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Tille: Rearing cyprinid fry in cages. [Summary only.]

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Conclusions

- The proposed method of rearing cyprinid fry in cages can increase considerably the amount of material produced of the stocked fry. According to observations to date, for 10 cages placed over 1 hectare of a pond it does not normally influence unfavourably the production of fish conducted in them. Therefore from one hectare of a pond it is possible to obtain additionally around 100 thousand reared fry (10 cages, each up to 10 thousand individuals).
- 2. Rearing in cages assures for fish good oxygenated conditions, protection against preditors as well as making possible a supply of proper food. Rearing in cages situated in ponds does not assure the correct thermal conditions for young growing stages. In both summers the thermal conditions of the experiments were modelled considerably below the averages. The number of days when the water temperature was equal or excedded 20^o was 11 during expts. in 1973 and 13 in 1974, when this was the mean of 10 summers taken in Zabienc for the said periods respectively 15 and 36 days.
- 3. A direct result of the unexpected drop in temperature in the first week of rearing the brood in 1974 was a massive death of white tilapea. A similar fall in temperature, which occurred in the third week of rearing white tilapea in 1973, caused no great death and more resistent fish. Besides evidence in the form of symptoms of death, unfavourable arrangements of the thermal conditions in summers when the expts. were conducted had an influence no doubt on the rate of development of the hatch of carp and white tilapea.
- 4. Under the climatic conditions of Poland unfavourable thermal arrangements, during the rearing of fry, are not an exceptional occurrence. In order to assure a high and independent from weather production of rearing fry particularly herbivorous fish one needs to transfer to rearing in ponds covered with glass or a plastic tent, or in ponds supplied with warm water from power stations. This last solution seems necessary and perspective, in view of a much and constantly increasing amount of water being warmed-up in our country. By lacking the possibility to rear cyprinid fry under more favourable thermal conditions, developing present day hatchery construction for carp and other species of stenothermal fish can give only partial results.

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