(527.0442)

D243

Day, Francis

Fishes of Gr Britain and Ireland.atlas.

633
G 5 D 273
1880 3
Atlas
SCHHRB

PERCA FLUVIATILIS.
a. Stomach and pyloric appendages. b. Air-bladder.

F. Day del C. Achille lith.

Mintern Bros imp.

361
35

DSI

F. Day del. C. Achilles lith.

Mintern Bros. imp.

LABRAX LUPUS.

ACERINA VULGARIS.
a Air-bladder. b Stomach and pyloric appendages.

F Day del C Achilles lith

Mintern Bros imp

F. Day del. C. Achilles lith.

SERRANUS CABRILLA.

Mintern Bros. imp.

SERRANUS CIGAS.
a Stomach and pyloric appendages.

F. Day del. C. Achille. lith.

Martern Bros. imp.

POLYPRION CERNIUM
a. Stomach and pyloric appendages

1. MULLUS BARBATUS. 2. VARIETY MULLUS SURMULETUS.
2a. Stomach and pyloric appendages

CANTHARUS LINEATUS.
a. Stomach and pyloric appendages. b. Air-bladder

F. Dar. sc. C. Achille lith

Mintern Bros imp

Hanhardt. imp.

PAGRUS VULGARIS.
a Upper Jaw b Lower Jaw

F. Day del. A. Hammond lith.

F. Day del. C. Achilles lith.

PAGRUS AURATUS.
a. Stomach and pyloric appendages. b. Dentition.

Miner Bros. imp.

PAGELLUS CENTRODONTUS.
a. Dentition.

F. Day del. C. Achille lith.

PAGELLUS BOGARAVEO
a. Stomach and pyloric appendages. b. Dentition.

Mintern Bros. imp.

F. Day del. A. Hammond lith.

PAGELLUS OWENII.
a Dentition.

Harhart imp.

F. Day del. A. Hammond lith.

PAGELLUS ACARNE
a. Dentition

Harbort. imp.

F. Day del. C. Achilles lith.

PAGELLUS ERYTHRINUS.
a. Lower jaw with teeth.

Mintern Bros. imp.

2

2a

1.

F. Day del. C. Achilles lith.

Mintern Bros. imp.

1. COTTUS SCORPIUS (VARIETY GROENLANDICUS.)
2. COTTUS GOBIO. 2a. under surface of head.

1. COTTUS SCORPIUS. 2. C. BUBALIS.

F. Day del. C. Achilles lith.

Mintern Bros. imp.

1. Stomach and pyloric appendages.

2. Air-bladder.

TRICLA LINEATA.
1. Stomach and pyloric appendages. 2. Air-bladder.

Mintern Bros. imp.

TRIGLA CUCULUS.
1. Air-bladder

TRIGLA HIRUNDO.
a. Stomach. b. Air-bladder. c. Pectoral fin. (inner side.)

F Day del C Achilles lith

Mintern Bros. imp

TRIGLA GURNARDUS.

1 Stomach and pyloric appendages 2 Air-bladder

F. Day del. C. Achillez lith.

TRIGLA LYRA.

Minton Bros imp.

TRIGLA OBSCURA.
la. Air-bladder. lb. Stomach and caecal appendages.

F. Day del C. Achilles lith.

Minerv. Bros. imp.

1. LAGONUS CATAPHRACTUS.
1a Stomach and caecal appendages
2. PERISTETHUS CATAPHRACTUM.
2a Upper surface of head. 2b Section through body. 2c Stomach and caecal appendages.

E. Day del. A. Hammond lith.

Hambart imp.

LOPHIUS PISCATORIUS.

F. Day del. C. Achilles lith.

1. TRACHINUS DRACO.
1a. Stomach and caecal appendages.

Miner. Bros. imp.

TRACHINUS VIPERA.

Macleay Bros. imp.

