

Intro

Name : Michael Köck

Age: 45

Homeland: Austria

Education: Study of Zoology

Profession: Curator in the
„Haus des Meeres“

Aquaristic interests: Goodeids, Poeciliids

Goodeids since: 1998

Founder of the Goodeid Working Group



Topic of this speech:

Raising the veil: Goodeid captive maintenance and conservation at the Haus des Meeres and Europe in general

Focus of the speech

Need of Goodeid conservation

Goodeids in Europe

Goodeid conservation in Europe

Haus des Meeres – conservation and maintenance

Is there a need for an international working group to conserve Goodeids?



The situation of Goodeids in the wild



That goes along with:

- **pollution** by industry (wastewater) and people (garbage)
- an **increased consumption of water** for agriculture and fast-growing cities
- **contamination** with fertilizers and pesticides
- **deforestation, habitat destruction**,...
- **exotic fish** (ornamental, food)

Development of threat



Hieronimus, 1995

Allodontichthys polylepis: not very rare

Allotoca dugesii: common

Neotoca bilineata: stock safe on long term

Xenoophorus captivus: stock safe on long term

At least 22 species „not very rare or common“

Lyons, 2011

Allodontichthys polylepis: EW? No records since 2000

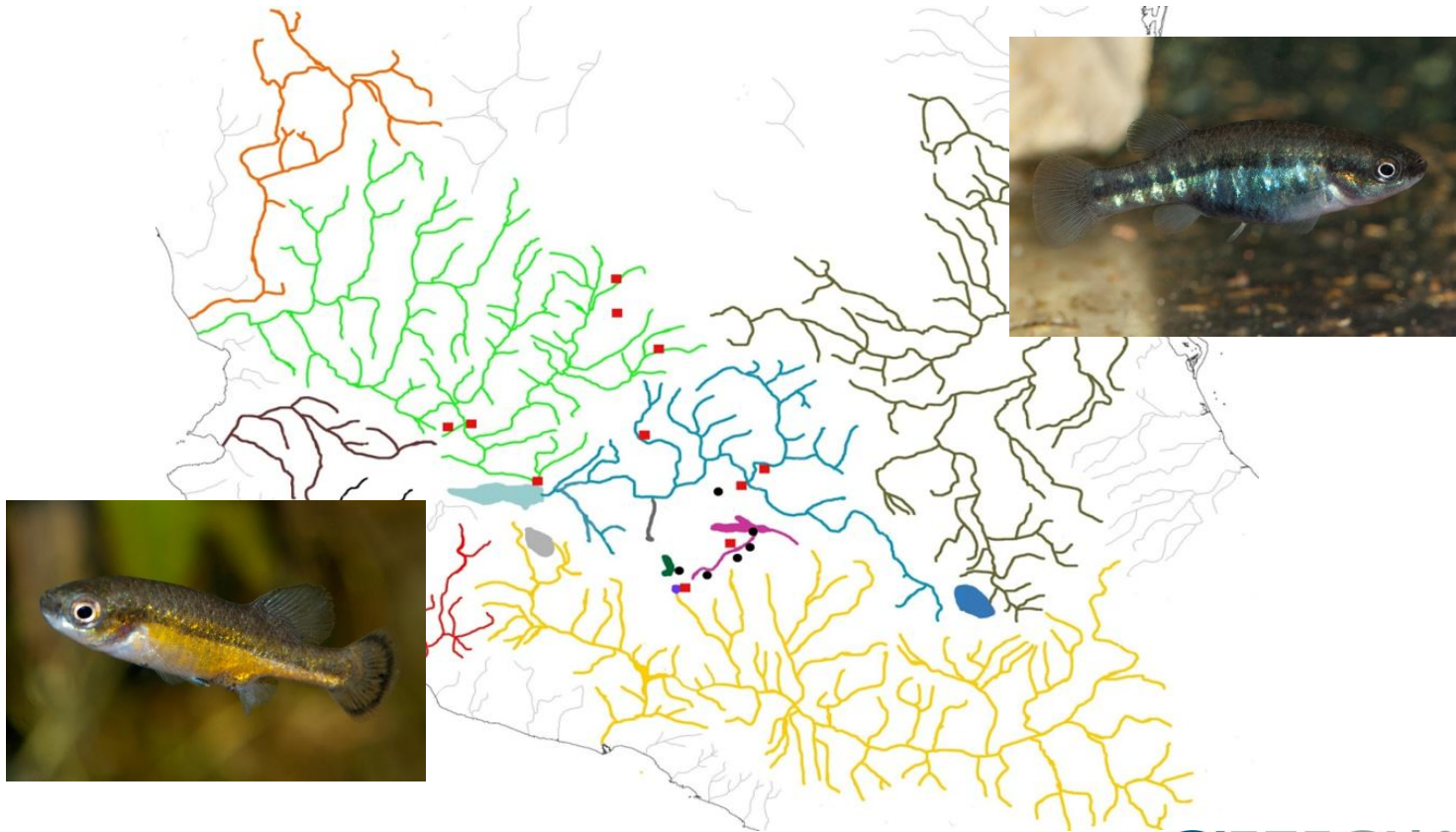
Allotoca dugesii: Endangered, declining

Neotoca bilineata: Critically endangered, declining

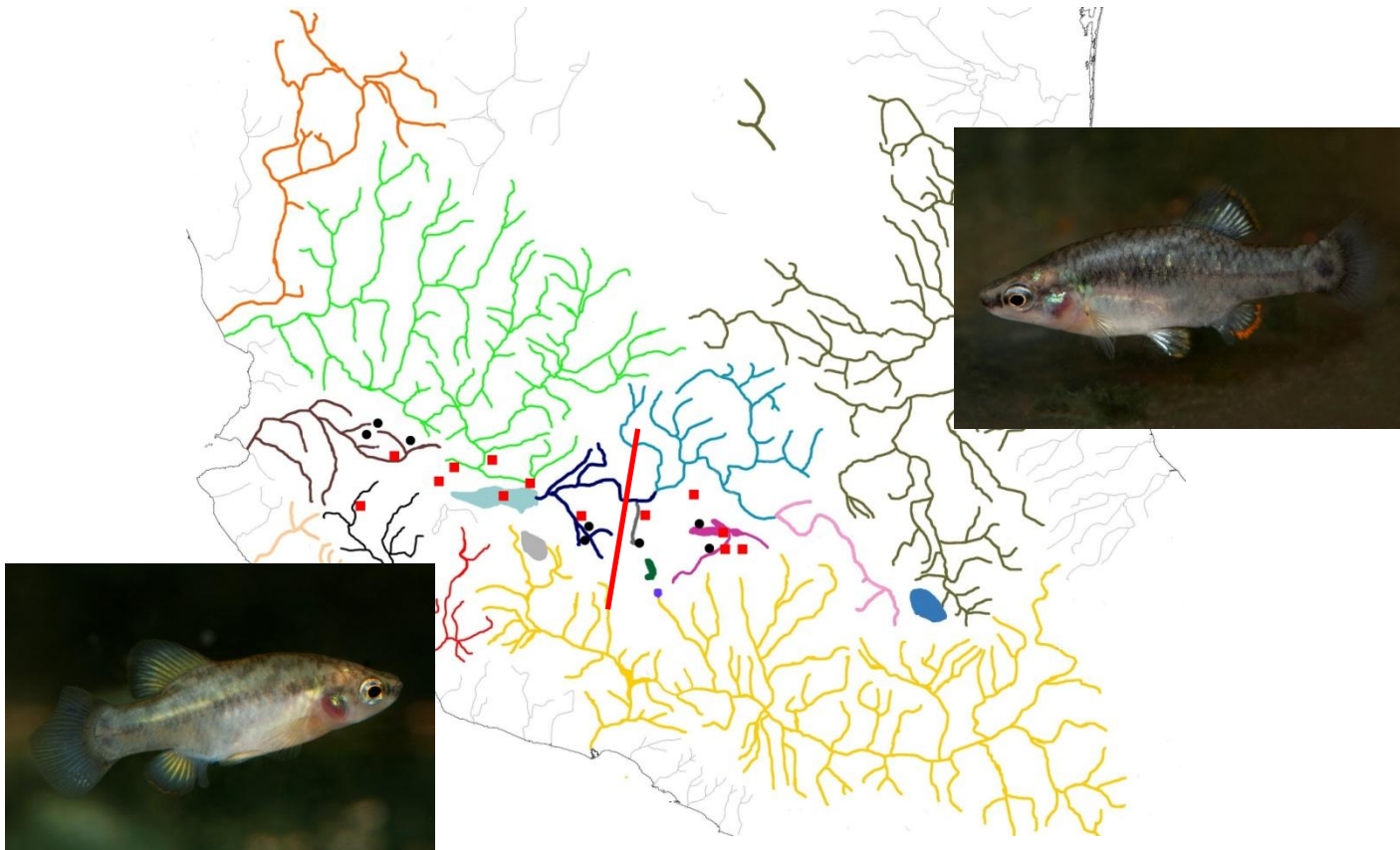
Xenoophorus captivus: Critically endangered, declining

