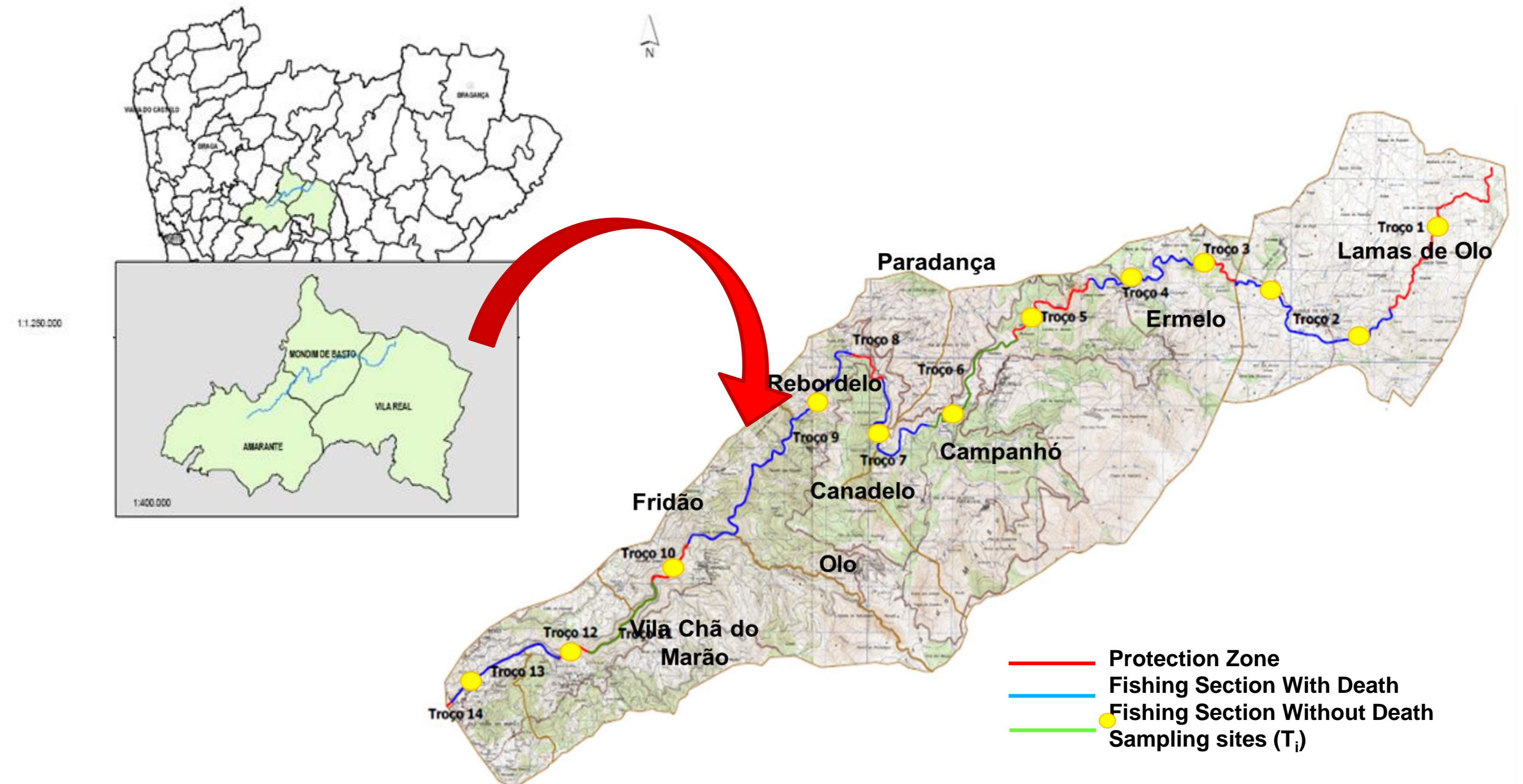


ZPR of the Olo river: management of sport fishing

António M. V. Martinho¹, Amílcar Teixeira², Simone Varandas³

1: ICNF – Instituto da Conservação da Natureza e das Florestas; Departamento de Conservação da Natureza e Florestas do Norte; Divisão de Licenciamento e Avaliação de Projetos; Parque Florestal, 5000-567 Vila Real
 2: CIMO-IPB - Mountain Research Centre, Polytechnic Institute of Bragança, Campus de Santa Apolónia, 5300-253 Bragança
 3: CITAB; ECAV; Universidade de Trás-os-Montes e Alto Douro; Quinta de Prados, 5000-801 Vila Real