F. Day del C. Achilles lith.

1. SCOMBER, SCOMBER (var. S. PUNCTATUS.)
1a. Upper surface of head. 1b. Stomach and caecal appendages.

F. Day del. C. Achilleus lith.

Mintern Bros. imp.

ORCYNUS THYNNUS.

F. Day del. A. Hammond lith.

ORCYNUS GERMÖ.

Hanhart imp.

1. *AUXIS ROCHEI*. 1a. Stomach and caecal appendages. 2. *ECHENEIS REMORA*.

F. Day del. C. Achilles lith.

Mintern Bros. imp.

Day del. A Hammond lith.

CENTROLOPHUS BRITANICUS 2 C POMPILUS

Hanhart imp

Day del. A. Hammond lith.

Hanhart imp.

LAMPRIIS LUNA

1 NAUCRATES DUCTOR 2 YOUNG &c.

F. Day del. C. Achilles lith.

Mintern Bros. imp.

1. LICHIA GLAUCA. 2 CAPROS APER.
2a. Stomach and caecal appendages.

1. XIPHIAS GLADIUS. $\frac{1}{2}$ natural size. 2. (YOUNG) $\frac{1}{2}$ natural size.

F. Day del.

Mintern Bros. imp.

1. *TRICHIURUS LEPTURUS*. 2. *LEPIDOPUS CAUDATUS*.

1

2

3

4

5

6

Edwards & A. Hammond lith.

1 Gobioides ruthensparri. 2. G. Paganellus. 3. G. Niger.
4 G. Minutus 5 G. Parnelli.

Hanhart imp

1. GOBIUS PICTUS. 2. G. QUADRIMACULATUS. 3. APHIA PELLUCIDA.
(Male ♀) 4. CRYSTALLGOBIUS NILSSONII (Male ♀). 5. CALLIONYMUS MACULATUS.

F Day del A Hammond lith.

Hanhart imp.

1. Day del. C. Achilles lith.

1. CALLIONYMUS LYRA. (MALE.) 2. FEMALE.

Mintern Bros imp.

2

2a

1

1a

3

3a

F. Day del. A. Hammond lith.

ANARRHICHAS LUPUS.

Harhart imp.

1 BLENNIUS GATTORUGINE. 2. B. OCELLARIS.

Mintern Bros imp.

1

3

2

F Day del A Hammond lith.

Hanhart imp

I. BLENNIUS GALERITA. 2. B. PHOLIS. 3. CARELOPHUS ASCANII.

1.

2.

MUGIL CAPITO.

a. Under surface of Head. b. Stomach.

a.

b.

F. Day del.

MUGIL CHELO.
a. Under surface of Head. b. Stomach.

Mintern Brø's imp.

2

4

3

2^a

5

F. Day del. A. Hammond lith.

Harvard Mus.

1. GASTEROSTEUS ACULEATUS, (VARIETY TRACHURUS) 2. G. ACULEATUS (VARIETY SEMIARMATUS) 3. G. ACULEATUS, (VARIETY GYMNUROS) 4. G. PUNGITIUS (VARIETY WANTING VENTRAL FINS) 5. G. SPINACHIA

1a

1

Ed. Day del. A. Hammond lith.

CENTRISCUS SCOLOPAX 1a. UPPER SURFACE.

Heubart imp.

F. Day del. A. Hammond lith.

Hanhart, imp.

JAERIS MACULATUS

1. LABRUS MACULATUS (VARIETY DONOVANI.)
2. L. MACULATUS (VAR. LINEATUS.)

LABRUS MIXTUS. (1. MALE. 2. FEMALE.)
1a. Pharyngeal teeth.

ACANTHEMABRUS PALLONI

1. CORIS JULIS (MALE) 2. C. JULIS (FEMALE).

GADUS MORHUA.
a. Stomach and pyloric appendages.

F. Day del. G. Achilles lith.

Mintern Bros imp.

F. Day del C. Achilles lith.

GADUS AEGLEFINUS.
A. Stomach and pyloric appendages.

