

**BEFORE THE SECRETARY OF THE INTERIOR**

**EMERGENCY PETITION TO LIST *Betta miniopinna* AS ENDANGERED UNDER THE  
ENDANGERED SPECIES ACT**

**SUBMITTED BY:**

**CENTER FOR BIOLOGICAL DIVERSITY**

**MONITOR CONSERVATION RESEARCH SOCIETY**

**July 5, 2023**

**Notice of Petition**

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The Center for Biological Diversity (the Center) is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats. The Center works through science, law, and creative media to secure a future for all species, great or small, hovering on the brink of extinction. The Center is supported by more than 1.7 million members and activists throughout the United States. The Center and its members are concerned with the conservation of endangered species and the effective implementation of the Endangered Species Act. The Center's International Program works to protect global biodiversity by using U.S. and international law to hold governments accountable for threatening imperiled species wherever they are found.

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The Monitor Conservation Research Society (Monitor) is a not-for-profit organisation based in Canada established to combat the illegal and unsustainable trade in wildlife through sound research, strategic interventions and publication of information critical to the conservation of threatened species. Monitor is made up of highly skilled and experienced experts in the field of

wildlife trade related conservation, situated around the world. Monitor staff members have authored numerous peer-reviewed publications on wildlife trade related issues and are recognised as leaders in this field. These outputs have resulted in increased enforcement efforts, a raised awareness amongst the public in key areas, improved legislation, and a general enhanced effort to reduce the illegal wildlife trade.

Submitted this 5<sup>th</sup> Day of July 2023

Pursuant to Section 4(b) of the Endangered Species Act (ESA), 16 U.S.C. § 1533(b), Section 553(e) of the Administrative Procedure Act, 5 U.S.C. § 553(e), and 50 C.F.R. § 424.14(a), the Center for Biological Diversity and Monitor Conservation Research Society hereby petition the Secretary of the Interior and the U.S. Fish and Wildlife Service (FWS or the Service) to protect *Betta miniopinna* as an endangered species under the ESA, 16 U.S.C. §§ 1531-1544.

As described in this Petition, *B. miniopinna* is a freshwater fish restricted to an area of less than 10 km<sup>2</sup> on Bintan Island in Indonesia's Riau Archipelago (Low, 2019 p. 1). *B. miniopinna* is primarily threatened by ongoing conversion of peat swamp forests to industrial forestry operations and plantations (Low, 2019 p. 2). The species was assessed as Critically Endangered by IUCN in 2019 (Low, 2019 p. 1). Wild-caught *B. miniopinna* are sold in the United States in the online aquarium trade. The species is not protected in Indonesia or the United States, and its trade is not regulated under the Convention on International Trade in Endangered Species (CITES). Given the species' limited, threatened range and Critically Endangered status, we request that the Service immediately protect *B. miniopinna* using its emergency listing authority under the ESA. 5 U.S.C. §§ 553(e), 555(b); 16 U.S.C. § 1533(b)(7).<sup>1</sup>

This Petition presents substantial scientific and commercial information indicating that *B. miniopinna* is in danger of extinction throughout all of its range.<sup>2</sup> See 50 C.F.R. § 424.14(h)(1)(i) ("substantial scientific or commercial information" refers to credible scientific or commercial information in support of the Petition's claims such that a reasonable person conducting an impartial scientific review would conclude that the action proposed in the Petition may be warranted). Therefore, the Secretary of the Interior, through the Service, should emergency list the species or at the very least make an initial finding "that the petitioned action may be warranted" within 90 days of receiving this Petition and make a subsequent finding that listing is warranted within 12 months receiving this Petition. 16 U.S.C. § 1533(b)(3)(A), (B).

The Service has a duty to protect *B. miniopinna* by listing the species as endangered under the Endangered Species Act, which would meaningfully contribute to conservation of the species by strictly regulating the import, export, and interstate commerce of the species and by highlighting conservation concerns for this species. See 16 U.S.C. § 1538(a)(1) (prohibiting the import, transport, and sale of endangered species with narrow exemptions).

Respectfully submitted,

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<sup>1</sup> Where there is "any emergency posing a significant risk to the well-being of any species of fish or wildlife or plants," the Service need not comply with the regular listing process including notice and comment before issuing an emergency rule, so long as the agency publishes detailed reasons why such regulation is necessary and if the regulation applies to resident species of fish or wildlife, or plants, it gives actual notice of the regulation to the State agency of each State where the species is believed to occur. 16 U.S.C. § 1533(b)(7). The emergency listing takes effect after being published in the Federal Register. *Id.* Emergency listing is a temporary measure that ensures immediate protection in an emergency and expires 240 days following the date of publication unless the rulemaking procedures that apply for making a non-emergency listing determination were complied with during that time. *Id.*

<sup>2</sup> Because this species does not occur within the United States, the Center is not required to send notification to any U.S. state agency. 50 C.F.R. § 424.14(b).

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## Executive Summary

*Betta miniopinna* is a rare, freshwater fish endemic to an area of less than 10 km<sup>2</sup> in the peat swamp forests of Bintan Island in the Riau Archipelago of Indonesia (Low, 2019 p. 1). The species was first described in 1994 (Tan & Tan, 1994 as cited in Low, 2019). In 2019, IUCN assessed *B. miniopinna* as Critically Endangered (Low, 2019 p. 1). The species has no common name. *B. miniopinna* are bubble-nesters like other members of the *Betta coccina* species group (Hui & Ng, 2005 p. 56).

