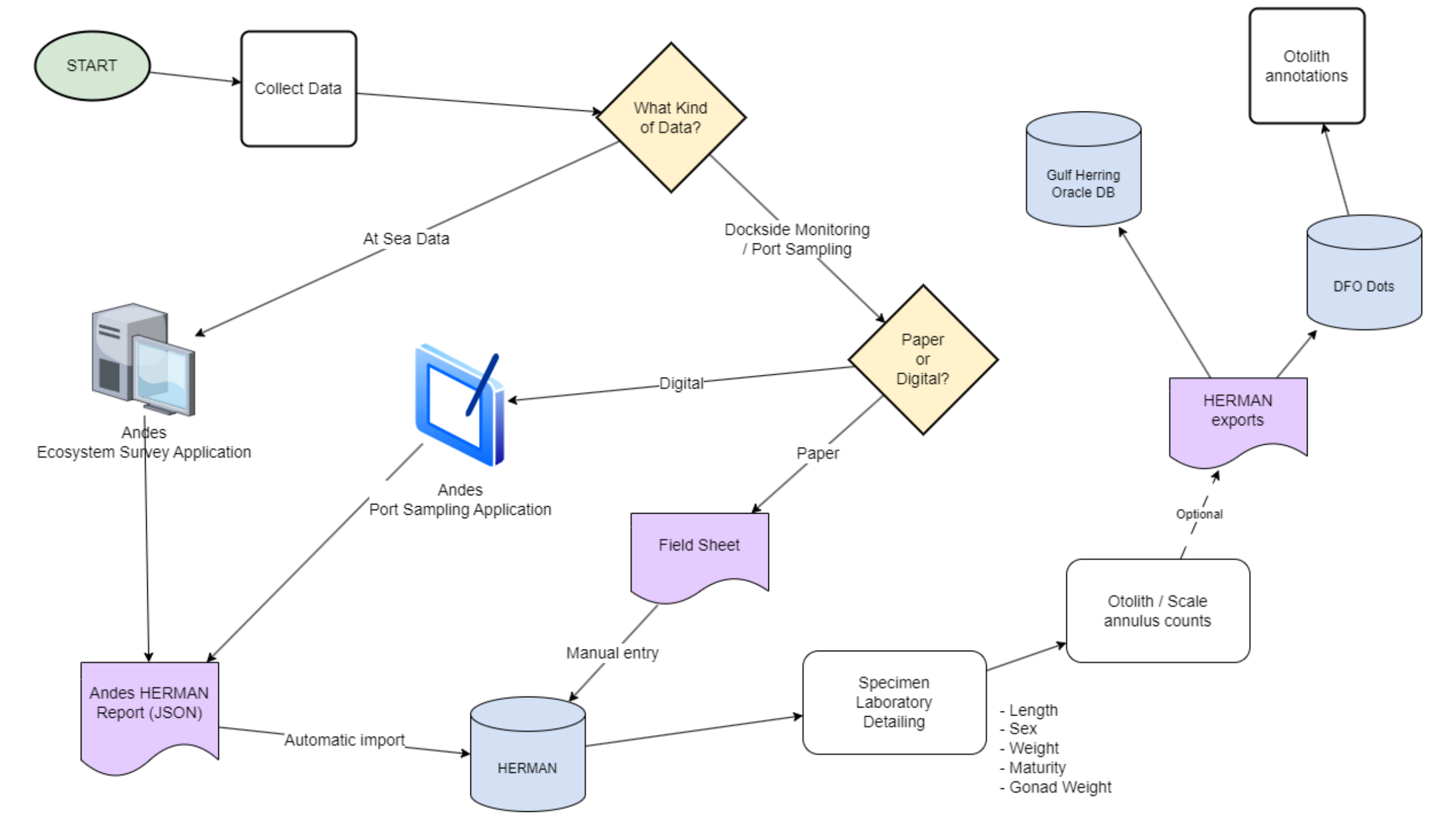
DFO Dots

- New tool still under development
- Organization of otolith and scale collections
- Downstream of HERMAN
- Ability to annotate otoliths
- Compatible with Smart Dots



DFO Dots – Herring Otolith Annotation




START
Collect Data
What Kind of Data?
At Sea Data
Dockside Monitoring / Port Sampling
Andes Ecosystem Survey Application
Andes Port Sampling Application
Paper or Digital?
Digital
Paper
Field Sheet
Manual entry
Andes HERMAN Report (JSON)
Automatic import
HERMAN
Specimen Laboratory Detailing
- Length
- Sex
- Weight
- Maturity
- Gonad Weight
Otolith / Scale annulus counts
Optional
HERMAN exports
Gulf Herring Oracle DB
DFO Dots
Otolith annotations