Mintern Bro's imp.

GADUS LUSCUS.
a. Stomach and pyloric appendages.

F. Day, del. C. Achilles lith.

GADUS MERLANGUS.
A. Stomach and pyloric appendages.

F. Doy del. C. Achilles lith.

GADUS VIRENS.
a. Stomach and pyloric appendages.

Mintern Brø's imp.

F. Day del. A. Hammond lith.

1. MERLUCCIVS VULGARIS. 2. PHYCIS BLENNOIDES.

Hartn. imp.

MOLVA VULGARIS.
a. Stomach and pyloric appendages.

F. Day del. C. Achilles lith.

Mintern Bro's imp.

2

3

1

F. Day del. A. Hammond lith.

Harvard Imp.

1. MOTELLA CIMBRIA 2. M. MACROPHTHALMA 3. M. TRICIRRATA (Young)

F. Day del. C. Achilles lith.

Mintern Bros imp.

1. MOTELLA TRICIRRATA. 2. MOTELLA MUSTELA.
1a. Stomach and pyloric appendages.

I

F. Day del. A. Hammond lith.

Harhart imp

1. OPHIDIUM BARBATUM 2. FIERASFER DENTATUS.

F. Day del. A. Hammond lith.

Harvard imp

1. AMMODYTES LANCEOLATUS 1^a END OF VOMER 1^b STOMACH AND PYLORIC APPENDAGE.
2. A. TOBIANUS 3. A. CICERELLUS

F. Day del. A. Hammond lith.

Hamhart imp.

CORYPHÆNOIDES RUPESTRIS.

Engraved by A. Lampross, lith.

RHOMBUS MAXIMUS

Harbort imp

1. RHOMBUS LEVIS.
1a. Stomach and caecal appendages

F. Day del. C. Achilles lith.

Mintern Bros. imp.

I

F. Day del. A. Hammond lith.

1. ARNOGLOSSUS MEGASTOMA Ia. STOMACH

Harhart imp.

1. ZEUGOPTERUS UNIMACULATUS 2 ARNOGLOSSUS LATERN.

1. ZEUGOPTERUS PUNCTATUS.
1st Under side of Caudal Fin.

F. Day del. C. Achules lith

1.

1. PLEURONECTES PLATESSA.
1^a Stomach and caecal appendages.

F. Day del. C. Achilles lith.

1. PLEURONECTES MICROCEPHALUS.
1^a Stomach and caecal appendages.

Minster Bros. imp.

F. Day del. C. Achilles lith.

1. PLEURONECTES LIMANDA.
1^a Stomach and caecal appendages.

Museum Bras imp.

F Day del C Achilles lith.

Mintern Bros imp.

1 PLEURONECTES FLEUS.
1st Stomach and oesophageal appendages

1.

1. *SOLEA VULGARIS.*

1^a Under side of head. 1^b Stomach

1^a

F. Day del. C. Achilles lith.

1^b

Mintern Bro's imp.

F. Day del. A. Hammond lith.

1. SOLEA LASCARIS 12 UNDEL. SURFACE OF HEAD

Hanhart imp.

1. SOLEA VARIEGATA 2 S. LUTEA.

2

1

3

F. Day del. A. Hammond lith.

Hanhart imp.

ARGYROPELECUS HEMIGYMNUS 2 MAUROLICUS PENNANTII.
3. SALMO FARIO (VARIETY ESTUARIUS)

E. Day del. A. Hammond lith.

Hanhardt imp.

1. SALMO SALAR 1a DENTITION 2. YOUNG, 2a DENTITION.

1

2

F. Day del. A. Hammond lith.

Harshart inq.

1. SALMO TRUTTA (VARIETY CAMBRICUS) 1a. DENTITION 2. S. TRUTTA (VARIETY ALBUS)
2a. DENTITION.

1

2

F. Day del. A. Hammond sculp.

Hankart imp.