*B. miniopinna* is only known from one area that is threatened by ongoing land conversion and degradation of peat swamp forests in the region (Low, 2019 p. 3). Bintan, the island where *B. miniopinna* is found, lost 29% of its tree cover from 2001-2021 (Global Forest Watch, 2023 unpaginated). As of 2010, there were 1.52 kha of oil palm plantations, 3.09 kha of rubber plantations, and another 9.37 kha of unknown plantations on the island (Global Forest Watch, 2023 unpaginated).

In addition to being threatened by habitat loss, *B. miniopinna* is one of several Critically Endangered and Endangered *Betta* fishes being sold in the aquarium trade. It is impossible to quantify the number of *B. miniopinna* specimens being imported to the United States because species-level data are often not provided by importers or documented by relevant agencies upon import, or the data are not made available to the public. However, a quick Google search demonstrates that wild-caught specimens of this Critically Endangered species are widely available for purchase in the United States.

Existing national and international regulatory mechanisms are inadequate to protect *B. miniopinna* from the threats it faces. There are currently no regulatory mechanisms in place to ensure that trade in *B. miniopinna* does not put the wild population of the species at risk of extinction under Indonesian, U.S., or international law. Additionally, regulatory mechanisms in Indonesia are not sufficient for protecting peat swamp forests in the region where *B. miniopinna* occurs.

Under the Endangered Species Act, the Service is required to list a species as “endangered” if it “is in danger of extinction throughout all or a significant portion of its range.” 16 U.S.C. § 1532(6). There are five statutory listing factors that the Service must analyze for the species: (A) the present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; and (E) other natural or manmade factors affecting its continued existence. *Id.* § 1533(a)(1). Based upon the following analysis of these factors, the Service must emergency list *B. miniopinna* as endangered under the Endangered Species Act.

### I. Introduction

About a third of freshwater fish species globally are threatened with extinction (Hughes, 2021 p. 38). Of the species that have been assessed by the International Union for Conservation of Nature (IUCN), 80 species of freshwater fish have been declared extinct, 10 species are

extinct in the wild, and 115 species are “Critically Endangered Possibly Extinct” (Hughes, 2021 p. 40). There are 71 species in the genus *Betta* that have been assessed by IUCN. Of those 71 species, 41 species (58%) are at risk of extinction while another 19 species have been assessed as Data Deficient (IUCN, 2023).

Thousands of the world’s fish species can be found in the global aquarium trade. The aquarium trade is estimated to involve 7,600 species each year. Due to a lack of reliable tracking data, it is impossible to quantify the volume of trade. However, it is estimated that 2 billion live ornamental fish are traded globally each year (Monticini, 2010 p. 4). Freshwater fishes make up about 90% of the ornamental fish trade, with more than 5,300 species traded annually (Evers et al., 2019 p. 909; Maceda-Veiga et al., 2016 p. 861). The United States is the world’s largest consumer of the ornamental fish trade, making regulating the U.S. market a critical part of conserving wild populations of ornamental fishes (Monticini, 2010 p. 4).

*Betta miniopinna* is a rare, freshwater fish endemic to an area of less than 10 km<sup>2</sup> of Bintan Island of the Riau Archipelago in Indonesia (Low, 2019 p. 1). The species was first described in 1994 (Tan & Tan, 1994 as cited in Low, 2019 p. 1). In 2019, IUCN assessed *B. miniopinna* as Critically Endangered, finding that the species’ already limited habitat is threatened by continuous clearing of peat swamp forests in the region (Low, 2019 p. 1). Wild-caught specimens of *B. miniopinna* are offered for sale in the online aquarium trade for purchase in the United States and, despite being Critically Endangered, the species is not protected in Indonesia or the United States, and its trade is not regulated under the Convention on International Trade in Endangered Species (CITES). The United States must take responsibility as a consumer country and extend protections to *B. miniopinna* by promptly listing it as an endangered species under the Endangered Species Act.

## II. Natural History

### A. Taxonomy

*B. miniopinna* was first described in in 1994 (Tan & Tan, 1994 as cited in Low, 2019 p. 1). The species is a member of the *Betta coccina* species group (Schindler & Linke, 2013 p. 36).

**Table 1.** Taxonomy of *B. miniopinna*.

Kingdom	<i>Animalia</i>
Phylum	<i>Chordata</i>
Class	<i>Actinopterygii</i>
Order	<i>Perciformes</i>
Family	<i>Osphronemidae</i>
Genus	<i>Betta</i>
Species	<i>miniopinna</i>

### B. Description

Species in the *Betta coccina* species group have a body size smaller than 40 mm SL and nine abdominal vertebrae (Hui & Ng, 2005 p. 56). *B. miniopinna* has a blackish body (Schindler & Linke p. 38) with red ventral fins.

