

Notes on severity rankings of gross external anomalies in Field Manual for Assessing Internal and External Anomalies in Brown Bullhead (PA Sea Grant and PADEP, December 2006)¹

Category	Severity Ranking	Photograph Depiction
Barbels	1 mild 2 moderate 3 severe	1 shortened/missing/deformed barbel 2 shortened/missing/deformed barbels * >2 shortened/missing/deformed barbels
Raised Skin Lesions	1 mild 2 moderate 3 severe	1 lesion 2 lesions many
Raised Mouth Lesions	1 mild 2 moderate 3 severe	1 small area 1 large area 2 large areas
Pigmentation (Yellow or Black)	1 mild 2 moderate 3 severe	1 spot 2 to 4 spots extensive coverage
Fin Erosion	1 mild 2 moderate 3 severe	* 1 small area on fin * 1 large area on fin 2 fins; extensive coverage
Ulcers	1 mild 2 moderate 3 severe	1 small ulcer 1 large ulcer 2 ulcers
Scars/Wounds	1 mild 2 moderate 3 severe	* 1 healed area 1 small area 1 large area
Eyes	1 mild 2 moderate 3 severe	1 discolored eye 1 cloudy or missing eye * 2 missing eyes

Notes:

1. The notes are based on photograph depictions contained in the manual

* = No photo present in manual; severity assumed based on other rankings