



PYGMY HIPPOPOTAMUS in captivity

International studbook as animal inventory



Studbook

- List of all pygmy hippos ever held in captivity
- Basis for genetic and demographic analysis
- Kept by Basel Zoo

Current captive population

Studbook 2015:

377 animals in **140** collections

Two professionally managed breeding programmes in US and Europe

Various holders on other continents

European Breeding Programme

EPP: managed by Basel zoo

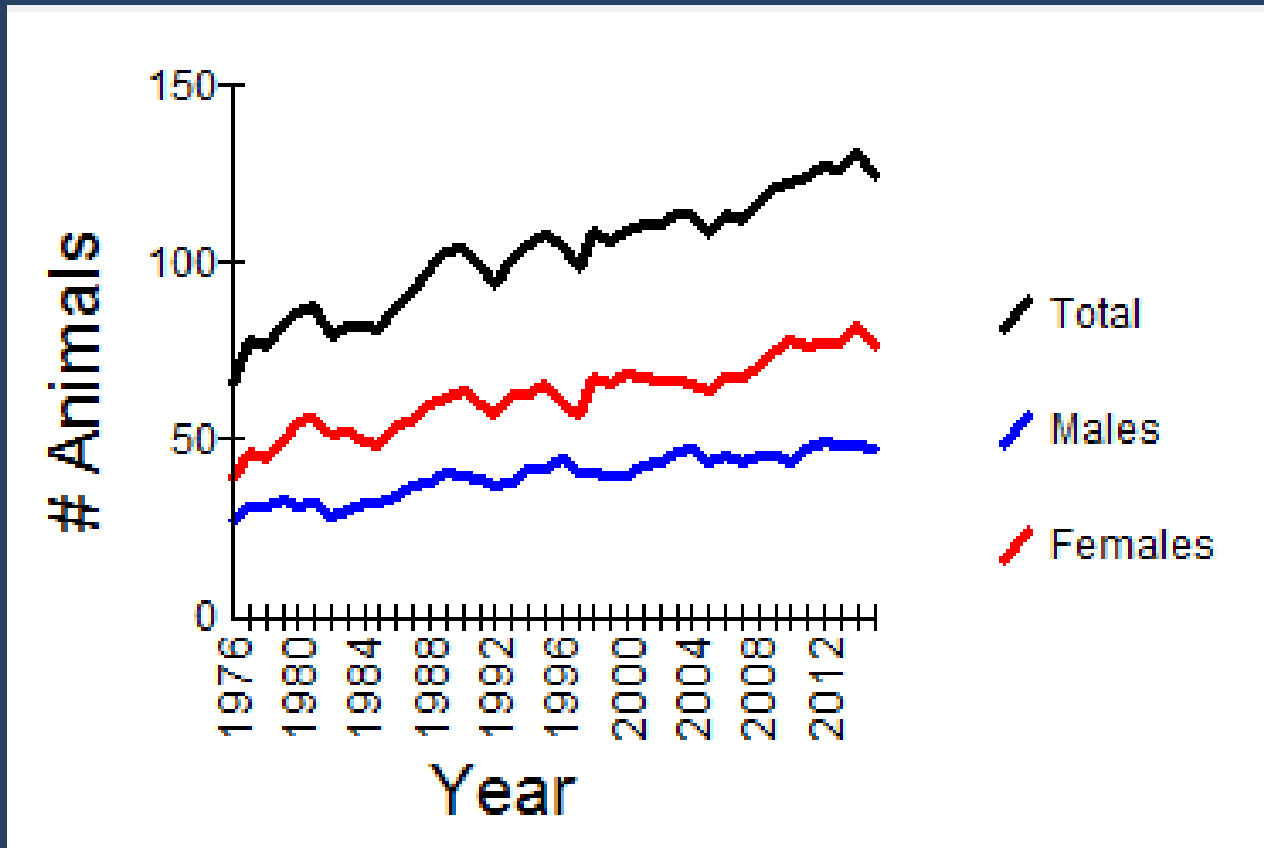
127 animals in **57** zoos

American Breeding Programme

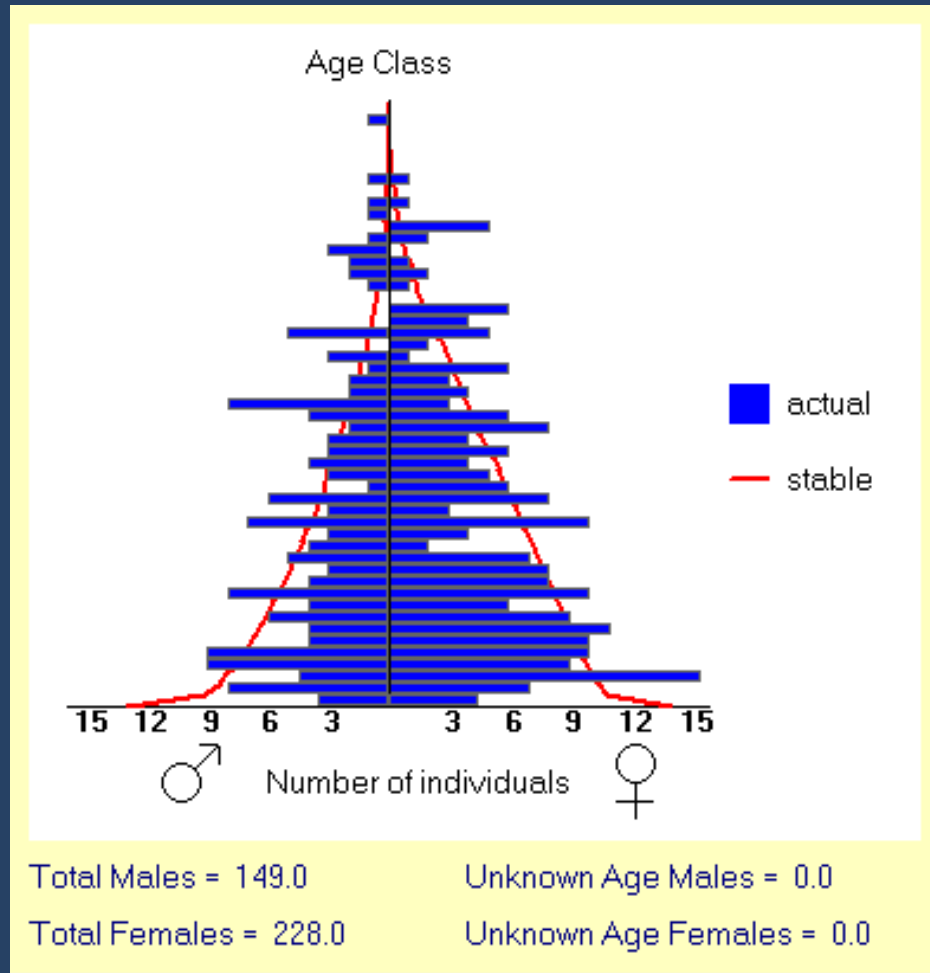
SSP: managed by Omaha Zoo

90 animals in **17** institutions

Demographic Analysis of world population



Demographic Analysis: Age pyramid



Genetic summary

	Current	Potential