### **C. Life Cycle and Behavior**

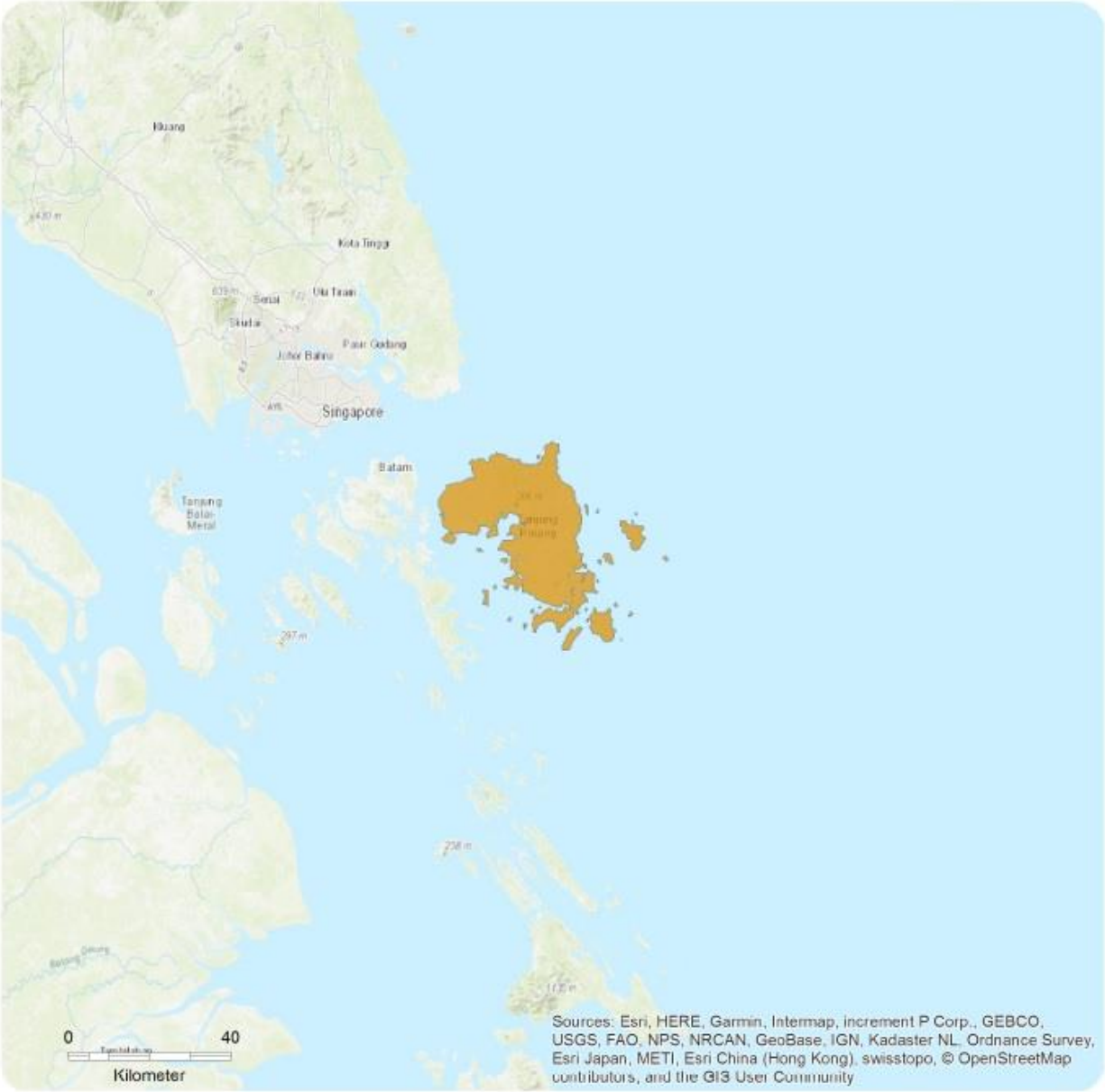
Very little is known about the life cycle and behavior of *B. miniopinna* in the wild. Like other species in the *B. coccina* group, *B. miniopinna* is a bubble-nester (Hui & Ng, 2005 p. 56).

### **D. Habitat**

*B. miniopinna*, like other species of the *B. coccina* species group, lives in peat swamp forests with black water, preferring shallow pools with leaf litter (Hui & Ng, 2005 p. 56). According to IUCN, the species inhabits waters with a pH of 4.9-6 (Low, 2019 p. 3).

## **III. Distribution**

The distribution of *B. miniopinna* is limited to an area of less than 10 km<sup>2</sup> in the peat swamp forests of Bintan Island in the Riau Archipelago of Indonesia (Low, 2019 p. 1). Due to a lack of population surveys, the historic distribution of the species is unknown. However, as discussed below, its limited distribution and the threats the species faces from habitat loss and demand for the U.S. aquarium trade indicate that the species is likely declining.