Planning map (Olo River) / (2010 – 2018)



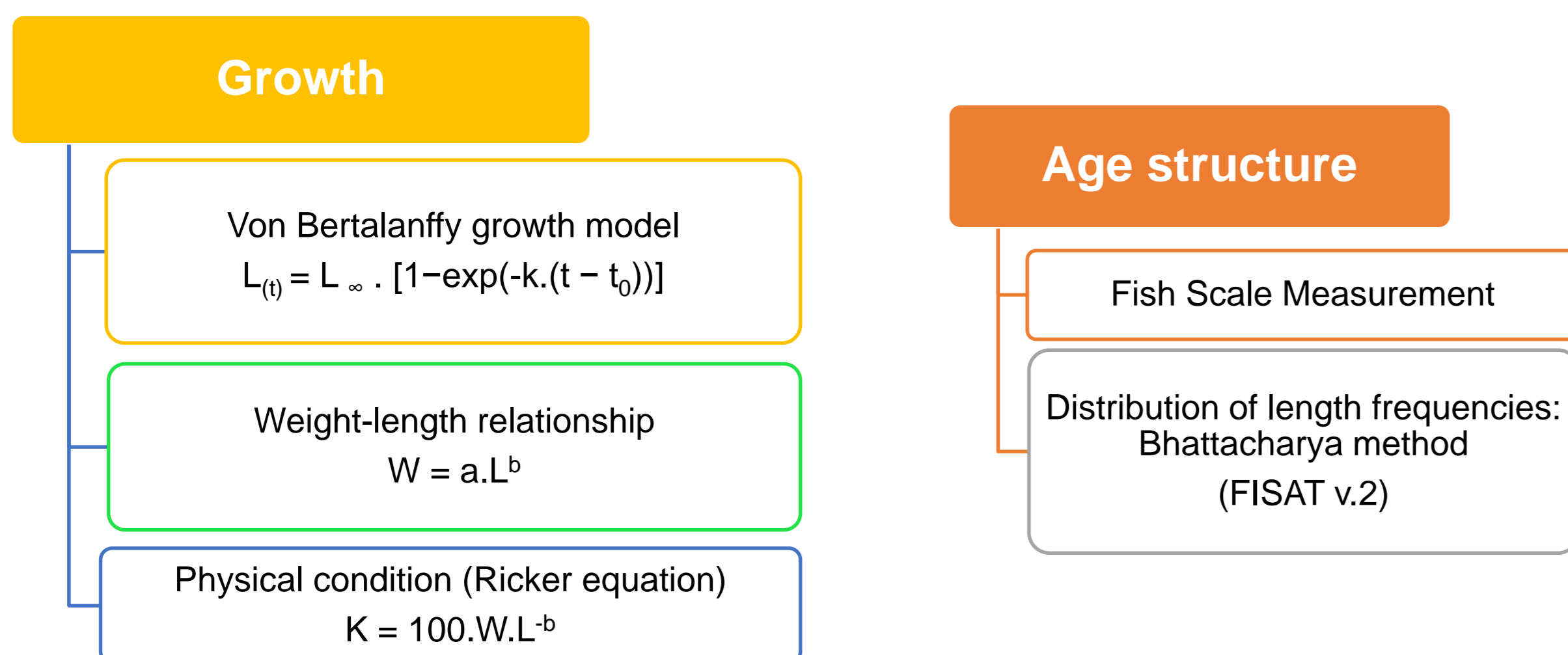
Introduction

The present study is the result of the most recent work of monitoring the sport fishing carried out in 2013 in the Reserved Fisheries Area (ZPR) of the Olo River. The purpose of this initiative was to ask whether the management model, initially established, would require, after six years of operation, eventual adjustments, and to stabilize, in a Management Plan, the operation of this recreation and sport fishing activity during the next years of operation.