1. SALMO FARIO (FROM YORKSHIRE) 1a. DENTITION 2. S. FARIO (VARIETY NIGRIPINNIS) 2a. DENTITION

1

2

T. Pay del A. Hammond del.

Blanchard inv.

1 *OSMERUS EPERLANUS* 1a. STOMACH & CAECAL APPENDAGES, 2 *COREGONUS OXYRHYNCHUS*.

1 COREGONUS VANDESIUS, 2. C POLLAN

Minnow B. in p.

THYMALLUS VULGARIS.
1a. Stomach and caecal appendages.

1a.

F. Day del. C. Achilles lith.

F. Day del. C. Achille's lith.

Murten Bros. imp.

ARGENTINA SPHYRÆNA.
2 Section of body, 3 Stomach and caecal appendages.

F Day del A Hammond lith.

Harhart imp

1. *BELONE VULGARIS*. 1a YOUNG. (2) 1b EGG (MAGNIFIED)
2. *SCOMBRESOX SAURUS*

F Day del A Hammond lith.

Harhart imp.

1 EXOCETUS EVOLANS 2 CYPRINUS CANPIO 2a PHARYNGEAL TEETH 2b SCALE.

1. *CARASSIUS VULGARIS* 2. *C. AURATUS*, 2a PHARYNGEAL TEETH, 2b SCALE.

1 BARBUS VULGARIS, 1a. PHARYNGEAL TEETH, 1b. SCALE.
2 GOBIO FLUVIATILIS, 2a. PHARYNGEAL TEETH, 2b. SCALE.

F. Day del. A. Hammond lith.

Henhart imp.

1. LEUCISCUS CEPHALUS, 1a. PHARYNGEAL TEETH, 1b. SCALE.
2. LEUCISCUS RUTILUS, 2a. PHARYNGEAL TEETH, 2b. SCALE.

E. Day del A. Hammond lith.

Hanhart imp.

1. LEUCISCUS VULGARIS. 1a. PHARYNGEAL TEETH, 1b. SCALE.
2. ERYTHROPTHALMUS, 2a. PHARYNGEAL TEETH, 2b. SCALE.

Hanhart imp.

E. Day del. A. Hammond lith.

1. *LEUCISCUS PHOXINUS*, 1a. PHARYNGEAL. TEETH, 1b. SCALE
2. *TINCA VULGARIS* 2a. PHARYNGEAL TEETH 2b. SCALE

Hanhart imp.

F. Day del. A. Hammond lith.

ABRAMIS BLICCA.

1. ALBURNUS LUCIDUS, 1a PHARYNGEAL TEETH, 1b SCALE
2. NEMACHEILUS BARBATULA, 3. COBITIS TENIA.

• T Day del. A Hammond lith.

Hanhart imp.

1. ENGRAULIS ENCRASICOLUS. 2. CLUPEA HARENGUS.
2a. keeled scales. 3. clupea sprattus keeled scales.
along abdominal edge.

1. CLUPEA PILCHARDUS 1a. STOMACH AND FOOD. 2. C. SPRATTUS.
2a. STOMACH, CECAL APPENDAGES AND AIR BLADDER.

F. Day del. A. Hammond lith.

Hanhart imp.

1

1a

F. Day del. A. Hammond lith.

Manbaru simp

1 CIUPEA FINTA. 1a. OUTER ARCH OF GILL.

Harhart imp.

1. *ANGUILLA VULGARIS* 1a. TEETH.
2. *CONGER VULGARIS* 2a. TEETH.

F. Day del A. Harwood lith.

Muraena helena, Linn.

MURÆNA HELENA. 1a PALATE.

Hanhart imp

1 SYNGNATHUS ACUS. 2. S. ACUS (Young) 3. SIPHONOSTOMA TYPHLE
 4 NEROPHIS EQUOREUS 5. N. OPHIDION 6. N. LUMBRICIFORMIS
 ~ HIPPOCAMPUS ANTIQUORUM

ay del. A Hammond lit

W. J. S. P. in p

BALISTES MACULATUS

Flanhart imp

2

1b.