Range  
 Extant (resident)

Compiled by:  
 IUCN (International Union for Conservation of Nature)

**Figure 1.** Range of *B. miniopinna*. Extracted from Low (2019, p. 2).

**IV. Conservation Status and Warranted Endangered Species Act Protection**

The Endangered Species Act (ESA) is a “comprehensive scheme with the ‘broad purpose’ of protecting endangered and threatened species.” *Ctr. for Biological Diversity v. U.S. Bureau of Land Mgmt.*, 698 F.3d 1101, 1106 (9th Cir. 2012) (quoting *Babbitt v. Sweet Home*, 515 U.S. 687, 698 (1995)). Congress’ plain intent in enacting the ESA was “to halt and reverse the trend toward species extinction.” *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 184 (1978). In doing so, the ESA requires that “all Federal departments and agencies shall seek to conserve

endangered species and threatened species and shall utilize their authorities in furtherance of [these] purposes.” 16 U.S.C. § 1531(c)(1). Endangered and threatened species are “afforded the highest of priorities.” *Tenn. Valley Auth.*, 437 U.S. at 174. Endangered species are species that are “in danger of extinction throughout all or a significant portion of its range,” and threatened species are species that are “likely to become endangered species within the foreseeable future” throughout all or a significant portion of range. 16 U.S.C. §§ 1532(6), (20), 1533.

The best available science demonstrates that *B. miniopinna* meets the definition of endangered. *B. miniopinna* was assessed as Critically Endangered by IUCN in 2019. The species occurs in an area of less than 10 km<sup>2</sup> and, as determined by IUCN and discussed below, is in danger of extinction throughout all or a significant portion of its range due to loss of habitat. It is also likely threatened by overcollection for the aquarium trade.

## **V. Current Threats**

Under the ESA, the Service is required to list a species as “endangered” if it “is in danger of extinction throughout all or a significant portion of its range” or as “threatened” if it “is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range” based upon one or more threats or factors. 16 U.S.C. § 1532(6), (20). There are five statutory listing factors that the Service must analyze for the species: (A) the present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; and (E) other natural or manmade factors affecting its continued existence. *Id.* § 1533(a)(1). Based upon an analysis of these factors, *B. miniopinna* should be protected as an endangered species under the ESA.

### **A. The Present or Threatened Destruction, Modification, or Curtailment of its Habitat or Range**

Habitat loss is a major threat to *B. miniopinna* (Low, 2019 p. 1). Indonesia has experienced the highest deforestation rate of any country in the world (Newman and Valentinus, 2005 p. 1). From 2000 to 2012, the country is estimated to have lost 157,850 km<sup>2</sup> of tree cover (Hansen et al., 2013 supplementary text, Table S1). In 2012, researchers concluded “If peatland deforestation is allowed to continue at current rates, the Southeast Asian peat swamp forests will disappear by around 2030” (Miettinen et al., 2012 p. 124).

Bintan, the island where *B. miniopinna* is found, lost 29% of its tree cover from 2001-2021 (Global Forest Watch, 2023 unpaginated). As of 2010, there were 1.52 kha of oil palm plantation, 3.09 kha of rubber plantations, and another 9.37 kha of unknown plantations on the island (Global Forest Watch, 2023 unpaginated). Deforestation of peatland strongly increases the risk of fire (Miettinen et al., 2012 pp. 126-127). Bintan lost 7.13 kha of tree cover from 2001-2021 due to fires (Global Forest Watch, 2023 unpaginated).

Deforestation of peat swamp forests is expected to have major implications for fish populations. Giam et al. (2012 p. 468) analyzed the impact of peat swamp forest conversion on freshwater fishes in the Sundaland region. The researchers concluded that if the deforestation rate seen from 2000-2010 continues through 2050, 16 of the 102 stenotopic fish species found in

the study area are likely to go extinct. Furthermore, if deforestation occurs through 2050 at the highest rate previously seen in the study area, 79 of the 102 species are predicted to go extinct (Giam et al., 2012 p. 468).

## **B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes**

### **1. *B. miniopinna* is in the Aquarium Trade.**

The global aquarium trade is largely unmonitored, and accessing data is challenging. The number of specimens of *B. miniopinna* being imported to the United States annually cannot be determined because species in the aquarium trade that are not Endangered Species Act-listed are typically not identified to the species level in the Service's Law Enforcement Management Information System (LEMIS) database. Most ornamental fish species are identified only under the species code "FWTF" or "MATF," the genus "tropical fish," or species "marine" or "freshwater" or are listed only by the genus "NONCITES" or "NONCITES ENTRY." *B. miniopinna* is also not listed under CITES, so no import/export data are available under the treaty. It is unclear how many *B. miniopinna* specimens are being exported from Indonesia or imported into the United States.

Despite the lack of specific import data, it is clear from online advertisements that *B. miniopinna* is widely available for sale in the United States. In a brief online search, we found 7 advertisements of *B. miniopinna* for sale (Appendix I). Six of these advertisements were for wild-caught specimens while the remaining advertisement did not specify the specimens' origins. Prices for the specimens ranged from US \$16 for an individual to US \$49.95-199 for a pair. These advertisements indicate that wild-caught *B. miniopinna* specimens are regularly imported to the United States to be sold in the aquarium trade.

## **C. Disease**

Research is needed to determine whether disease is a threat to *B. miniopinna*.

## **D. Other Natural or Manmade Factors**

### **1. Climate Change**

Climate change is likely a threat to *B. miniopinna*. Changes in surface temperature and precipitation are expected to occur in Southeast Asia, impacting the habitat in which *B. miniopinna* exists. There is an expected median surface temperature warming of 2.5°C in Southeast Asia by the end of the 21<sup>st</sup> century (Christensen et al., 2007 p. 883). Additionally, summer precipitation is expected to increase in South and Southeast Asia, and intense precipitation events are expected to occur more frequently (Christensen et al., 2007 p. 879). Indonesia is one of the most vulnerable countries globally to climate change, ranking fourteenth in the Global Climate Risk Index in 2019 (Eckstein et al., 2021 p. 41).

