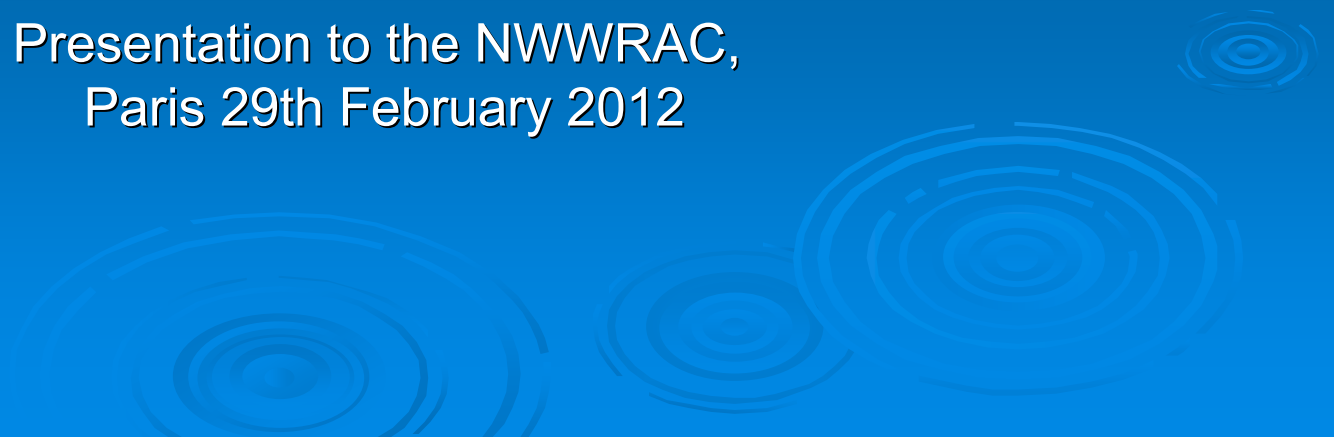


Status and biology of some sharks in the ICES area

Graham Johnston
ICES Working Group on Elasmobranch Fishes

Presentation to the NWWRAC,
Paris 29th February 2012



ICES Advice

- ICES advice for elasmobranchs is on a two year cycle
- Last issued in 2010 (except Spurdog 2011)
- Next release is October 2012
- Recommended TACS that should last for two years

Scyliorhinus canicula

- Egg-laying, like rays
- Spawning season – October-July
- Uterine Fecundity 29-62
- Length at maturity (m) 52cm
- Length at maturity (f) 55cm
- L_{∞} combined sexes 82.7cm



Scyliorhinus canicula

➤ Status:

- Stable / Increasing

➤ ICES Advice: Status quo catch

Scyliorhinus stellaris

- Coastal species
- Found in VI and VII
- Surveys are not good indices as often found on rocky grounds in shallow water.



Scyliorhinus stellaris

- Egg laying
- Max Length: 150cm
- Status: Locally common. Survey indices increasing in Villa, but low catches in other areas
- Advice: No advice in 2010. EU have requested advice in 2012.

Mustelus spp.

- *Mustelus mustelus* and *Mustelus asterias*
- Not possible to separate visually.
- *Mustelus asterias* in VI and VII.



Mustelus spp.

- K: (m) 0.195, (f) 0.146
- Max length: (m) 104cm, (f) 123.5cm
- Maximum age: (m) 13, (f) 20
- Status: Increasing in most surveys
- Advice: Status quo catch

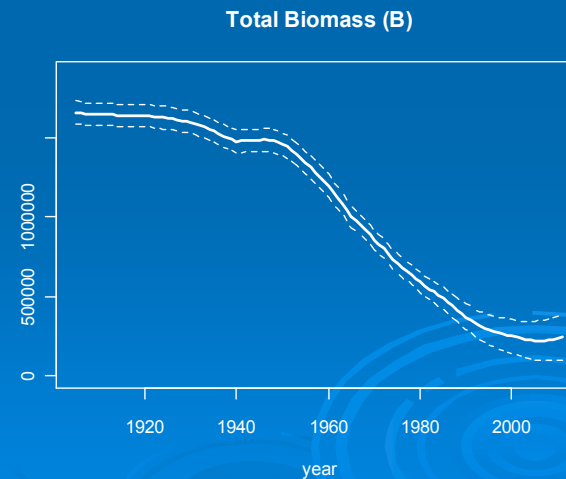
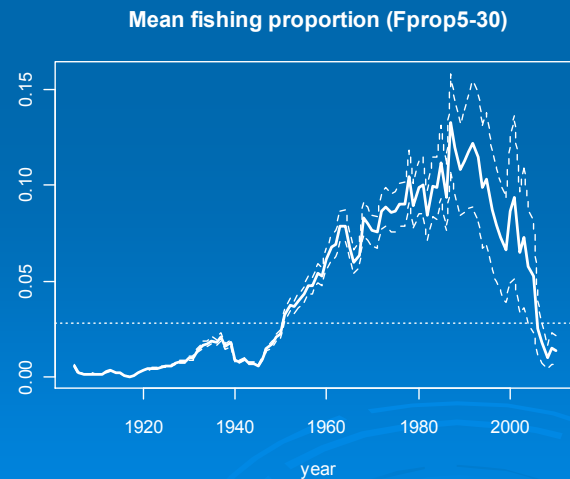
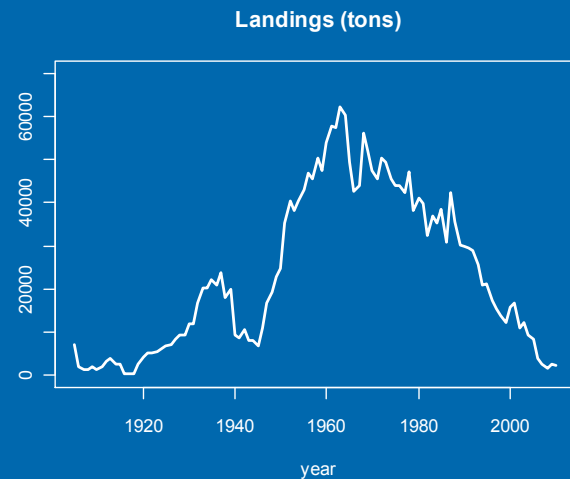
Squalus acanthias