Founders	60	0 additional
Living Descendants	352.50	—
Percent Known	94.0	—
Gene Diversity	0.9695	0.9877
Gene Value	0.9666	—
Founder Genome Equivalent	16.38	40.57
Founder Genomes Surviving	40.31	40.57
Mean Inbreeding (F)	0.0600	—



Current N = 377

% Known = 94.0

GD = 0.9695

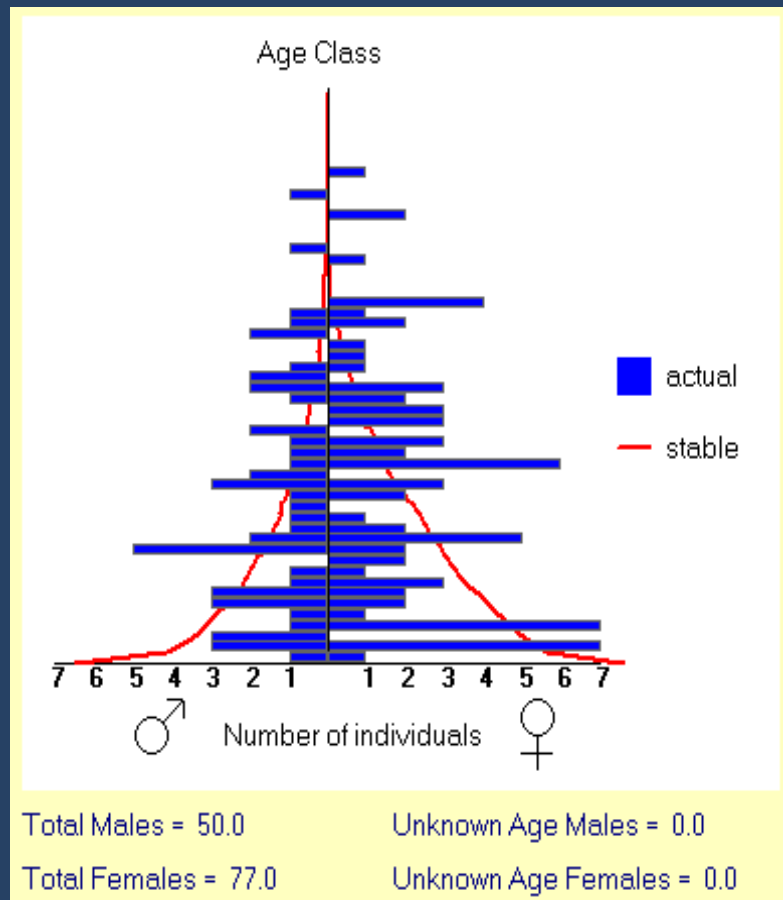
MK = 0.0305

GV = 0.9666

fge = 16.38

Pairs = 21

European Ex situ Programme EEP



Genetic Overview

Founders: 37

Gene Diversity: 0.9552

Mean Inbreeding: 0,407

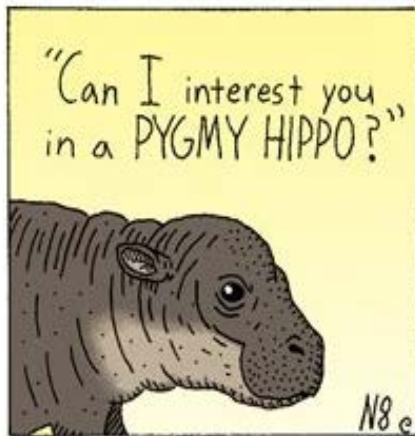


EEP: new holders urgently needed

Very difficult to find new holders among EAZA members
(various transfers of females out of the EEP)

-> **New holders urgently required** to move the young and reach the target population size.

