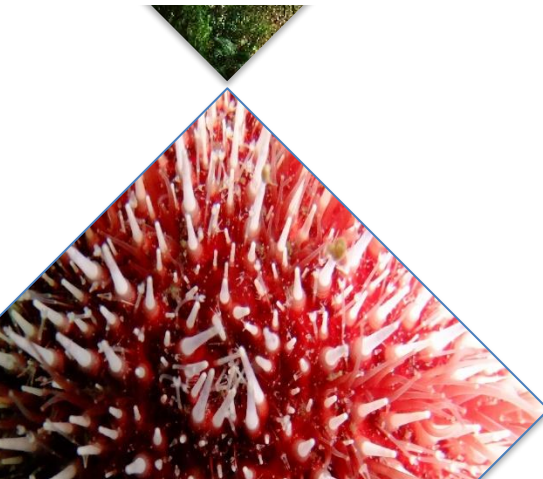
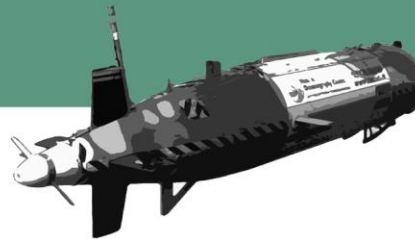
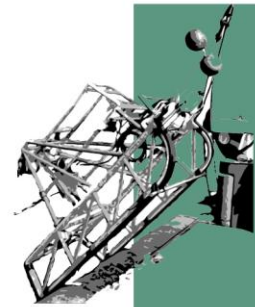




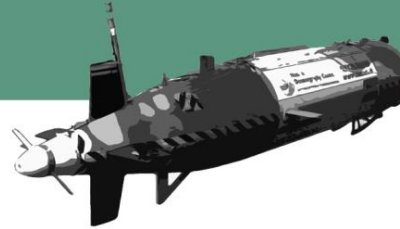
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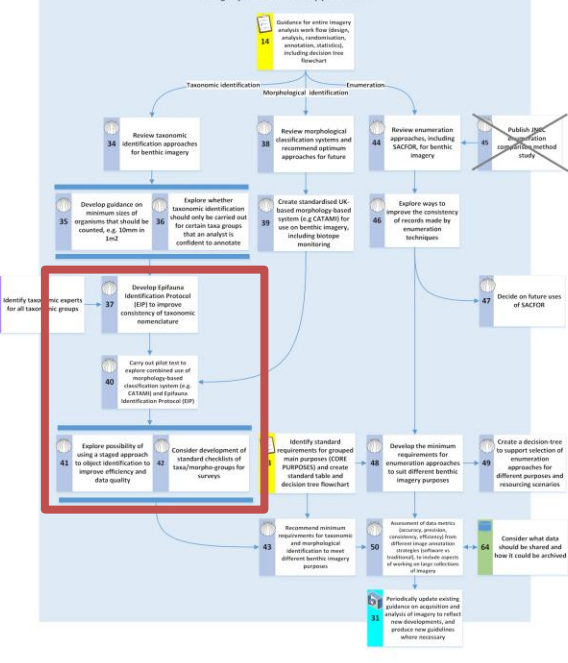
Epifaunal Identification Protocol

