

Humboldt Squid (*Dosidicus gigas*)

2009 Update
(preliminary)

Historic Information

- Historic range from California to Tierra del Fuego
- First BC records from mid- to late-1990s
- Relatively consistent occurrence since 2005
- Extremely abundant in 2009

Biology

- Life span 1 to 1.5 years
- Can grow to 4 m TL, 1.5 m ML (southern population) or 1 m ML (northern population)
- Seasonal migrant from sub-equatorial spawning grounds
- Usually below 250 m during day, migrate to surface to feed at night



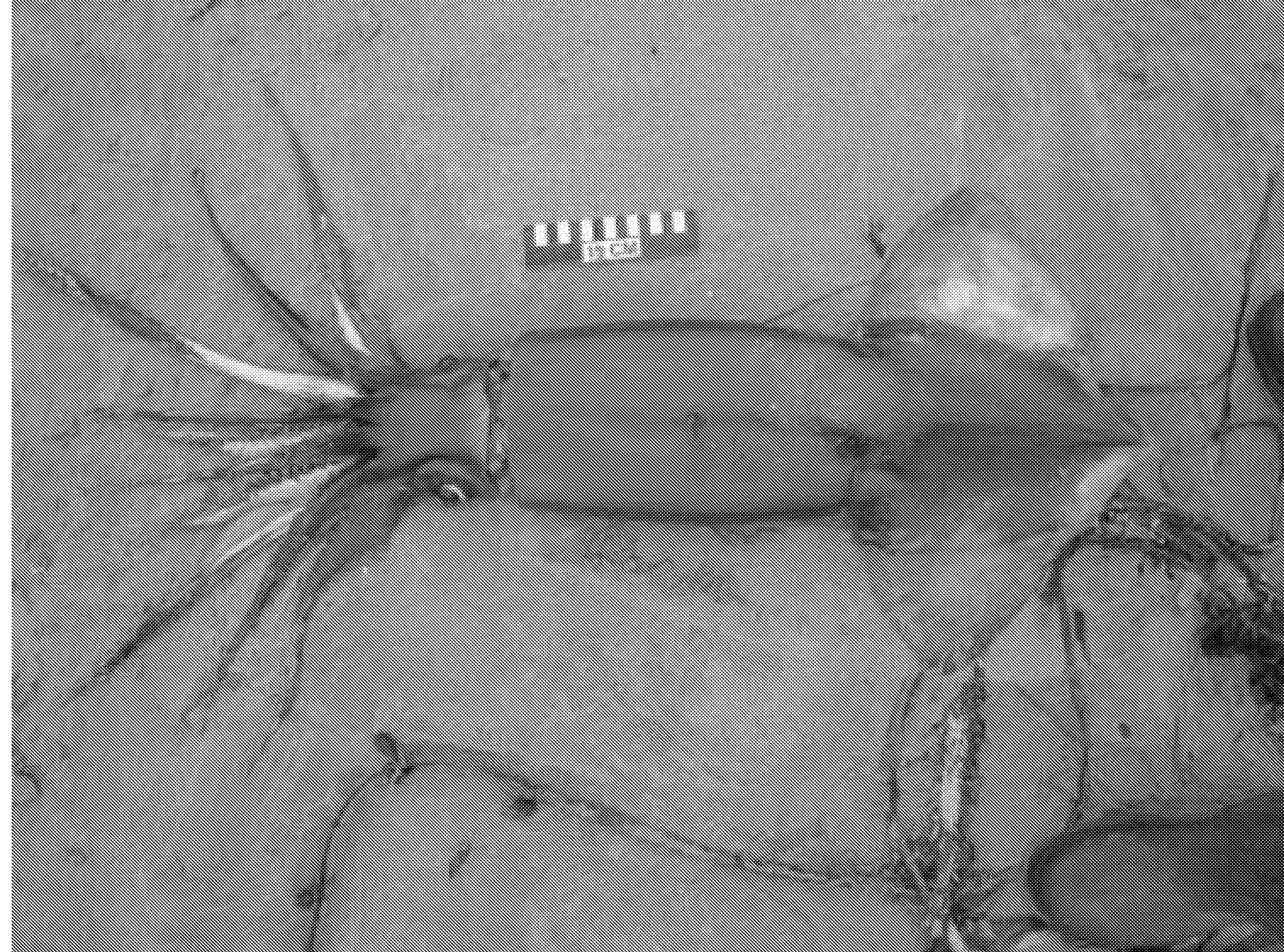
Biology

- Feed on myctophids, sardines, herring, hake, pelagic rockfish (*S. jordanii*), other squid
 - No direct evidence of predation on salmon
 - Diet studies from Oregon and Gulf of California
 - Net predation common
- Preyed on by sharks, billfishes, tuna, whales

2009 Records

- Strandings:
 - Tofino (August 3 and September 24)
 - North Beach QCI (August 13)
 - Kitasoo Bay (early September)
 - Aristazabal Island (September 9)
 - Rivers Inlet (September 18)