New holders needed: please spread the word





Pygmy hippo conservation projects

Conservation projects in all range states:

Liberia: Flora & Fauna International in Sapo NP and Wonegizi

Guinea: Sylvatrop

Ivory Coast: Centre Suisse de Recherche Scientifique in Taï NP

Sierra Leone: RSPB in and around Gola NP
ZSL around Loma mountains

Conservation in Ivory Coast



Awareness raising: **Hippo day**

- parade in Tai Town
- Pygmy hippo film projection
- Drawing competition
- Sport activities

- **Research**

Study on density, distribution and ecology
collection of fecal samples





Conservation: Pygmy hippo project Gola Rainforest National Park (GRNP) Sierra Leone

Community Youth Volunteer Conservation Programme to teach
monitoring techniques

- > distribution of species
- > surveys of key habitats
- > collect dung samples for conservation genetics
- > awareness raising in schools and communities,

See previous presentation by Annika Hillers



Conservation: Pygmy hippo project in Sierra Leone around Loma mountains: ZSL

- see separate presentation by Chris Ransom

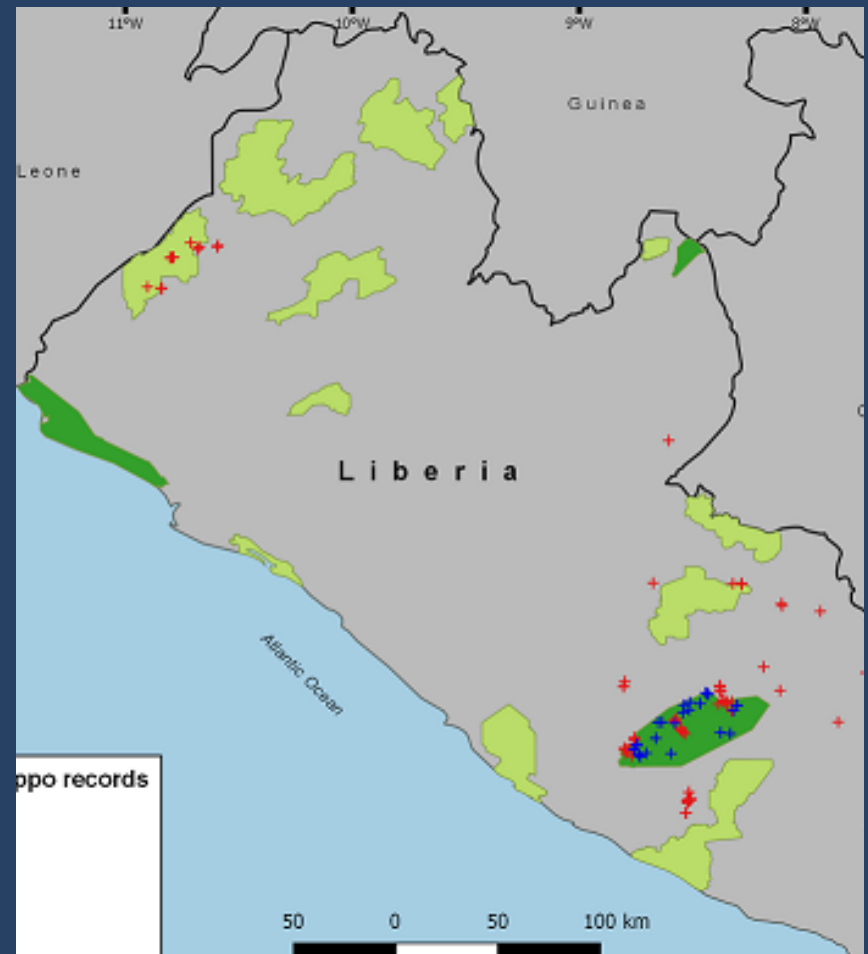
Conservation Liberia: Biomonitoring in Sapo National Park by FFI (Flora & Fauna International)

Biomonitoring programme

Continued presence of pygmy hippos but at low numbers

Serious problems with mining, hunting, security issues

Development of park law enforcement plan is urgent to secure habitat for species



Conservation in Guinea: Sylvatrop





Conclusion and Problems for the future

Conclusion

Population has been growing

growth rate could be maintained if enough new holders can be found

Problems

- Maintain growth rate
- Find new holders
- Maintain fertility and fecundity
- Skewed sex ratio
- High infant mortality, especially in males



ZOO BASEL