Jessica Taylor JNCC

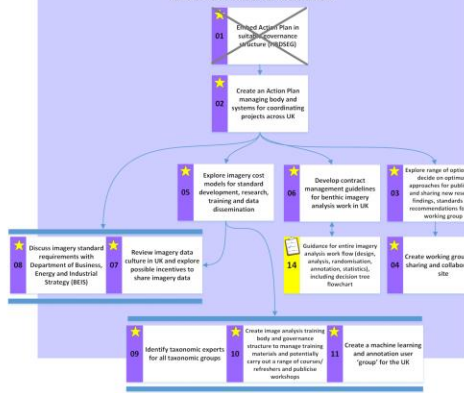


JNCC

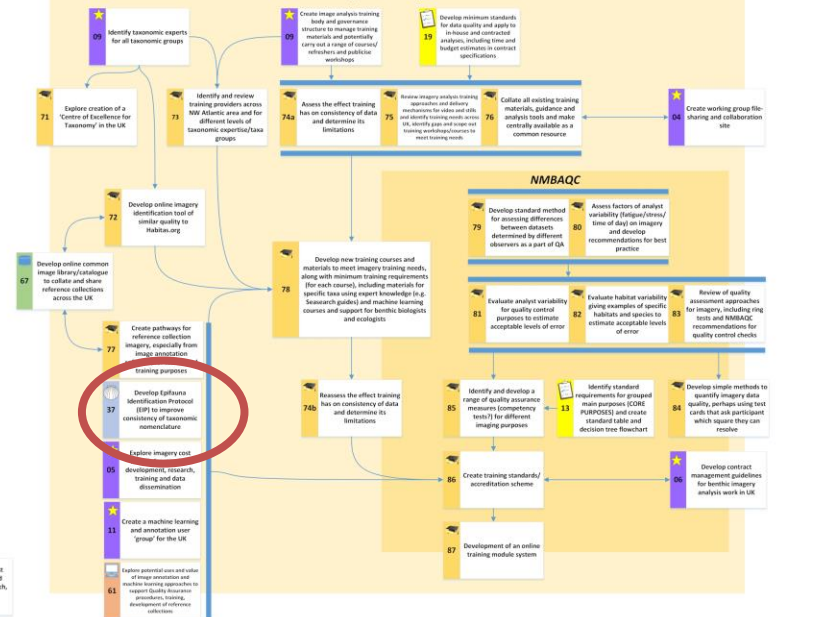
Imagery annotation approaches



Governance and co-ordination



Training and Quality Assurance



Overarching guidelines and purposes for imagery

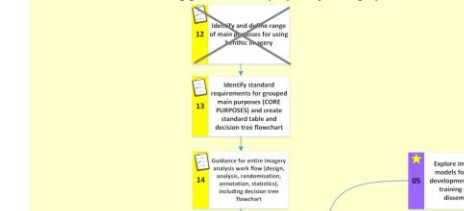
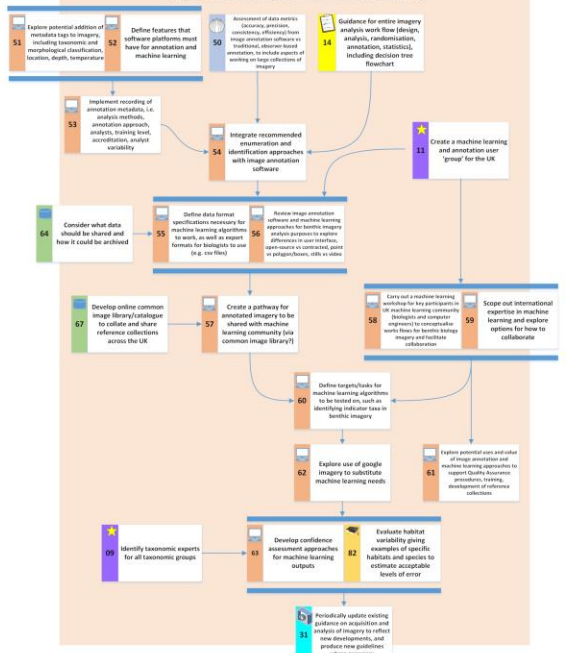
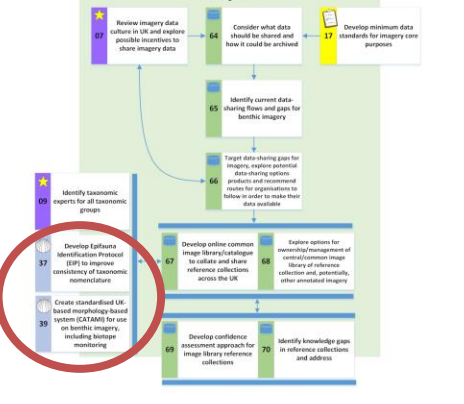


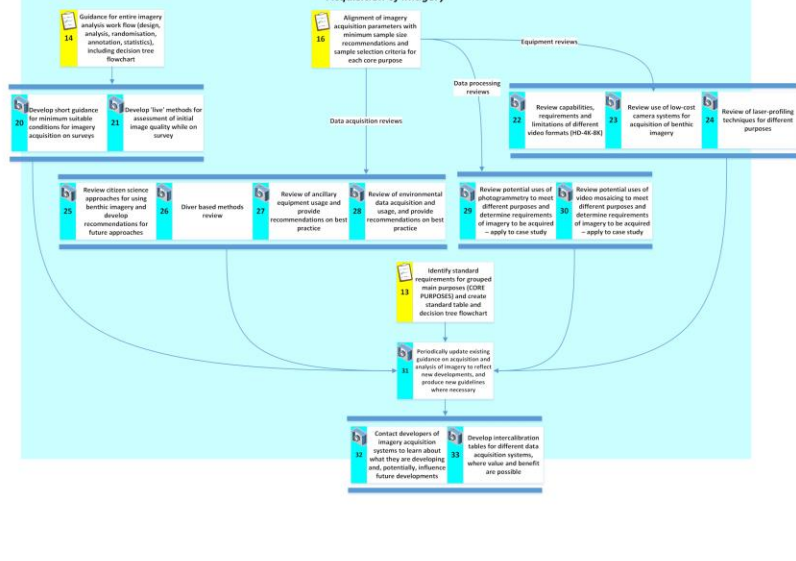
Image annotation software and machine learning



Data flows



Acquisition of imagery



Purpose and Objectives

- Update all 800 taxa within the EIP to current taxonomic levels
- Assign taxonomic identification recommendations for different image and video quality levels for each species
- Reassess image quality levels for consideration in the EIP work

