

AQUARIUM WORLD

3. WEEK: AQUARIUM WORLD: BIODIVERSITY

WEEKLY TOPICS (CONTENT)

- 1. Week Why there is an interest on aquarium? Introduction and motivation
- 2. Week Aquarium world: To be a fish
- 3. Week Aquarium world: Biodiversity
- 4. Week Popular aquarium invertebrates
- 5. Week Popular aquarium fishes: Freshwater and brackish-water species
- 6. Week Popular aquarium fish: Marine species
- 7. Week Public aquariums: Aquarium world
- 8. Week Personal hobby aquarium: Aquarium world.
- 9. Week Species selection
- 10. Week World aquarium sector
- 11. Week Cleaning an aquarium, main principles
- 12. Week Education: Aquarium world
- 13. Week General evaluation and discussion: About species exhibited in public aquariums
- 14. Week How to keep an aquarium fish healthy

Biodiversity terminology is described as the variations: genetics of organisms and populations, species, communities and ecosystems.

Biodiversity affects the capacity of living systems to respond to changes in the environment (like nutrient cycling, clean water) (1,2).

Biodiversity is important for the future sustainability of marine natural resources that include commercial fisheries. Fisheries that exploit a range of species may have more stable catches than fisheries that exploit a single species (3).

Fish are very diverse animals and can be categorised in many ways. This article is an overview of some of ways in which fish are categorised. Although most fish species have probably been discovered and described, about 250 new ones are still discovered every year. According to FishBase, 33,100 species of fish had been described by April 2015 (4).

That is more than the combined total of all other vertebrate species: mammals, amphibians, reptiles and birds.

https://en.wikipedia.org/wiki/Diversity_of_fish

Marine Aquarium Biodiversity and Trade Flow

<https://www.aquariumtradedata.org/>

Aquarium Industry Threatens Biodiversity

<http://science.sciencemag.org/content/341/6145/457.1>

The aquarium industry is a major source of aquatic invasions, especially in terms of the number of species and potential sites of species release (5,6).

References

1. Costanza, R. et al. *Nature* 387, 253-260 (1997).
2. Hooper, D. U. et al. *Ecol. Monogr.* 75, 3-36 (2005).
3. Hilborn, R., Quinn, T. P., Schindler, D. E. & Rogers, D. E. *Proc. Natl. Acad. Sci. U. S. A.* 100, 6564-6568 (2003).
4. FishBase, April 2015 update.
5. D. K. Padilla, S. L. Williams, *Front. Ecol. Environ.* 2, 131 (2004).
6. J. D. Olden, N.L. Poff, *Am. Nat.* 162, 442 (2003).