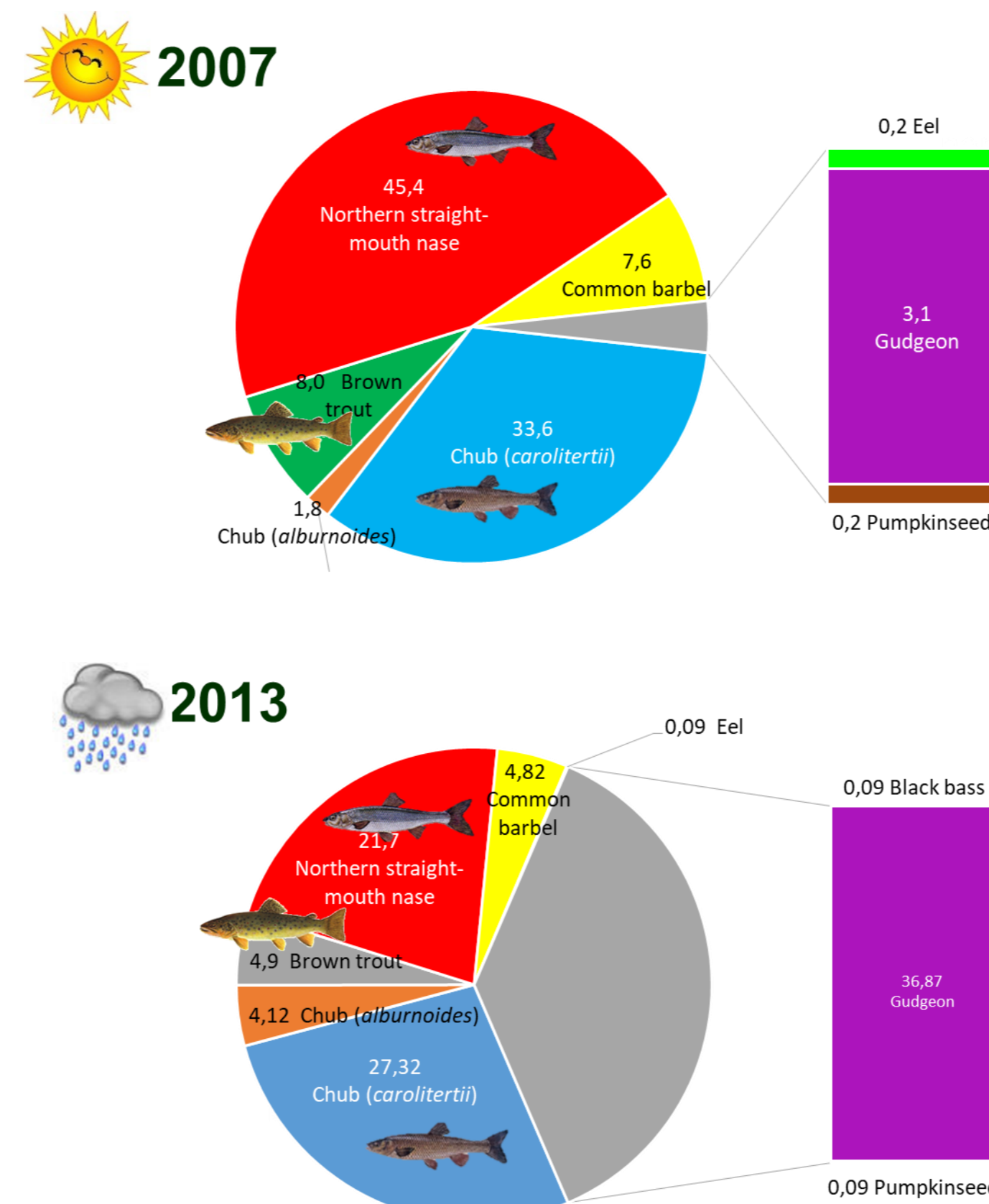


Methodology

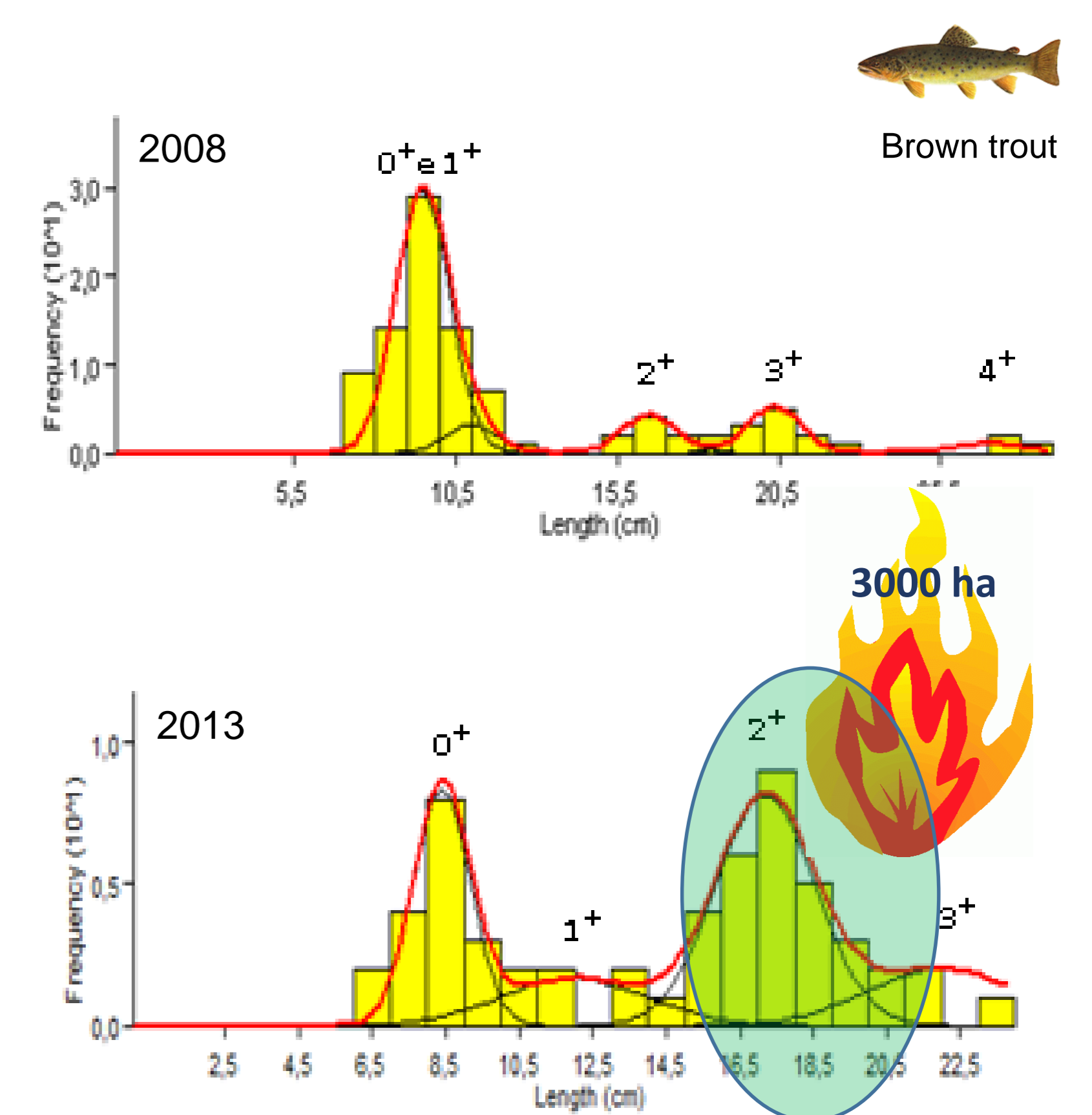
Thirty six sampling sites were surveyed (electrofishing was initially made in twelve sampling sites in 2007). In the evaluation of the fish communities conservation status, the data regarding the age, growth, physical condition of the monitored specimens and their relation with the different habitat types were analyzed.