Image Quality

- Revision of the NMBAQC Image/Video Quality guidelines to increase specificity and clarity.
- Change in NMBAQC categories from;
 - Excellent
 - Good
 - Poor
 - Very Poor
 - Zero

CHANGED TO

 - Excellent
 - Satisfactory
 - Poor
 - Very Poor
 - Zero

Not included in EIP

Species Identification Workshops

- 6 x 3 hour workshops on different taxa groups
- Members of the BIG PICTURE group joined to assess the correct identification level for the imagery quality

The EIP Process

- For each species the following were discussed;
 - CATAMI Class
 - Excellent
 - Satisfactory
 - Poor
 - Video Quality
 - Excellent
 - Satisfactory
 - Poor
 - Stills Quality
 - Excellent
 - Satisfactory
 - Poor



Taxa Groups that have been reviewed

- Sponges
- Bryozoans
- Cnidarians
- Molluscs
- Arthropods
- Echinoderms
- Chordata
- Annelids
- A small number of Platyhelminthes

Epifaunal Identification Protocol

WoRMS Taxonomic Identification				Scientific Name WoRMS (2020)	CATAMI		Image Quality			Video Qual	
Class	Order	Family	ScientificName		Corresponding Morphological Class	Sponge Morphological Classification (G.K.)	Poor Quality Recommended ID	Satisfactory Quality Recommended ID	Excellent Quality Recommended ID	Poor Video Recommended ID	Satisfactory Video Recommended ID
Demospongiae	Axinellida	Axinellidae	Axinella damicornis	Axinella damicornis	Sponges> Erect forms > branching	Category 2: Arborescent	Sponges> Erect forms > branching	Sponges> Erect forms > branching	Axinella damicornis	Sponges> Erect forms > branching	Sponges> Erect forms > branching
Demospongiae	Axinellida	Axinellidae	Axinella dissimilis	Axinella dissimilis	Sponges> Erect forms > branching	Category 2: Arborescent	Sponges> Erect forms > branching	Sponges> Erect forms > branching	Axinella dissimilis	Sponges> Erect forms > branching	Sponges> Erect forms > branching
Demospongiae	Axinellida	Axinellidae	Axinella infundibuliformis	Axinella infundibuliformis	Sponges> Cup-likes> Cups>Cup / goblet	Category 4: Flabellate	Sponges> Cup-likes> Cups>Cup / goblet	Axinella infundibuliformis	Axinella infundibuliformis	Sponges> Cup- likes> Cups>Cup / goblet	Axinella infundibuliformis
Demospongiae	Suberitida	Halichondridae	Ciocalypa penicillus	Ciocalypa penicillus	Sponges> Cushion	Category 3: Massive, Spherical and Papillate	Sponges> Cushion	Ciocalypa penicillus	Ciocalypa penicillus	Sponges> Cushion	Sponges> Cushion
Calcarea	Clathrinida	Clathrinidae	Clathrina coriacea	Clathrina coriacea	Sponges> Crusts> Encrusting		Faunal Crust	Sponges> Crusts> Encrusting	Clathrina coriacea	Faunal Crust	Faunal Crust
Demospongiae	Clionaida	Clionaidae	Cliona celata	Cliona celata	Sponges> Massive> Simple	Category 3: Massive, Spherical and Papillate	Cliona celata	Cliona celata	Cliona celata	Cliona celata	Cliona celata
Demospongiae	Tetractinellida	Ancorinidae	Dercitus (Dercitus) bucklandi	Dercitus (Dercitus) bucklandi	Sponges> Crusts> Encrusting	Category 1: Encrusting	Dercitus (Dercitus) bucklandi	Dercitus (Dercitus)	Dercitus (Dercitus) bucklandi	Dercitus (Dercitus) bucklandi	Dercitus (Dercitus) bucklandi



JNCC

EIP Tools

- EIP Standalone tool – for use on ID checking whilst completing annotations

EIP Checker (stand-alone tool)

Please enter an aphia ID or scientific name and specify the image quality level

<input type="text" value="Aphia ID"/>	<input type="text" value="Scientific Name"/>	<input type="text" value="Excellent"/> ▼
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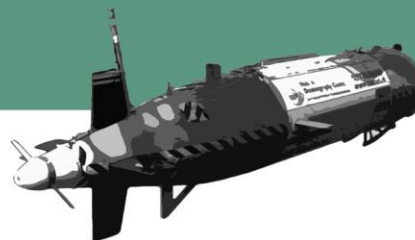
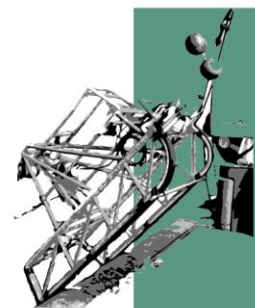
Future of the EIP

- Integration of more deep-sea fauna within the species list
- Future workshop suggestions;
 - Creation of a UK CATAMI with a primary focus on sponges
- Potential creation of a catalogue of images to sit alongside the EIP for identification aids.



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Any Questions?