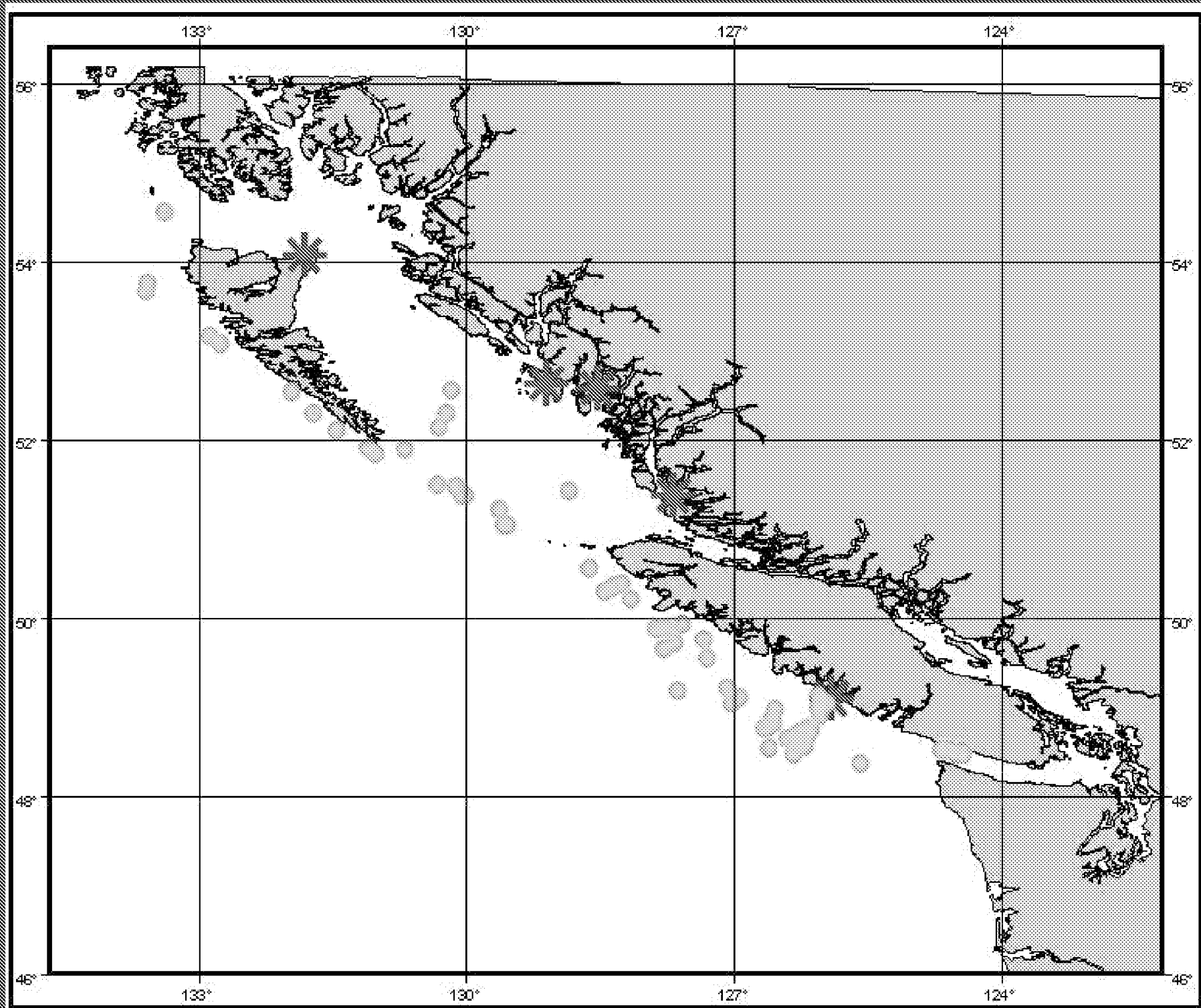
2009 Records

- Commercial encounters
 - Early August trawl catch off La Perousse and Swiftsure Banks
 - Estimated at 70-100 mt
- Other catches not coded yet
 - AMR recoding for Humboldts rather than generic squid
- Anecdotal (unconfirmed) report of recreational catch near Thetis Island (August)
 - Previous record of stranded specimen at Nanaimo

2009 Records

■ Research catches

- First report July 29 sardine survey off southern Vancouver Island
 - Estimated 1500 kg in one tow off Lennard Island August 4
- Reported from hake survey August 13-September 7
 - Taken in midwater trawl tows and with automated and hand jigging equipment
 - Common off SWVI but also records from Queen Charlotte Sound, West Coast Queen Charlotte Islands and Dixon Entrance
 - 1200 kg in a 3-minute tow off Checleset Bay August 16
- Taken in Juan de Fuca salmon test seine fishery August 7 to September 11
 - Estimated 1200 squid taken in two sets off Port San Juan September 11







Summary

- Humboldts unusually abundant throughout BC in 2009
- Distribution, abundance and behaviour not well documented
 - Appear to arrive in BC waters late July
 - Extent of northern distribution not well understood
- No direct evidence of predation on salmon
 - Potential overlap in space and time with sockeye salmon (JdF test fishery)
 - Have collected ~200 stomachs in 2009