Research is needed on the impacts of climate change on *Betta* species. Throughout Asia, up to 50% of biodiversity is at risk because of climate change (Cruz et al., 2007 p. 485).

Scientists predict that climate change will intensify existing threats already felt from land conversion and habitat fragmentation in most parts of Asia and that threats to ecological stability will increase (Cruz et al., 2007 p. 485). Existing research on freshwater fishes and climate change suggests that the species that will adapt to climate change are those that have sufficient phenotypic plasticity to adapt genetically and those that are able to move to more suitable habitats (Harrod, 2015 p. 647). Considering this, it can be inferred that *B. miniopinna* is particularly vulnerable to habitat changes due to climate change given its small area of occurrence, limited habitat in Bintan, likely limited ability to migrate, and small population.

## **E. The Inadequacy of Existing Regulatory Mechanisms**

Existing national and international regulatory mechanisms are inadequate to protect *B. miniopinna* from the threats it faces. As discussed below, there are currently no regulatory mechanisms in place to ensure that trade in *B. miniopinna* does not put the wild population of the species at risk of extinction. Additionally, regulatory mechanisms in Indonesia are not sufficient for protecting peat swamp forests in the region where *B. miniopinna* occurs. Therefore, Endangered Species Act protections are necessary to protect this species from declines and extinction.

### **1. Domestic Protections in Indonesia**

#### **a. Government Regulation No. 7/1999 on Preserving Flora and Fauna Species**

Under Indonesia's Law Concerning Conservation of the Living Natural Resources and Its Ecosystem (No. 5/1990), animals may be listed as "protected," and the law prohibits the catching, killing, transporting, and trade of any protected species.<sup>3</sup> Government Regulation No. 7/1999 lists protected species.<sup>4</sup> *B. miniopinna* is not protected under Government Regulation No. 7/1999 and therefore neither the conservation law nor the regulation is adequate for protecting the species.<sup>5</sup>

#### **b. Regulation of the Minister of Forestry No. 447/Kpts-11/2003 Concerning Administration Directive of Harvest or Capture and Distribution of the Specimens of Wild Plant and Animal Species**

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<sup>3</sup> Law of the Republic of Indonesia, No. 5/1990 Concerning Conservation of the Living Natural Resources and Its Ecosystem, at Art. 21(2), available at:

<http://www.flevin.com/id/lgs0/translations/JICA%20Mirror/english/4.05.1990.eng.qc.html>

<sup>4</sup> Government Regulation of the Republic of Indonesia No. 8/1999 on Wild Flora and Fauna Exploitation, Art. 18. Available at [https://sherloc.unodc.org/cld/uploads/res/document/regulation-8-of-1999\\_html/Regulation\\_8\\_of\\_1999.pdf](https://sherloc.unodc.org/cld/uploads/res/document/regulation-8-of-1999_html/Regulation_8_of_1999.pdf); Regulation of the Minister of Environment and Forestry Number 20/2018. Available at: [http://ksdae.menlhk.go.id/assets/news/peraturan/P.20\\_Jenis\\_TSL\\_.pdf](http://ksdae.menlhk.go.id/assets/news/peraturan/P.20_Jenis_TSL_.pdf)

<sup>5</sup> Regulation of the Minister of Environment and Forestry, Republic of Indonesia, Number P.20/MENLHK/SETJEN/KUM.1/6/2018, Types of Plant and Animal Protected. Available at: <https://leap.unep.org/sites/default/files/national-legislation/Reg%252020%25202018%2520Mi.pdf>.

For species not protected under Regulation No. 7/1999 on Preserving Flora and Fauna Species, Regulation of the Minister of Forestry No. 447/Kpts-11/2003 Concerning Administration Directive of Harvest or Capture and Distribution of the Specimens of Wild Plant and Animal Species requires hunters and traders to register with regional offices of the Indonesian natural resources conservation agency (Natusch & Lyons, 2012 p. 2902). The Regulation further requires that hunters and traders obtain permits for capturing, transporting, and selling wildlife within Indonesia (Natusch & Lyons, 2012 p. 2902) and request a harvest or capture quota (Nijman et al., 2022 p. 4) from the relevant agency.<sup>6</sup> Accordingly, non-protected species like *B. miniopinna* can only be traded once this quota has been issued (Nijman et al., 2022 p. 4), and trade in species without a quota is illegal (Nijman et al., 2022 p. 4; Latinne et al., 2020 p. 10).

Indonesia has not issued an export quota for *B. miniopinna*. Because there is no quota for *B. miniopinna*, it is illegal to capture and trade *B. miniopinna* in Indonesia. Therefore, the sales of *B. miniopinna* identified in Appendix I indicate that the regulation is not being enforced and therefore is not adequately protecting the species.

## **2. Protected Areas**

The range of *B. miniopinna* does not fall within protected areas. Therefore, protected areas in Indonesia are not adequate for protecting the species

## **3. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)**

Indonesia became a party to CITES in 1979. While CITES is a powerful conservation tool for regulating species in trade, none of the species under the genus *Betta* are currently listed under CITES. Therefore, CITES does not adequately protect *B. miniopinna*.