28 species at least endangered

Allotoca dugesii



Zoogoneticus



In many species, we have...

- (very) few habitats
- declining numbers (up to 70% over the last 10 – 25 years)
- many threats by different reasons
- no existing conservation program

A COEN BROTHERS FILM

NO COUNTRY FOR OLD MEN



Small Fish

JAVIER BARDEM IS ANTON CHIGURH

Goodeids in Europe



Pioneers before WW II



Girardinichthys viviparus (1926, Lafrentz)
Neotoca bilineata (1935)
Goodea atripinnis (1937, Mayer)
maybe *Skiffia multipunctata* (1939, Waitze)

1970's – 1990's



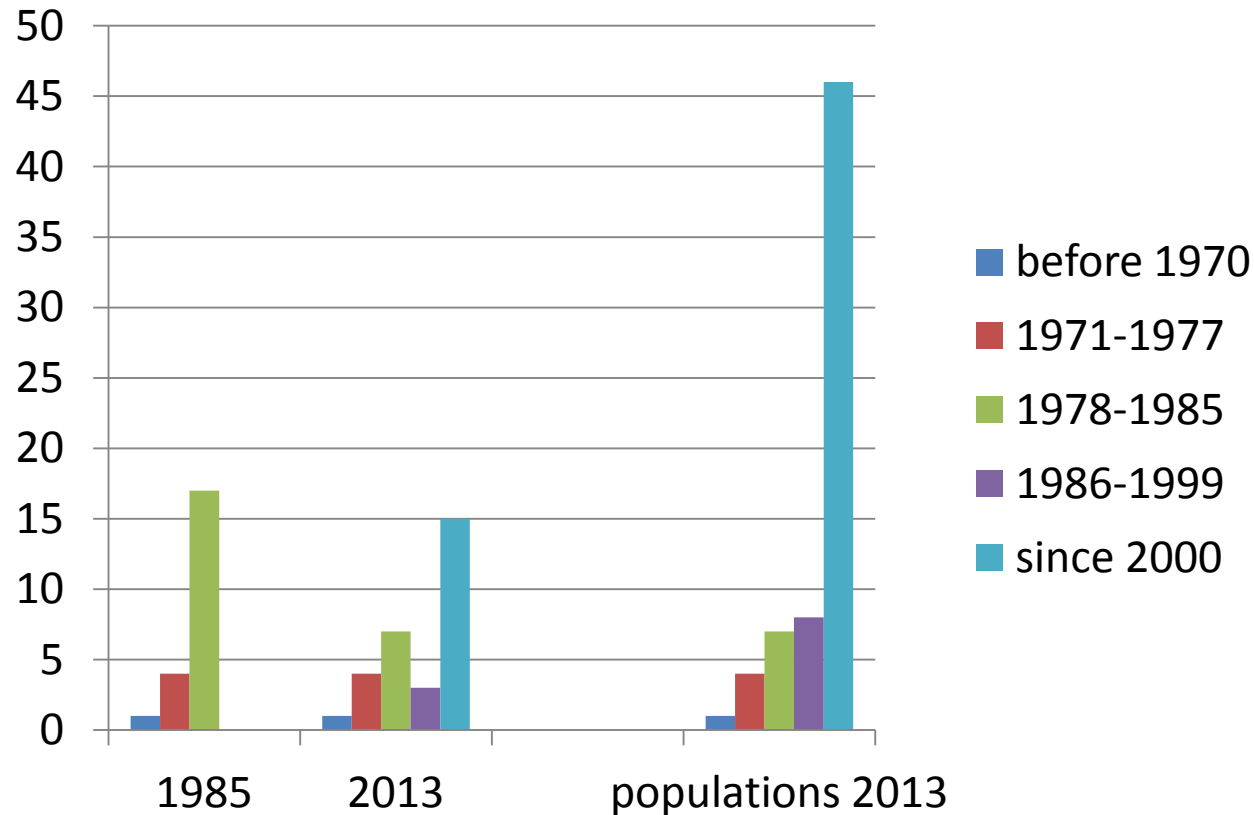
Imports from the USA (Dibble)
from the 1970's to 1980's
Sampling trips by Radda, Daul,
Georg, Hinz et al by the end of
1970's and during 1980's

