

**UPDATE ON TASK II SIZE SAMPLING BASED ON  
JAPANESE TUNA FLEET OPERATING IN URUGUAYAN EEZ (2009-2011)**

R. Forselledo<sup>1</sup>, A. Domingo<sup>1,2</sup> and F. Mas<sup>1,3</sup>

**SUMMARY**

*Between 2009 and 2011 Japanese-flagged tuna fishing vessels operated in Uruguay with a research fishing licence targeting *Thunnus obesus*. The fleet operated in Uruguayan jurisdictional waters (EEZ) and adjacent international waters of the Southwestern Atlantic Ocean. The present paper synthetize the information referred to blue shark (*Prionace glauca*) obtained by the Uruguayan Observer Program on board this fleet. The effort observed was 2,459,825 hooks in 1,060 sets with an observers' coverage of the fleet of 100%. A total of 9,906 blue sharks were measured with a mean fork length (FL) of 152 cm (range 63-261) in the period 2009-2011. Size class distributions by sex and year are presented.*

**RÉSUMÉ**

*Entre 2009 et 2011, des navires de pêche de thonidés battant le pavillon du Japon ont opéré en Uruguay avec un permis de pêche de recherche ciblant le *Thunnus obesus*. La flotte opérait dans les eaux territoriales uruguayennes (ZEE) et les eaux internationales adjacentes du Sud-Ouest de l'océan Atlantique. Le présent document synthétise les informations sur le requin peau bleue (*Prionace glauca*) obtenues par le programme d'observateurs uruguayens embarqués à bord de cette flotte. L'effort observé a été de 2.459.825 hameçons au cours de 1.060 opérations avec une couverture d'observateurs de la flotte de 100%. Au total, 9.906 requins peau bleue ont été mesurés avec une longueur moyenne à la fourche (FL) de 152 cm, s'inscrivant dans une gamme de 63-261 cm au cours de la période 2009-2011. Les distributions de classe de tailles par sexe et année sont présentées.*

**RESUMEN**

*Entre 2009 y 2011, atuneros con pabellón de Japón operaron en Uruguay con una licencia de pesca de investigación y se dirigían al *Thunnus obesus*. La flota operaba en aguas jurisdiccionales de Uruguay (ZEE) y en aguas internacionales adyacentes del Atlántico sudoccidental. Este documento sintetiza la información sobre tintorera (*Prionace glauca*) reunida por el Programa uruguayo de observadores a bordo de esta flota. El esfuerzo observado fue de 2.459.825 anzuelos en 1.060 lances con una cobertura de observadores del 100% en la flota. Se midieron en total 9.906 tintoreras, con una longitud a la horquilla media (FL) de 152 cm, rango 63-261 cm, en el periodo 2009-2011. Se presentan las distribuciones de clases de talla por sexo y año.*

**KEYWORDS**

*Blue shark, Task II, Size sampling, Japan, Uruguay*

---

<sup>1</sup> Laboratorio de Recursos Pelágicos, Dirección Nacional de Recursos Acuáticos (DINARA). Constituyente 1497, CP 11200, Montevideo, Uruguay.

<sup>2</sup> adomingo@dinara.gub.uy

<sup>3</sup> Centro de Investigación y Conservación Marina (CICMAR), Uruguay.

## **1. Introduction**

Japanese-flagged tuna fishing vessels operated between 2009 and 2011 in Uruguay with a research fishing licence targeting *Thunnus obesus*. In agreement with Japan consulted in previous meetings, we synthesize in this paper the information obtained by the Uruguayan Observer Program regarding ICCAT Statistics Task II Size Sampling for blue shark (*Prionace glauca*).

## **2. Material and methods**

The data presented in this study were obtained by scientific observers from the National Observer Program on board the Japanese fleet between 2009 and 2011. Japanese-flagged vessels operated almost exclusively within the UEEZ with an experimental fishing license during austral autumn and winter of 2009-2011. This fleet targeted bigeye and albacore tuna at depths ranging from 95 to 210 m (Domingo *et al.* 2011). The fleet operated in Uruguayan jurisdictional waters (EEZ) and adjacent international waters of the Southwestern Atlantic Ocean (Domingo *et al.* 2011). The effort observed was 2,459,825 hooks in 1,060 sets with an observers' coverage of the fleet of 100%.

The information here presented was sent in the format requested to ICCAT to be included in the statistics data base.

## **3. Results and discussion**

A total of 9,906 blue sharks were measured during 2009-2011 with a mean fork length (FL) of 152 cm (range 63 - 261 cm). **Table 1** shows the number of specimens measured per year and sex, together with the mean FL and range by sex.

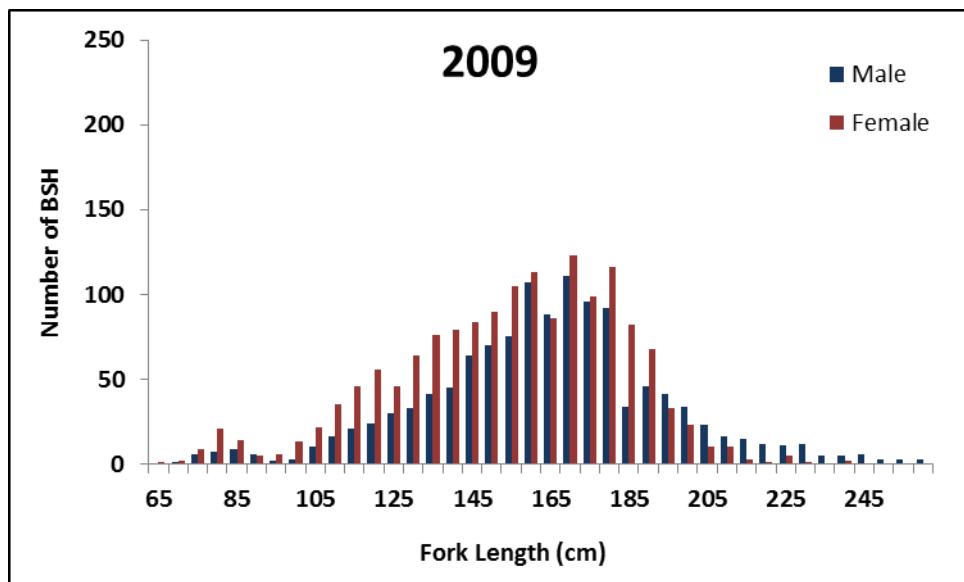
**Figures 1 to 3** presents the size class distribution per year and sex.

