| Common Names: | Aulo | pyge huegeli | | | | | Region: | : 1 | | | | |
|--|--|---|----------------------|--------------------------|----------------------|--------------|----------|------------|------------------|------------------------|-----------------|----------|
| Defination Barbelgudgeon English | | | | | | | | | | | | |
| Order: Cyprinformes Notes on taxonomy: General Information | | | | | | | | | | Franksk | | |
| Terestrial Ter | | | | | | | Dalmati | | 0 0 | English | | |
| General Information | Order: | Cypriniformes | | | | | Family: | (| Cyprinidae | | | |
| Cocyampto | Notes o | n taxonomy: | | | | | | | | | | |
| Habitat and Ecology Information: Florament or the susterarians of Contain and Bosinia Harzagovina where it is known from the Zmanja, Kixa and Celtina rivers. It can also seablish itself in lakes and has been infroduced to Lakes Billind and Busko Bilato. It has also been recorded in some small rivers in Luxnajsko Polje. The presence in Zmanja has not been confirmed recently (Povz. M. person-corm.). Conservation Measures: | Gener | al Information | | | | | | | | | | |
| Endemic to the karst area of Creatia and Bosnia-Herzegovina where it is known from the Zmanja, Kina and Cetina rivers. It can also establish itself in lakes and has been introduced to Lakes Bildin and Buskos Blato. It has also been recorded in some small rivers in Livanjako Polje. The presence in Zmanja has not been confirmed recently (Povz, M. pers. comm.) The presence in Zmanja has not been confirmed recently (Povz, M. pers. comm.) Threats: Dams, degradation of the habitat, water pollution and water extraction. Species population information: Little data but is locally abundant. Native - Presence Presence Presence Presence Presence Country Distribution Confirmed Possible Bosnia and Herzegovina Dipper Level Habitat Preferences 1 | Biome | | Terrestr | ial | | ✓ Fre | eshwate | r | ☐ Ma | rine | | |
| is known from the Zmanija, Krida and Cetina rivers. It can also Busko Bate. It has also been recorded in some small rivers in Layer Bate. It has also been recorded in some small rivers in Layer Bate. It has also been recorded in some small rivers in Layer Bate. It has also been recorded in some small rivers in Layer Bate. It has also been recorded in some small rivers in Layer Bate. It has also been recorded in some small rivers. It has also been recorded in some small rivers. It has also been recorded in some small rivers. It has also been confirmed recently (Pozz, M. pers. comm.). Threat: Dams, degradation of the habitat, water pollution and water extraction. | Geogra | phic Range of species: | | | | | Habitat | and E | cology Inform | ation: | | |
| Pers. comm.). Conservation Measures: None Native - Presence Confirmed Describing the data but is locally abundant. | is known establish Busko E Livanjsk | n from the Zrmanja, Krka and Cetina ri h itself in lakes and has been introduce Bato. It has also been recorded in som to Polje. | ivers. It ded to Lai | an al kes B rivers | so lidin an in | d | karst ca | ves in | winter. Spawni | | | of |
| Conservation Measures: Dams, degradation of the habitat, water pollution and water extraction. Species population information: | | | neu rece | illuy (| POVZ, I | /1. | | | | | | |
| Species population information: Little data but is locally abundant. Native | • | , | | | | | Threats | : : | | | | |
| Distribution Presence Prese | None | | | | | | Dams, o | degrad | ation of the hal | oitat, water pollution | and water extra | action. |
| Presence Presence Confirmed Possible Poss | - | | | | | | | | | | | |
| Presence Presence Confirmed Possible | | Na | ative - | Na | tive - | | | | | | | |
| Sonia and Herzegovina | | Pre | sence | Pre | sence | Extino | ct Rein | itroduc | ed Introduced | l Vagrant | | |
| Digital Dig | Count | try Distribution Cor | nfirmed | Po | ssible | | | | | | | |
| Lower Level Habitat Preferences Score | Bosnia | • | | | | | | | | | | |
| 5.1 Wetlands (inland) - Permanent Rivers/Streams/Creeks 1 (includes waterfalls) | Croatia | | ✓ | | | | | | ✓ | | | |
| Past Present Future Code Conservation measures In place Needed | 5.6 W 5.18 W | ivers/Streams/Creeks /etlands (inland) - Seasonal/Intermitte over 8ha) /etlands (inland) - Karst and Other Sul | nt Fresh | water | Lakes | | | | | | | |
