Golden Acara (*Aequidens viridis*)
Ecological Risk Screening Summary

U.S. Fish and Wildlife Service, web version – 03/30/2018

Native Range and Status in the United States

Native Range
From Froese and Pauly (2015):

“South America: Guaporé River basin, Amazon River basin.”

From Hablützel (2012):

“Aequidens viridis (Heckel, 1840), Aphyocharax rathbuni Eigenmann, 1907, Catoprion mento (Cuvier, 1819) and Cyphocharax plumbeus (Eigenmann & Eigenmann, 1889) are reported for
the first or second time respectively from río Mamoré sub-drainage. These four species have been found to be abundant in the río Iténez drainage (Vari 1992a, b, Lasso et al. 1999, Sarmiento 1999, Fuentes Rojas & Rumiz 2008; personal observations). The first three species have, like *H. elachys*, been reported earlier from the Lago Largo (río Yata drainage) in the aquarium hobbyist literature (Staeck 2010a, b).

**Status in the United States**
No records of *Aequidens viridis* introductions in the United States were found.

**Means of Introductions in the United States**
No records of *Aequidens viridis* introductions in the United States were found.

**Remarks**
No additional remarks.

## 2 Biology and Ecology

**Taxonomic Hierarchy and Taxonomic Standing**
From ITIS (2013):

“Kingdom Animalia  
  Subkingdom Bilateria  
    Infrakingdom Deuterostomia  
      Phylum Chordata  
        Subphylum Vertebrata  
          Infraphylum Gnathostomata  
            Superclass Osteichthyes  
              Class Actinopterygii  
                Subclass Neopterygii  
                  Infraclass Teleostei  
                    Superorder Acanthopterygii  
                      Order Perciformes  
                        Suborder Labroidei  
                          Family Cichlidae  
                            Genus *Aequidens*  
                              Species *Aequidens viridis* (Heckel, 1840)”

From Eschmeyer et al. (2017):

“*viridis*, **Acara** Heckel [J. J.] 1840:343 [Annalen des Wiener Museums der Naturgeschichte v. 2 […] Mato Grosso State, Brazil. Syntypes: NMW 16247 (1, dry), 33833 (1), ?91433 (1, dry); SMF 2925 [ex NMW in 1844] (1, dry). •Valid as *Aequidens viridis* (Heckel 1840) -- (Kullander in Reis et al. 2003:609 […]], Sarmiento et al. 2014:122, 188 […]). **Current status:** Valid as *Aequidens viridis* (Heckel 1840). Cichlidae: Cichlinae.”
Size, Weight, and Age Range
From Froese and Pauly (2015):

“Max length: 16.5 cm SL male/unsexed; [Kullander 2003]”

Environment
From Froese and Pauly (2015):

“Freshwater; benthopelagic.”

Climate/Range
From Froese and Pauly (2015):

“Tropical”

Distribution Outside the United States
Native
From Froese and Pauly (2015):

“South America: Guaporé River basin, Amazon River basin.”

Introduced
No records of Aequidens viridis introductions were found.

Means of Introduction Outside the United States
No records of Aequidens viridis introductions were found.

Short Description
A physical description of Aequidens viridis was not found.

Biology
From Froese and Pauly (2015):

“In flood plains; […]”

Human Uses
From Chapman et al. (1994):

Aequidens viridis was reported as imported to the United States in the ornamental trade in 1992.
From Froese and Pauly (2015):

“[… ] used as food [Stawikowski and Werner 1998].”

From Hablützel (2012):

“The first three species [including *Aequidens viridis*] have, like *H. elachys*, been reported earlier from the Lago Largo (río Yata drainage) in the aquarium hobbyist literature (Staeck 2010a, b)”

**Diseases**

Information on pathogens and parasites known to be carried by *Aequidens viridis* was not found.

**Threat to Humans**

From Froese and Pauly (2015):

“Harmless”

### 3 Impacts of Introductions

No records of *Aequidens viridis* introductions were found.

### 4 Global Distribution

![Map showing the global distribution of *Aequidens viridis*. Locations are in Brazil and Bolivia. Map from GBIF Secretariat (2017).](image)

**Figure 1.** Known global distribution of *Aequidens viridis*. Locations are in Brazil and Bolivia. Map from GBIF Secretariat (2017).
The northernmost point is located at the same location as the holding collection of the specimen. Due to the difference between this location and all other descriptions of the species’ range found, it cannot be ruled out that the coordinates attached to the specimen are for the repository and not where it was collected. This location was not used as a source location.

5 Distribution Within the United States

No records of *Aequidens viridis* introductions in the United States were found.
6 Climate Matching

Summary of Climate Matching Analysis
The climate match for *Aequidens viridis* was medium for southern Florida and the very southern tip of Texas. The climate match was low everywhere else. The Climate 6 score (Sanders et al. 2014; 16 climate variables; Euclidean distance) for the contiguous U.S. was 0.00, low, and no states had an individually high climate match.

Figure 2. RAMP (Sanders et al. 2014) source map showing weather stations in Bolivia and Brazil selected as source locations (red) and non-source locations (gray) for *Aequidens viridis* climate matching. Source locations from GBIF Secretariat (2017).
Figure 3. Map of RAMP (Sanders et al. 2014) climate matches for *Aequidens viridis* in the contiguous United States based on source locations reported by GBIF Secretariat (2017). 0 = Lowest match, 10 = Highest match.

The High, Medium, and Low Climate match Categories are based on the following table:

<table>
<thead>
<tr>
<th>Climate 6: Proportion of (Sum of Climate Scores 6-10) / (Sum of total Climate Scores)</th>
<th>Climate Match Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000 &lt; X ≤ 0.005</td>
<td>Low</td>
</tr>
<tr>
<td>0.005 &lt; X ≤ 0.103</td>
<td>Medium</td>
</tr>
<tr>
<td>≥ 0.103</td>
<td>High</td>
</tr>
</tbody>
</table>

7 Certainty of Assessment

The certainty of assessment is medium. There was very little information available but the information that was available was of high quality. There were no records of introduction found.
8 Risk Assessment

Summary of Risk to the Contiguous United States

The history of invasiveness is uncertain. No records of introductions were found. The climate match was low. Most of the country had a very low climate match, parts of southern Florida and Texas had a medium match. The certainty of assessment is medium. The overall risk assessment category is uncertain.

Assessment Elements

- **History of Invasiveness** (Sec. 3): Uncertain
- **Climate Match** (Sec. 6): Low
- **Certainty of Assessment** (Sec. 7): Medium
- **Remarks/Important additional information**: No additional remarks.
- **Overall Risk Assessment Category**: Uncertain

9 References

Note: The following references were accessed for this ERSS. References cited within quoted text but not accessed are included below in Section 10.


10 References Quoted But Not Accessed

**Note:** The following references are cited within quoted text within this ERSS, but were not accessed for its preparation. They are included here to provide the reader with more information.