## **4. Lacey Act**

The Lacey Act prohibits any person from importing or selling any wildlife “taken . . . in violation of any foreign law.” 16 U.S.C. § 3372(a)(2)(A). As discussed above, because Indonesia has not established a quota for *B. miniopinna*, trade in the wild-caught specimens is illegal according to Regulation of the Minister of Forestry No. 447/Kpts-11/2003 Concerning Administration Directive of Harvest or Capture and Distribution of the Specimens of Wild Plant and Animal Species. Many online advertisements indicate that the *B. miniopinna* specimens for sale have been caught from the wild, demonstrating that the Lacey Act is not adequately protecting *B. miniopinna* because specimens taken in violation of Indonesian law are available in the United States.

## **VI. Request for Regulations**

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<sup>6</sup> Decree of the Ministry of Forestry 447 of 2003, Tata Usaha Atau Penangkapan Dan Peredaran Tumbuhan Dan Satwa Liar. . Available at: [http://178.128.117.95/admin-absch/assets/media/uploads/doc\\_peraturan/ddc15-kepmen\\_447\\_2003\\_pengambilan\\_atau\\_penangkapan\\_dan\\_peredaran\\_tsl-min.pdf](http://178.128.117.95/admin-absch/assets/media/uploads/doc_peraturan/ddc15-kepmen_447_2003_pengambilan_atau_penangkapan_dan_peredaran_tsl-min.pdf) (last visited Mar. 16, 2022).

Based on the best available information presented above, the Center petitions the Service to emergency list *B. miniopinna* as endangered under the Endangered Species Act. 16 U.S.C. § 1533(b). Listing is warranted, as *B. miniopinna* “is in danger of extinction throughout all or a significant portion of its range.” *Id.* § 1532(6). Once listed as endangered, the ESA bans the import, transport, and sale of species with narrow exemptions. *Id.* § 1538(a)(1). These ESA protections are necessary to help prevent U.S. demand from driving this species’ pending extinction and to assist in the species’ ultimate recovery.

## **VII. Conclusion**

*B. miniopinna* was assessed as Critically Endangered by IUCN in 2019. The species occurs in an area of less than 10 km<sup>2</sup> and, as determined by IUCN, is unquestionably in danger of extinction throughout all or a significant portion of its range due to the clearing of peat swamp forests in the region and likely overcollection for the aquarium trade.

*B. miniopinna* is one of several Critically Endangered and Endangered *Betta* fishes being sold in the aquarium trade in the United States. It is estimated that 2 billion live ornamental fish are traded globally each year, and the United States is the world’s largest consumer of the trade (Monticini, 2010 p. 4). This petition seeks listing for only one *Betta* species, *B. miniopinna*. See 50 C.F.R. § 424.14 (“Only one species may be the subject of a petition”). However, we urge the Service to consider listing all threatened *Betta* species (or the genus) in a single listing decision to provide needed protections for other *Betta* species in trade; to avoid any potential run on other, unprotected *Betta* species once *B. miniopinna* is listed; and to save agency time and resources, as the *Betta* species face similar threats. Regulating the U.S. market by extending Endangered Species Act protections to imperiled *Betta* species is a critical part of conserving wild populations of these ornamental fishes (Monticini, 2010 p. 4).

We are in a global extinction crisis with one million species headed toward extinction and millions more declining (IPBES, 2019). With each species declared extinct, the critical processes it maintains in its ecosystem are lost and the health of the ecosystem is further degraded. To lose *B. miniopinna* would mean losing a key part of Indonesia’s incredibly unique peat swamp forest ecosystems. Because protections in the range countries have not been sufficient to protect the species, consumer countries such as the United States must act to protect the species from extinction. We strongly urge the Service to swiftly list *B. miniopinna* as endangered under the Endangered Species Act.