- Spawning season – October-December
- $K = 0.17$ (m) 0.086 (f)
- Fecundity 2-21. Mean is 7
- Gestation 22-24 months (Gives birth to live young)
- Length at birth 19-30cm
- Length at maturity (m) 80 cm
- Length at maturity (f) 87 cm
- Age at maturity (f) 17
- L_{∞} (m) 81cm (f) 110 cm
- Maximum Age - >40



Squalus acanthias

- Status: Stock at very low level



- Advice: no targeted fishery

Lamna nasus

- Found throughout North Atlantic
- Considered to be Western and Eastern Atlantic stocks
- Some intermixing

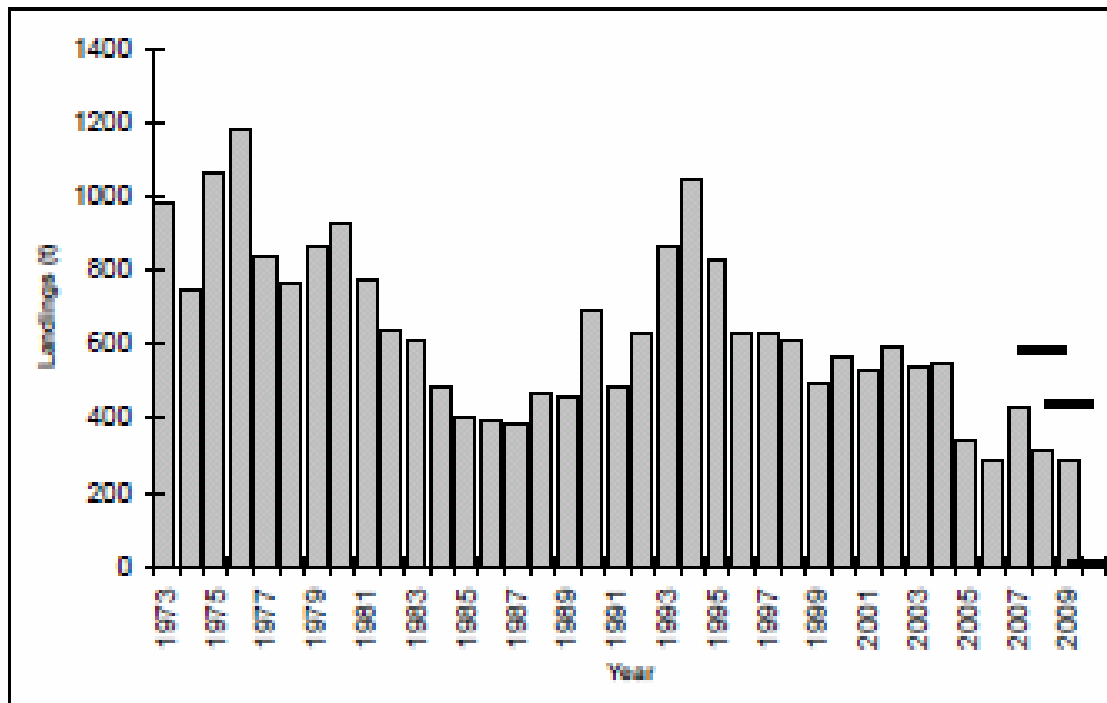


Lamna nasus

- Fecundity 3-6 pups per year (average 4)
- Gestation 8-9 months
- Length at birth 58-77 cm
- Length at maturity (m) 195cm
- Length at maturity (f) 245cm
- Age at maturity (m) 8
- Age at maturity (f) 13
- L_{∞} (m) 290 cm (f) 348cm
- Maximum Age 30

Lamna nasus

➤ Status: Depleted



➤ Advice: TAC=0

Galeorhinus galeus

Spawns every three years

Fecundity 10-41

Length at birth 30-40cm

Length at maturity (m) 117 cm

Length at maturity (f) 123 cm

Age at maturity (m) 11

Age at maturity (f) 16

L_{∞} male 152 cm female 163 cm

Maximum Age 36



Galeorhinus galeus

➤ Status:

- Insufficient information for a full assessment
- Considered to be highly vulnerable to overexploitation
- Targeted fisheries have collapsed in other areas
- No ICES advice

Prionace glauca

K= (m) 0.175, (f) 0.130-0.251

Spawning season – Spring/Early Summer

Fecundity 4-75.

Gestation 9-12 months

Length at birth 37-47cm

Length at first maturity (m) 153 cm

Length at first maturity (f) 180-190 cm

Age at maturity (f) 5.5

L_{∞} (m) 295 cm (f) 241 cm

Maximum Age 24



Prionace glauca

- ICCAT Assessment 2008 – Stock believed to be above MSY , F is below F_{MSY}
- No ICCAT or ICES advice
- New ICCAT assessment due 2012

Alopias vulpinus

- Fecundity 2-6
- Length at birth 117cm- 155cm
- Length at first maturity (f) 260-330 cm
- L_{∞} (m) 492 cm (f) 636 cm



Alopias vulpinus

➤ Status:

- Not a targeted species
- Identification / quantities issues in records
- Considered vulnerable to exploitation.
- No targeted fishery allowed by ICCAT
- No ICES advice