| Habitat Loss/Degradation (human induced) I Habitat Loss/Degradation (human induced) I V V I 1.2 Legislation I 1.3.6 Groundwater extraction V V V 1.2.1 Development I Infrastructure development V V V 1.2.1.1 International level Pollution (affecting habitat and/or species) V V I 1.2.2 Implementation Radiculture Pollution I 1.2.2 International level I 1.2.3 International level I 1.3 Agriculture I 2 V V 1.2.2 National level I 3.3 Commercial/Industrial V V V 1.2.2 National level I 2 Communication and Education V V V 1.2.2 National level I 2 Communication and Education V V V 1.2.2 National level I 2 Communication and Education V V V 1.2.3 Research actions V V V 1.3 Research actions V V V 1.4 Abitat status I 3.5 Threats I 3.8 Conservation measures I 3.9 Trends/Monitoring I 4 Habitat and site-based actions V M Habitat And site | Major threats | | | | | | Cons | erva | tion Measu | res | | |
| 1.3 Extraction V V 1.2 Legislation V V 1.2.1 Development V V 1.2.1.1 International level V V V 1.2.1.1 International level V V V 1.2.1.2 National level V V V 1.2.2.2 Implementation V <th>Code</th> <th>Description of threat</th> <th>F</th> <th>Past F</th> <th>Present</th> <th>Future</th> <th>Code</th> <th>Cons</th> <th>ervation meas</th> <th>ures</th> <th>In place</th> <th>Needed</th> | Code | Description of threat | F | Past F | Present | Future | Code | Cons | ervation meas | ures | In place | Needed |
| 1.3 Extraction V V 1.2 Legislation V V 1.2.1 Development V V 1.2.1 Development V V V 1.2.1.1 International level V | 1 | Habitat Loss/Degradation (human inc | duced) | ~ | ✓ | ✓ | 1 | Policy | /-based actions | S | | ~ |
| 1.3.6 Groundwater extraction 1.4 Infrastructure development 1.4.6 Dams 2. V. V. 1.2.1.1 International level 2. V. V. 1.2.1.2 National level 3. National level 4. V. V. V. 1.2.2.1 International level 4. National level 5. National level 6.3 Water pollution 6.3.1 Agriculture 7. V. V. V. V. 1.2.2.2 International level 8. V. V. V. V. V. 1.2.2.2 National level 9. V. | 1.3 | Extraction | | | | | 1.2 | Legis | lation | | | |
| 1.4 Infrastructure development 1.4.6 Dams Pollution (affecting habitat and/or species) Pollution (affecting habitat and Education) Pollution (affecting habitation) Pollution (affecting habitation | 1.3.6 | Groundwater extraction | | ~ | ✓ | ✓ | 1.2.1 | Deve | lopment | | | |
| 6. Pollution (affecting habitat and/or species) 7. Water pollution 9. V. V. 1.2.2 Implementation 1.2.2.1 International level 9. V. V. 1.2.2.2 National level 9. V. V. V. 1.2.2.2 National level 9. V. | 1.4 | Infrastructure development | | ✓ | ✓ | ✓ | 1.2.1.1 | Intern | ational level | | | |
| 6.3 Water pollution V V 1.2.2.1 International level V V 1.3.2.2 National level V V V 1.2.2.2 National level V V V V V V V V V | 1.4.6 | Dams | | ✓ | ✓ | ✓ | 1.2.1.2 | Natio | nal level | | | ✓ |
| 6.3.1 Agriculture 6.3.2 Domestic 7 | 6 | Pollution (affecting habitat and/or spe | ecies) | | | | 1.2.2 | Imple | mentation | | | ✓ |
| 6.3.2 Domestic ✓ ✓ ✓ 2.2 Communication and Education ✓ ✓ ✓ 2.2 Awareness ☐ ✓ ✓ ✓ 3.3 Research actions ✓ ✓ ✓ 3.3. Biology and Ecology 7.1 Drought ✓ ✓ 3.3 Biology and Ecology 3.4 Habitat status 3.5 Threats 3.8 Conservation measures 3.9 Trends/Monitoring 4 Habitat and site-based actions ✓ ✓ 4.4.1 Identification of new protected areas 4.4.2 Establishment 4.4.3 Management ✓ ✓ 4.4.3 Management ✓ ✓ 5.4 Recovery management | 6.3 | | | | | | | | | | | |
| 6.3.3 Commercial/Industrial ✓ ✓ ✓ ✓ 3.2 Awareness ✓ ✓ ✓ 3.3 Research actions ✓ ✓ 3.2 Population numbers and range ✓ ✓ 3.3 Biology and Ecology 7.1 Drought ✓ ✓ 3.3 Biology and Ecology 3.4 Habitat status 3.5 Threats 3.8 Conservation measures 3.9 Trends/Monitoring 4 Habitat and site-based actions 4.4 Protected areas 4.4.1 Identification of new protected areas 4.4.2 Establishment 4.4.3 Management ✓ ✓ 5 Species-based actions ✓ ✓ 5 Species-based actions ✓ ✓ 5 Recovery management | | • | | | | | | | | | | |
| 6.3.8 Sewage 7 Natural disasters 9 3.2 Population numbers and range 7.1 Drought 9 3.3 Biology and Ecology 3.4 Habitat status 3.5 Threats 3.8 Conservation measures 3.9 Trends/Monitoring 4 Habitat and site-based actions 4.4 Protected areas 4.4.1 Identification of new protected areas 4.4.2 Establishment 4.4.3 Management 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | | | | | | | | | | Education | | |
| 7 Natural disasters | | | | | | | | | | | | |
| 7.1 Drought | | | | | | | | | | | | |
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| 3.8 Conservation measures 3.9 Trends/Monitoring 4 Habitat and site-based actions 4.4 Protected areas 4.4.1 Identification of new protected areas 4.4.2 Establishment 4.4.3 Management 5 Species-based actions 5 Species-based actions 5 Recovery management | | | | | | | | | | | | |
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| 5 Species-based actions 5.4 Recovery management 5.4 Recovery management | | | | | | | | | | | | |
| 5.4 Recovery management | | | | | | | | | - | ns | | |
| | | | | | | | 5.4 | | | | | |
| | Utilisa | tion of Species | | | | | | | | | | |