This millenium



Scandinavians (Grum-Schwensen, Quist)
Germans (Teichmann, Mück), French
(Grioche), Dutch (de Jong, de Moree)
British (Lambert, Mc Allister), Czechs and
Slovakians (Murko, Slaboch)

What happened to the fish?



Hard facts:

- From 2000, Europeans had to sample about 50% of the species again after losing them in the 15 years before!
- Only 1/3 of the populations is older than about 15 years, 1/5 older than 30
- About 30 populations collected in the 1980's and 1990's disappeared within 15 years.

Goodeid conservation in Europe...



Pioneer in the 1990's

Ivan Dibble



Fish Ark
Mexico
Project

Fish Ark

- [Ex-situ conservation](#) in Mexico by funding by members of Livebearer clubs around the world.
- [Aqualab](#) in Morelia

Until him: no efforts in conservation (?)

The reasons

- Little demand on species (fin eaters)
- Knowledge about the threats has been weak
- Threat for many species had not been so alarming

e.g. Magdalena-basin

Brian Kabbes



Dec. 1998:

- A channel south of Magdalena:
most beautiful *Allotoca maculata*
- Magdalena-lake: plenty of them

Ex-situ conservation in Europe

- Breeding groups in Livebearer clubs (e.g. DGLZ, by 1999/2000)
- Goodeid Study Group (Ellenberg), 2004 – 2006/7
- GWG since 2009

GWG provides

- Coordinated networking
- Database
- Fish Exchanges
- Conventions

The primary goal

The primary goal of the Goodeid Working Group is a **collaboration** between hobbyists, universities, public aquaria, zoos, museums and conservation projects in order to **maintain aquarium populations** of Goodeids while assisting in preservation of remaining natural habitats.