Composition and abundance

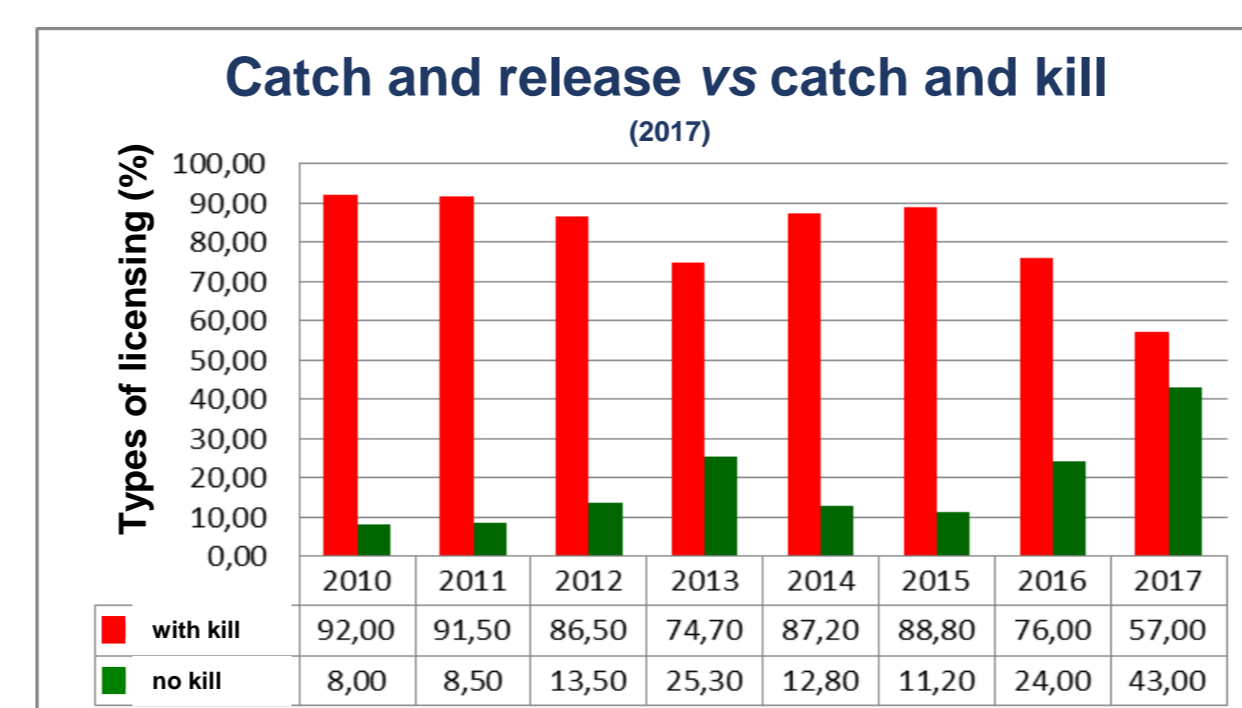


Structure of brown trout populations

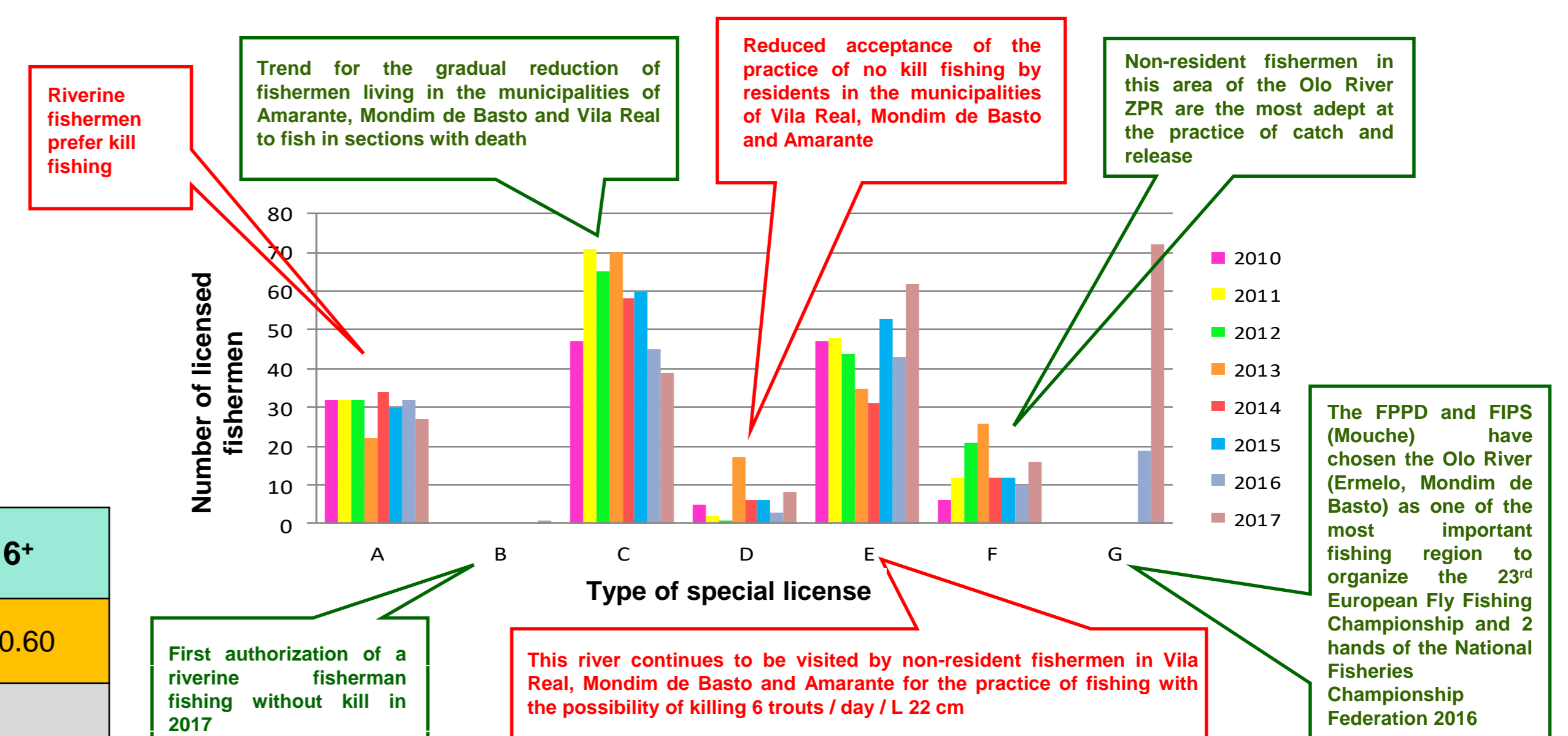


Results

The results indicate that the brown trout and the northern chub recovered their spatial distribution from the headwaters to the Olo mouth, and brown trout was detected in all the sampling sites with flowing water throughout the year. These habitats maintained a good quality and reduced artificialization. The recent occurrence of a brown trout specimen at the age of 6+ in a monitoring action determined the increase in 2016 of one year in the maximum longevity obtained by this salmonid fish. In 2013, *Gobio lozanoi* was detected in the last third of Olo River, with a large number of young individuals (0+). Their occurrence can be associated with anthropic actions (illegal introductions) in more lentic habitats, where the water temperature is higher in the summer. In global terms, the total variation of the species was directly related with the quality of the fluvial habitat.



Operating Results / Licensing (2010-17)



Conclusions

With this work, it was possible to evaluate the pertinence of the adoption of complementary measures to improve the sustainable management of sport fishing in the area of the Olo River ZPR (Portaria No. 206/2008, of February 25), which are proposed in the Management Plan of the Olo River. From the set of works carried out, it was possible to establish the possibility of current use of the "Table of mean lengths by age classes of fish surveyed in the