## VIII. References

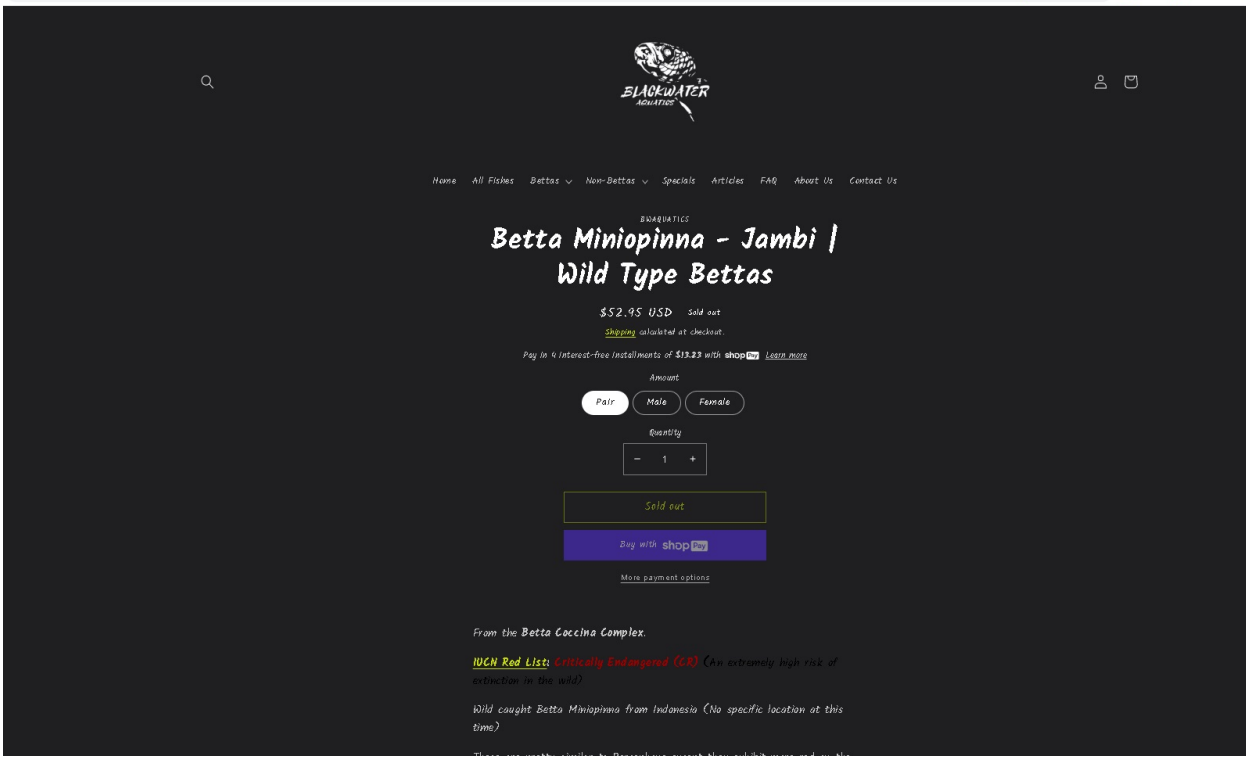
Please note that all references have been submitted on a jump drive and can also be found in this [Google Drive folder](#).

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# Appendix I

Table 1. *B. miniopinna* for sale online.


Website Name (Date Accessed)	Advertisement
Blackwater aquatics (Accessed January 13, 2023)	 <p>The screenshot shows a product page for "Betta Miniopinna - Jambi Wild Type Bettas" on the Blackwater Aquatics website. The page features a dark theme with a search bar and navigation menu at the top. The main heading is "Betta Miniopinna - Jambi Wild Type Bettas" with a price of "\$52.95 USD" and a "Sold out" status. Below the price, there is a "Shipping" note and a "Pay in 4 interest-free installments of \$13.23 with shopify" option. The page also includes a "Quantity" selector set to 1, a "Sold out" button, and a "Buy with shopify" button. At the bottom, there is a note about the fish's origin: "From the Betta Coccina Complex. IUCN Red List: Critically Endangered (CR) (An extremely high risk of extinction in the wild). Wild caught Betta Miniopinna from Indonesia (No specific location at this time)." The browser address bar shows "bwaquatics.com/products/betta-miniopinna-jambi-wild-type-bettas".</p>

Blackwater  
aquatics  
(Accessed  
January 13,  
2023)

bwaquatics.com/products/wild-betta-miniopinna



Home All Fishes Bettas Non-Bettas Specials Articles FAQ About Us Contact Us



**Betta Miniopinna | Wild Type Bettas**

\$49.95 USD Sold out

Shipping calculated at checkout.

Pay in 4 interest-free installments for orders over \$50.00 with shopify [Learn more](#)

Amount

Pair  Male  Female

Quantity

Sold out

[Buy with shopify](#)

More payment options

From the Betta Coccinia Complex.

**IUCN Red List: Critically Endangered (CR)** (An extremely high risk of extinction in the wild)

Wild caught Betta Miniopinna from Indonesia (No specific location at this time)

These are pretty similar to Persephone except they exhibit more red on the ventral fins. Male and females are pictured.

The Wet Spot  
Tropical Fish  
(Accessed  
January 13,  
2023)


wetspottropicalfish.com/product/betta-miniopinna/

Your safety is important to us. Review our Covid-19 policy here.

CONTACT US LOGIN

My Account Fish Services About Us FAQ Store Pickup Location Spotlight

Livestock > ALL LABYRINTH & NANDIDS > Betta miniopinna



**Betta miniopinna**  
"Red Wine Betta"  
\$16.00

Please note that the fish shown in the photo is not the exact fish you will receive and is only a representative of what an adult specimen will look like.

Size:

Sex:

Origin:

*This fish is covered by our [Livestock Guarantee Policy](#)*

Description Additional Information

**Additional information**

**Size** Extra Small (.5" to 1"), Small (1" to 1.5")

**Sex** UNSEXED

**Origin** WILD

7 Fishes  
(Accessed  
January 13,  
2023)

7fishes.com/collections/wild-betta/products/betta-miniopinna-pair

### Betta Miniopinna Pair

~~\$299.00~~ \$199.00 Sold Out

Home / Wild Betta / Betta Miniopinna Pair

Betta Miniopinna Pair  
~~\$299.00~~ \$199.00

← 1 →

or 4 interest free payments of \$49.75 with Zipp

Sold Out

Buy with shop Pay

More payment options

ADD TO WISHLIST(S)

Description Shipping Terms

Size: Approx 3cm+  
WILD CAUGHT

[Image depicts actual stock available](#)

The betta miniopinna is a small bubble nesting species endemic to Indonesia. Being found in waters stained with humic acids, they prefer a low pH blackwater set up. A skittish species, they feel safest with leaf litter and hiding spaces in the tank.