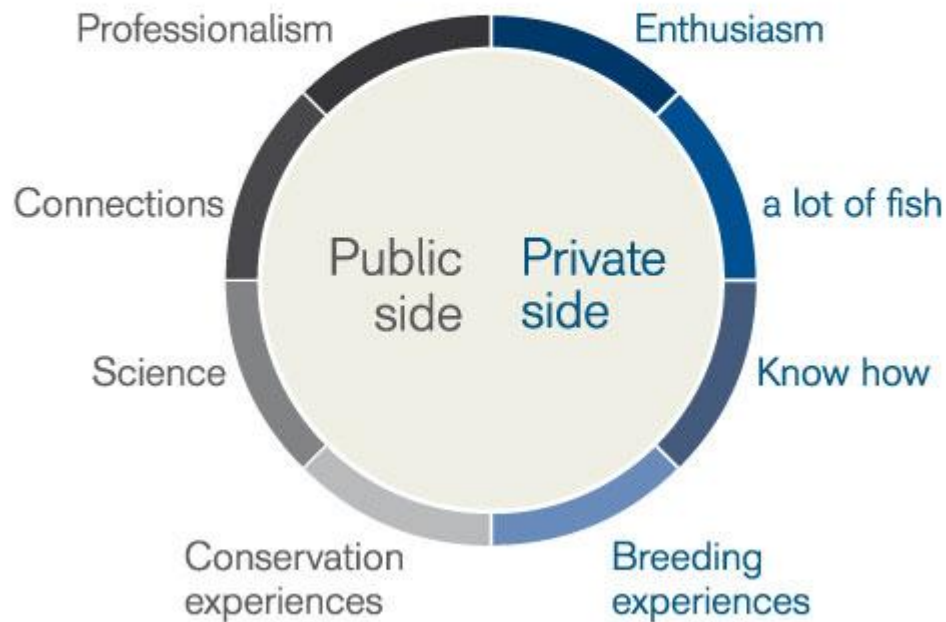
Head and tail of the fish

Public side Private side



Zoos Hobbyists
Aquaria
Museum
Universities

What both sides put into balance



Zoos :

- **British Zoos** since the late 1990's
(Chester, London, Bristol)
- **Vienna Zoo** (2004 – 2007)
- **Haus des Meeres** since 2009

Others follow: Tropiquaria,
Zaragoza, Stuttgart, aso.



conservation
maintenance



Why Goodeids? :

- Little space
- Perfect climatic conditions
- The „must“ of having a conservation story
- and me 😊

Conservation support of the HdM

- **Financial** (support of the meetings, tanks, fishfood, energy, employee)
- **Spatial** (rooms for fish, display)
- **Medial** (public relations)
- **Temporal** (time with „my“ fish)

Why this support for little grey fish?

- Need of a conservation story
- Benefit from media response
- Sobriety among other Zoos

Our flagship:
Allodontichthys polylepis



The perfect story:

- HdM related story (Radda)
- Brand „Rarest fish in the world“
- Dramatic way to Vienna – at the point of no return
- Happy end: Breeding success

Media response

- 2 Austrian television-reports
- 7 different radio stations reported
- 11 newspapers and magazines
- Multiple internet presences
- Neighboring countries impacted

Maintenance



Start in 2009

- Different *Characodon* – populations
- *Chapalichthys pardalis*
- *Ataeniobius toweri*

Situation in 2010

- The first „own“ fishroom
- Increasing numbers of populations up to 25
- About 30 tanks

Changes 2011

- Doubling of populations up to nearly 50
- 50 tanks
- Employee

Status 2012

- Second fishroom
- More than 70 tanks
- More than 70 populations
- GWG-Convention in the Haus des Meeres

Our main efforts:

- Breeding and distributing of fish
- Information about threat
- Connecting Zoo and Hobbyists
- Promoting and supporting the
GWG

Conservation facility

- 70 (mainly) 160 liter-tanks
without gravel for keeping
- Filtration: Hamburg Mattenfilter
- (mainly) conspecific tanks
- 60 liter-tanks for separating
females and offspring

Room No. 1: The cistern,...



made for hobbits,...



and room No. 2



Keeping

- 80% water change every week
- 2 times per day feeding
- Temperature: winter around 18%, summer up to 24%
- Separating pregnant females if necessary

Some species from the conservation-facility



Allotoca meeki

since 2011



Allotoca catarinae

since 2012



Allotoca goslinei

since 2009



Allotoca zacapuensis

since 2012



Allodontichthys polylepis

since 2011/12



Hubbsina turneri

since 2012



Neophorus regalis

since 2012



Zoogoneticus purhepechus „El Fuerte, 1983“

since 2009



Allotoca dugesii „Rio Santiago, 2010“

since 2010



Thank you very much