Olo river", whose quality should continue to be improved with the introduction of new complementary results. This important management tool has been used, since 2015, to simplify the expeditious determination of the age of the brown trout according to its total length.

Mean lengths by age class of fish surveyed in the Olo River ZPR

	0+	1+	2+	3+	4+	5+	6+
<i>Salmo trutta</i>	3.90/10.30	10.20/12.40	13.50/17.80	18.00/23.20	25.80/28.20	27.20/28.30	30.60
<i>Squalius carolitertii</i>	4.20/7.20	7.30/10.20	10.40/13.60	13.70/18.00	20.00/21.30		
<i>Pseudochondrostoma duricense</i>	5.00/7.70	7.80/11.90	12.00/15.20	12.90/17.30	17.80/19.40		
<i>Luciobarbus bocagei</i>	5.00/8.50	8.70/10.40	11.10/14.80	15.60/18.90	19.20/20.78	27.80/30.20	28.60/39.40

EDITAL (2014 – 2018)

- 4 – No ano de 2014, nesta ZPR observar-se-ão as seguintes disposições:
- a abertura da pesca será no dia 1 de março e o seu encerramento a 31 de julho;
 - é permitida a pesca em todos os dias de semana;
 - cada pescador apenas poderá capturar, com morte, 6 trutas por dia, com comprimento mínimo de 22 cm

Bibliographic references

Martinho A.M.V. 2008. Gestão sustentável de populações de Truta (*Salmo trutta*): O Caso do Rio Olo. Dissertação de Mestrado em Engenharia de Produção Florestal. Universidade de Trás-os-Montes e Alto Douro. Vila Real. 153 pp.
 Martinho A.M.V. 2014. Plano de Gestão da Pesca Desportiva da Zona de Pesca Reservada (ZPR) do Rio Olo. Divisão de Licenciamento e Avaliação de Projetos, Dptº de Conservação da Natureza e Florestas do Norte, ICNF. Vila Real. 74 pp.