Rewards

Fish Buff  
(Accessed  
January 13,  
2023)

fishbuff.com/products/betta-miniopinna

fishbuff  
by PT Agrobisnis Aquatic

Home Shop Wholesale Become an Affiliate Aquarium Supplies Keeping Guide

Search User Account USD

### Wild Betta Miniopinna

\$56.76 USD

Shipping calculated at checkout.  
Please read our Terms & Conditions before purchasing. By purchasing we indicated that you agree and accept the applicable terms and conditions.

Quantity: - 1 +

Add to cart

ADD TO WISHLIST

Assorted adult pair Betta miniopinna. Fish pictures are taken as accurate as possible. Pictures shown are the exact same fish to be sent.

Price listed include shipping cost from Indonesia through transhipper. Buyer must pay himself to their local transhipper agent for import fee and domestic shipping costs (if necessary).

Live Arrival Guarantee

Returns & Exchanges

Aqua Bid  
(Accessed  
January 17,  
2023)

aquabid.com/cgi-bin/auction/auction.cgi?fwbetas&1673973006

patagonia Let Them Be Kids

Home | Register | Sell Item | Closed Auctions | Items Wanted | My Account | Feedback

Search All Categories Search

aries > Wild Type Betta > Auction # 1673973006

Current Server Time: Tue Jan 17 2023 10:30:05 AM CDT

ADD TO WATCHLIST ASK THE SELLER A QUESTION VIEW THE SELLER'S OTHER AUCTIONS

**wild caught pair betta minipina**  
Buy It Now Price: \$65.00 - Buy Now

Buy It Now before a bid is placed

ADVERTISEMENT

**Betterment**  
Diversified investing built to navigate stormy markets  
GET STARTED

Time Left: 40 minutes 17 seconds  
Started: Tue Jan 3 2023 - 10:30:06 AM CDT  
Ends: Tue Jan 17 2023 - 10:30:06 AM CDT

Currently Starting Price: \$65.00  
# of Bids: 0 (Bid History)

Seller: Cupang\_king (??)  
Location: Yogyakarta 56255 Indonesia

(View All Seller's Auctions or This Category)  
(View Seller's Feedback)  
(Ask Seller a Question)  
(Report this Auction)

High Bidder: --  
Page Views: 68

Payment: See Item Description, PayPal  
AquaBid.com does not recommend payment via Western Union, Moneygram or other instant cash transfer services (non-bank, point-to-point cash transfers).  
Effective Oct. 17, 2019: sellers are no longer allowed to request PayPal.com payments via the friend and family option.

Shipping: Will Ship Internationally See Item Description

Seller assumes all responsibility for listing this item. You should contact the seller to resolve any questions before bidding. Currency is U.S. dollars (US\$).

Tweet Print 50K+

Description

Aqua Bid  
(Accessed  
January 17,  
2023)

aquabid.com/cgi-bin/auction/auction.cgi?fwbetas&1673973006

patagonia Let Them Be Kids

Home | Register | Sell Item | Closed Auctions | Items Wanted | My Account | Feedback

Search All Categories Search

aries > Wild Type Betta > Auction # 1673973006

Current Server Time: Tue Jan 17 2023 10:30:05 AM CDT

ADD TO WATCHLIST ASK THE SELLER A QUESTION VIEW THE SELLER'S OTHER AUCTIONS

**wild caught pair betta minipina**  
Buy It Now Price: \$65.00 - Buy Now

Buy It Now before a bid is placed

ADVERTISEMENT

**Betterment**  
Invest with a portfolio built by the pros  
START INVESTING

Time Left: 35 minutes 34 seconds  
Started: Tue Jan 3 2023 - 10:30:06 AM CDT  
Ends: Tue Jan 17 2023 - 10:30:06 AM CDT

Currently Starting Price: \$65.00  
# of Bids: 0 (Bid History)

Seller: Cupang\_king (??)  
Location: Yogyakarta 56255 Indonesia

(View All Seller's Auctions or This Category)  
(View Seller's Feedback)  
(Ask Seller a Question)  
(Report this Auction)

High Bidder: --  
Page Views: 69

Payment: See Item Description, PayPal  
AquaBid.com does not recommend payment via Western Union, Moneygram or other instant cash transfer services (non-bank, point-to-point cash transfers).  
Effective Oct. 17, 2019: sellers are no longer allowed to request PayPal.com payments via the friend and family option.

Shipping: Will Ship Internationally See Item Description

Seller assumes all responsibility for listing this item. You should contact the seller to resolve any questions before bidding. Currency is U.S. dollars (US\$).

Tweet Print 50K+

Description

beli 5 pasang sama jenis atau campuran 1 pasang bonus: sehat, agresif, liar secara alami dan makan dengan lahap. pembayaran melalui paypal, dan informasi lebih lengkap silahkan hubungi kami langsung email cupangking@gmail.com