1a

1

1. ACIPENSER STURIO.
1a, upper side of head, 1b, under side of head, 2, variety A. latirostris.

1

1877

1877

1b

1877

1877

1b

CARCHARIAS GLAUCUS 1a TEETH OF ADULT 1b TEETH OF YOUNG

Hanhart imp

Fig. 1. Carcharias glaucus, 1a, 1b

F. Day del. A. Hammond lith.

CALFUS VULGARIS
1a. teeth. 1b. skin

Harbort imp.

F. Day del. A. Hammond lith.

Hammerhead

1. SPHRYNA TIBURO 1a UNDER SURFACE OF HEAD.

Hanhart imp.

F. Day del. A. Hammond lith.

1. MUSTELUS VULGARIS.
1a. under view of head, 1b. teeth.

Alopias vulpes
la.

Drawn by A. Hammond & lith.

Harkness map

ALOPIAS VULPES.
la. teeth.

F Day del. A. Hammond lith.

Hanhart imp.

1. SELACHE MAXIMA. 2. NOTIDANUS GRISEUS.
1a Gill rakers 1b the same detached 1c teeth 2a teeth 2b teeth

Prof. J. A. S. S. S. S. S.

Hanhart imp.

1. SCYLLIUM CANICULA. 2. S. CATULUS.
1a. under side of head. 1b. egg case with front wall removed showing embryo. 1c. skin. 2a. under side of head.

1. PRISTIURUS MELANOSTOMUS. 2. ACANTHIAS VULGARIS.
1a. under side of head. 1b. tooth 1c. skin from candat fin. 1d. egg case. 2a. under side of head. 2b. teeth.

Plâte CIX.

Hanhart imp.

CENTRINA SALVIANI

Hutchinson

1.

2b.

2a.

1a.

2.

2. ECHINORHINUS SPINOSUS.

1a. teeth 2a. teeth 2b. skin.

1a.

Hanhart imp.

TORPEDO NOBILIANA .

F. Day del. A. Hammond lith.

E. Day del. A. Hammond lith.

I. RAIA BATIAS.
1a under side of head 1b, fetus in egg case.

Hanhart imp.

E. Day del A Hammond lith.

Hanhart imp.

I. RAIA MACRORHYNCHUS. 1a. TEETH.

F. Day del. A. Hammond lith.

Hanhart imp.

RAIA ALBA

F. Day del. A. Hammond lith.

Hanhart. imp.

1. *RAIA CLAVATA*. 1a. TEETH OF FEMALE.
1b. TEETH OF MALE. 1c. OVUM. 2. MONSTROSITY.

1. *RAJA MACULATA* 1a. UNDER SURFACE OF HEAD. 1b. TEETH.

Hanhart imp

F. Day del. A. Hammond lith.

F. Day del. Alcock sculp.

RAJA MICROCELLATA.

Harbort imp.

1a.

Harhart imp.

1 RAIJA RADIATA. 1a. UNDER SURFACE OF HEAD.

RAIA CIRCULARIS
1a. under side of head.

F. Dey del. A. Hammond lith.

1. MYLIOBATIS AQUILA. 1a. UNDER SURFACE 1b. TEETH.

Harber's imp.

F. Day del. A. Hammond lith.

CEPHALOPTERA GIORNÆ.

Hanhart imp.

1. PETROMYZON MARINUS. 1a MOUTH.

Harbort imp

Day del. A Hammond lit.

F. Day del. A. Hammond lith.

Hanb. imp.

1. PETROMYZON FLUVIATILIS 2. 3. P. BRANCHIALIS 4. MYXINE GLUTINOSA,
4a. OVUM 5. BRANCHIOSTOMA LANCEOLATUM 5a. MOUTH.

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