Purpose/Type of Use

Subsistence
National International Other purpose:
not used at all

Primary forms removed from the wild

100% >75% 51-75% 26-50% <25% Other forms removed from the wild:

Source of specimens in commercial trade 100% >75% 51-75% 26-50% <25% Other source of specimens: Trend in wild offtake/harvest in relation to total wild population numbers over last five years: Trend in offtake/harvest produced through domestication/cultivation over last five years: CITES: **Red Listing** Possibly Extinct Red List Assessment: Endangered (EN) Red List Criteria: B1ab(iii,v) Rationale for the Red List Assessment: This species has an estimated EOO < 5000 km2 (Zrmanja, Krka and Cetina rivers), is restricted to two separate locations (based on the potential threat from invasive alien species and pollution), and has undergone an overall decline in habitat quality and the number of mature individuals. It is assessed as Endangered B1ab(iii,v). Date of Assessment: 31/10/2004 **Current Population Trend:** Decreasing Assessor(s): A.J. Crivelli

Bibliography

Notes on Red listing:

Evaluator:

Mrakovcic, M., Kottelat, M.

Bless, R. & Riehl, R., 2002, Biology and egg morphology of the Dalmatian barbelgudgeon Aulopyge huegeli, an endangered endemic species in Croatia., Environmental Biology of Fish, , , 63, 451-456, ,

Mrakovcic, M. & Misetic, S., 1990, Status, distribution and conservation of the salmonid, Salmothymus obtusirostris (Heckel) and the cyprinid, Aulopyge hugeli (Heckel) in Yugoslavia., Journal of Fish Biology, , , 37 (Supplement A), 241-242, ,

Soric, V.M. & P.M. Banarescu, 1999, Aulopyge huegeli Heckel, 1841, , The Freshwater Fishes of Europe, P.M. Banarescu, 5/l, 369-381, Aula-Verlag, Wiesbaden, Germany