## **References**

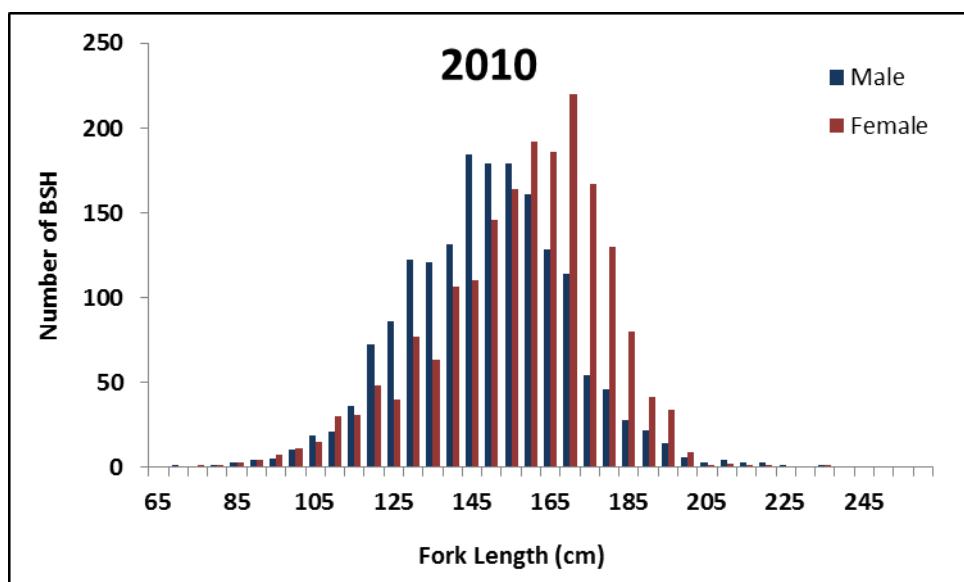
- Domingo, A., Forselledo, R., Pons, M. and Ortega, L. 2011. Análisis de la información del atún ojo grande (*Thunnus obesus*) obtenida por el programa nacional de observadores de Uruguay entre 1998 y 2009. Collect. Vol. Sci. Pap. ICCAT 66(1): 332-350.

**Table 1.** Data on blue shark sampling conducted on board the Japanese fleet operating in Uruguay 2009 - 2011. Measurements are fork length (FL) in centimetres.

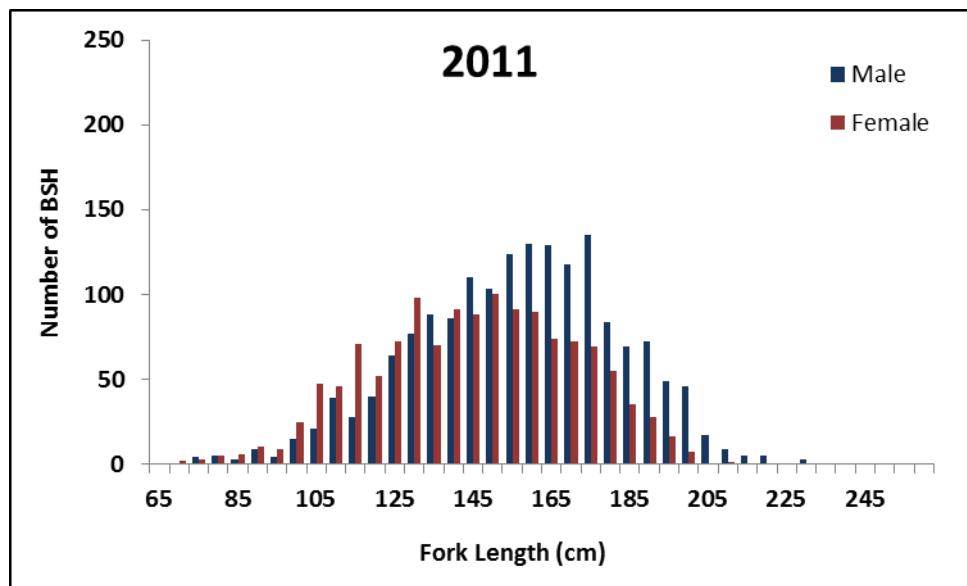
Year	Males		Females		Sex unknown		Total	
	Mean FL (range)	N° BSH						
2009	162 (69-260)	1226	152 (63-239)	1549	147 (69-261)	153	156 (63-261)	2928
2010	147 (70-234)	1762	156 (75-235)	1922	144 (88-203)	147	151 (70-235)	3831
2011	155 (71-230)	1783	143 (70-207)	1602	161 (85-205)	200	150 (70-230)	3147



**Figure 1.** Fork length distribution of blue shark by sex in 5 cm intervals for the year 2009.



**Figure 2.** Fork length distribution of blue shark by sex in 5 cm intervals for the year 2010.



**Figure 3.** Fork length distribution of blue shark by sex in 5 cm intervals for the year 2011.