



Jihočeská univerzita v Českých Budějovicích Fakulta rybářství a ochrany vod

Zátiší 728/II, 389 25 Vodňany IČO: 60076658 DIČ: CZ60076658

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Confidential

Review of USB RIFCH PhD Thesis

Surname of the PhD student: Turek	Name of supervisor: Tomáš Randák	
Title of PhD thesis: Adaptability of artifically reared brown trout (Salmo trutta m. fario L.) and European grayling (Thymallus thymallus L.) in free water condition		
REVIEWER:		
Surname: Slavík	T.G. Masaryk Water Research Institute, Public Research Institution, Department of Applied Ecology	
Name: Ondřej	Podbabska 2582/30, 160 00 Prague 6, CZ	
Titles: PhD	E-mail: ondrej_slavik@vuv.cz	
Please describe your professional relationship to the PhD student:	Please describe your field of expertise: Ecology of Freshwater Fish	

QUESTIONNAIRE

Originality, scientific importance, prospects of the PhD thesis and benefits for basic or applied research

Evaluate its competitiveness in the international context and compare its level with the current state of the art in the field:

Management of salmonids populations, particularly conservation of original wild fish populations, represents an important scientific topic, results of which are regularly published in many international scientific journals. In particular, information about ecology of the grayling *Thymallus thymallus* are limited. Comparison of population characteristics of wild and hatchery-reared conspecifics is highly attractive issue, and published results are important for both, basic and applied scientific research.

Preparation of the PhD thesis, targets of the work and deliverables

Evaluate the overall level of preparation of the PhD thesis and the originality of the selected approaches; evaluate publications and whether the targets set in the PhD thesis correspond with the declared purpose of the thesis:

Results of the Ph.D Thesis fully correspond to the subject matter and objectives of the research. Methodological approaches are adequate applying recently used standard methodologies. Ph.D Thesis formulation has relevant high/good quality standard; some of the results have been published in prestigious international journals with the IF.





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OVERALL COMMENTARY ON THE PhD THESIS

Management of salmonids populations is highly important issue that is recently frequently discussed. Results and recommendations of submitted research are in accordance with traditionally used approach, when wild populations are supported by hatchery-reared conspecifics. The used method of fish stocking carefully respond to conservation of an identity in local populations. It is highly advisable, relatively new approach, particularly in streams with pressure of sport fishing. Specific growth rate, fidelity and dispersion of fish in a stream are significant parameters/factors determining ecology of salmonids populations. However, also other behavioral aspects such as migration activity, reproduction success and/or ability to survive extreme environmental conditions (winter period, floods, predation pressure etc.) are very important. In general, stocking of hatchery-reared individuals appeared to be an out-of-date approach with regard to conservation of wild fish populations, since influence of fish stocking on individual behavioral changes nor long-term population development has not been sufficiently revealed. Many conflicts between wild and hatchery-reared conspecifics have been described; moreover, interactions among conspecifics are influenced by familiarity and former experiences of individuals. Inadequacy of traditional management of salmonids populations is documented by continuing decrease in salmonids populations not only in the Czech Republic but also in Europe. It can be assumed that in particular, strict conservation of wild population through limits for sport fishing in combination with strong regulation of any intervention into the ecology of wild population represent an appropriate approach for the management of salmonids populations.

Regardless of above-mentioned arguments, author is fully oriented in the issue, and submitted results reflecting contemporary inadequate fish management in the Czech Republic. Submitted Ph.D Thesis is high quality scientific contribution to the discussion about conservation of salmonids populations.

FINAL RECOMMENDATION

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8.6.2010	Prague	SLavik D-/n	S
Date and place	<u>/</u>	Surname and signature	





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Surname of the PhD student: Turek	Name of supervisor: Ing. Tomas Randak
Title of PhD thesis: Adaptability of artifically reared bro (Thymallus thymallus L.) in free water condition.	own trout (Salmo trutta m. fario L.) and European grayling
REVIEWER:	
Surname: Haunschmid	Institution: Federal Agency for Water Management – Institute for water Ecology, Fisheries Biology and Lake Research. Austria
Name: Reinhard	
Titles: Dr. Mag.	E-mail: reinhard.haunschmid@baw.at
Please describe your professional relationship to the PhD student:	Please describe your field of expertise: Fish ecology

QUESTIONNAIRE

Originality, scientific importance, prospects of the PhD thesis and benefits for basic or applied research

Evaluate its competitiveness in the international context and compare its level with the current state of the art in the field:

This PhD thesis combines basic and applied scientific issues in an excellent way. The behavior of stocked fish – brown trout and grayling – in streams was/is an actual research item in the past and presence. Survival (recapture rate) and growth of stocking fish are major features in terms of fish biology and their consideration is a basic assumption for producing scientific management principles.

The investigation design in the thesis was developed on a high scientific level and corresponds to international state of the art. Results are of great benefit for the international scientific community.

Preparation of the PhD thesis, targets of the work and deliverables

Evaluate the overall level of preparation of the PhD thesis and the originality of the selected approaches; evaluate publications and whether the targets set in the PhD thesis correspond with the declared purpose of the thesis:

The thesis is well structured in different chapters, using a clear scientific English. The chapters intercommunicate well; the extensive literature cited fulfills the requirements of international scientific approach.

The publications encompass relevant methodology to fit the targets of the work. Also the statistical analyses correspond to the state of the art. The discussion considers both the results and current literature and matches international standard.

In general the targets set in the PhD thesis were achieved in the different chapters.





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can not be recommended for defence of PhD Thesis

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OVERALL COMMENTARY ON THE PhD THESIS

	Please write comments: The PhD thesis demonstrates an excellent scientific work providing scientific relevant results. From this outcome conclusions in terms of management principles can be made. The technical descriptive chapters are of valuable handbook character. The thesis is well structured and language used is well understandable.
ı	FINAL RECOMMENDATION
) [can be recommended for defence of PhD Thesis can be recommended with reservations for defence of PhD Thesis

2010-06-30 Scharfling, Austria Date and place

Surname and signature