

A Note on *Oncorhynchus formosanus* and *Oncorhynchus masou*

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A landlocked salmonoid fish from the mountains of Formosa was described by JORDAN and OSHIMA (1919) as *Salmo formosanus*. Japanese workers have since considered this fish in the genus *Oncorhynchus*. MILLER (1950:33) points out that since the gender of *Oncorhynchus* is neuter, *formosanus* must be written *formosanus*.

On the basis of scale structure, OSHIMA (1934) concluded there were no differences between *O. formosanus* of Formosa and the small landlocked salmon, *O. masou*, of southern Japan. A recent examination of specimens in the Stanford University Collection has uncovered some new evidence concerning the systematics of these fish.

A single specimen of *O. formosanus* was examined (S.U. 23059). This specimen showed differences from samples of Japanese landlocked salmon collected from Lake Biwa and the Daiya River, Nikko. Since the sample sizes were small, it would be unwise to place a great significance on them, but one outstanding character noticed in *O. formosanus* was the presence of basibranchial teeth. These teeth, often called hyoid teeth, are found in no other *Oncorhynchus* and only in *Salmo clarkii* of the genus *Salmo*. They were not mentioned in the original description of this fish.

If all of the landlocked salmon of Formosa possess basibranchial teeth while the Japanese salmon lack this character, they cannot be considered identical. Further work may indicate that *O. formosanus* should be placed with *Salmo* as originally proposed by JORDAN and OSHIMA (*op. cit.*). However, a thorough study would be necessary to give much credence to such a decision.

Eleven specimens of *O. masou* were examined, 5 from the Daiya River, Nikko (S.U. 6700), labeled *Oncorhynchus ishikawae*, and 6 from Biwa (S.U. 6693), labeled *Salmo macrostomus*. The following table indicates some of the differences between *O. formosanus* and *O. masou*.

Basibranchial teeth :

O. formosanusPresent, 4 teeth counted.

<i>O. masou</i>				
L. Biwa	Absent			
Daiya R.	Absent			
Vertebrae :	62	63	64	65
<i>O. formosanum</i>	1			
<i>O. masou</i>				
L. Biwa			4	2
Daiya R.			2	3
Anal fin rays :	12	13	14	
<i>O. formosanum</i>	1			
<i>O. masou</i>				
L. Biwa		1	5	
Daiya R.	2	2	1	
Gill rakers :	17	18	19	20
<i>O. formosanum</i>	1			
<i>O. masou</i>				
L. Biwa	1	4	1	
Daiya R.		1	2	2
Range of upper jaw length in thousandths of the standard length :				
<i>O. formosanum</i>	161			
<i>O. masou</i>				
L. Biwa	130 — 145			
Daiya R.	130 — 142			

Literature Cited

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