Specialists for animal experiments: documentation and review of training and continuing education as required by animal protection law

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A Background and objectives

The animal protection act of 9 March 1978 (TSchG; SR 455) and the animal protection ordinance of 27 May 1981 (TSchV; SR 455.1) include provisions governing the handling of animals in animal experiments. These regulations attach central importance to the training of specialists who engage in (experimenters) or who lead (supervisors) experimental procedures in animals. The conservative and technically correct use of animals in studies requires in-depth knowledge of the needs, demands and biological peculiarities of animals. Practical experience and conservative procedures also play an essential part in reducing the stress on the animals. The development and use of methods according to principles of the 3 Rs (reduce, replace, refine), especially stress-reducing methods, are progressing rapidly, which is why knowledge has to be kept up to date through ongoing education.

Article 59d TSchV sets forth the requirements for the training and continuing education of specialists (experimenters and supervisors). The content and scope of the training and continuing education, as well as the duration of the teaching, are defined in the ordinance of 12 October 1998 on the training and ongoing education of specialists for animal experiments (training ordinance; SR 455.171.2). These regulations came into force on 1 July 1999. The additional training requirements that were introduced with these regulations do not apply to persons who can show that they already held the function of experimenter or supervisor before this date (Article 76 para. 3 TSchV). The requirements with regard to ongoing education apply to all specialists.

According to Article 59f TSchV, the function of the cantonal authorities in the approval procedure for animal experiments is to examine whether the conditions are met for a person to lead or carry out experiments. The authorities here are granted a certain flexibility to permit exemptions from parts of the required training and continuing education in individual cases or to require additional training (Article 59f letters b – c TSchV).

These guidelines have two objectives:

- to provide an overview of the requirements with regard to training and continuing education and to show examples which offer more precise details on the conditions under which exceptions in this respect may be granted; and
- to indicate the information which specialists have to submit for a review of his or her current level of training and continuing education.

For a better understanding, the following terminological modifications have been made: “special training” (Article 59f, para. 1, letters b and d TSchV) is superseded by “basic training” and “expert training” (Article 59d, para. 1 letter b and para. 2 TSchV) by “specialized training”.

B  Training

1  Experimenters

11  Overview of general requirements with regard to training and continuing education

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<th>Basic training</th>
<th>+</th>
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**Basic training:** This corresponds to the special training mentioned in Article 59f, para. 1, letter b TSchV. It includes all the knowledge and skills in relation to animal experiments which a person has acquired during his or her professional training and/or in the exercise of his or her profession. No special requirements apply for experimenters with regard to academic or professional qualifications.

**Specialized training:** This corresponds to the additional training mentioned in 59d, para. 2, TSchV. The TSchV stipulates that, in addition to the basic training, experimenters must complete a course of specialized training which provides the necessary specialist knowledge and practical training to carry out animal experiments. The scope of this training amounts to at least 30 hours if notifiable animal experiments (grade 0) are to be carried out and at least 40 hours if animal experiments requiring a licence (grade 1 or higher) are to be carried out. The training comprises a theoretical and a practical part. Content requirements are defined in Chapter 2 of the training ordinance.

For experiments involving less commonly used animal species (e.g. amphibians, fish) experimenters may — after consultation with the responsible cantonal authorities — replace those parts of the standard course which are related to rodents with practical parts specific to the species or the type of experiment or with participation in other suitable courses (Article 23 training ordinance).

**Study-specific familiarization** This comprises practical and theoretical training on the specific animal model that is to be used. The experiment supervisors are responsible for ensuring that adequate familiarization takes place before the start of the study.
Continuing education: Experimenters must in principle undergo continuing education for at least four days within a period of four years in the areas of animal experiments of relevance to them (see also Chapter C).

12 Partial exemptions from specialized training

Persons who conduct animal experiments may have a variety of qualifications depending on their basic training and education. They may for example be postgraduates working towards a doctorate, qualified animal keepers or biology lab technicians or people taking an apprenticeship in the chemical or pharmaceutical industry. Furthermore, the procedures undertaken in animal experiments differ widely in terms of their technical complexity. For this reason, the law stipulates that, in individual cases, an exemption from certain aspects of training or, if there is an individual need, a modification of the specialized training is possible.

A partial exemption in individual cases that are proved to be well-founded is possible if:

- content defined in the training ordinance has been covered during academic studies or vocational training as part of the practical or theoretical course;
- the proposed animal experiments are to be carried out using an animal species with which the person can be shown to be familiar from his or her studies or vocational training.

Persons who already conducted animal experiments or attended an equivalent course abroad before the new training regulations on animal experiments came into force are exempted from the specialized training for experimenters. However, they must undergo training with a competent person (e.g. animal welfare officer) for at least four hours or attend a suitable course to acquire the necessary knowledge of Swiss animal welfare legislation according to Article 4 of the training ordinance.

Examples illustrating the completion of specialized training and partial exemption for different professional groups are shown in Appendix 1. The requirements for secondary school teachers with regard to conducting animal experiments are shown in Appendix 3.

2 Supervisors

21 Overview of general requirements with regard to training and continuing education

<table>
<thead>
<tr>
<th>Basic training</th>
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<th>Practical experience</th>
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</table>

Basic training This corresponds to the special training referred to in Article 59f, para. 1, letters b and d TSchV. Supervisors must have a university degree, usually
in Biology, Veterinary or Human Medicine, or an equivalent qualification (TSchV, Article 59d, para. 1, letter a).

Specialized training for experimenters

As a rule, the qualification to carry out animal experiments is first obtained (see Chapter 1.1).

Practical experience

Supervisors must have three years of practical experience in the field of animal experiments (TSchV, Article 59d, para.1, letter c).

Specialized training for supervisors

This corresponds to the expert training referred to in Article 59d, para. 1, letter b TSchV. For supervisors of animal experiments, the animal protection ordinance stipulates the need for training which imparts in-depth knowledge about animal welfare, the characteristics, needs, disorders and use of experimental animals as well as the planning of animal experiments. It is made up of a theoretical and a practical part. The theoretical part comprises at least 20 hours of training and covers the content defined in Articles 15 to 19 of the training ordinance. The essentially practical or study-specific training must be completed in addition if animal experiments requiring a licence (grades 1 or higher) are to be carried out. This comprises at least 20 hours of training and is intended to impart the special knowledge necessary to ensure that experiments are properly carried out. They must focus in particular on the research area and animal model which are to be used, so that the practical skills necessary for this can be obtained (Article 20 of training ordinance).

Continuing education:

Supervisors must in principle undergo continuing education in the areas of animal experiments relevant for their work (see also Chapter C) over a period of at least four days within four years.

22 Basic training: recognition of equivalent training

Qualifications from universities, technical universities and colleges of applied science either at home or abroad may be regarded as equivalent to a degree in Biology, Human or Veterinary Medicine, provided they cover the disciplines relevant to animal experiments as listed below on the following scale:

- General Anatomy at least 2 semesters
- Physiology at least 2 semesters
- Zoology and Behaviour at least 2 semesters
- Genetics and Molecular Biology at least 2 semesters
- Chemistry / Biochemistry at least 2 semesters
- Subjects which cover areas related to hygiene, infectious processes and biosafety at least 1 semester

As a guideline, at least one hour per week is regarded as standard for each subject during the mentioned number of semesters.
The subjects mentioned here must be accredited in writing (in the form of credit points, certificates, etc). If individual subjects are not covered by the university degree, it is possible to take supplementary courses in these subjects and furnish the cantonal authorities with proof that they have been completed.

23 Practical experience: recognition of shorter duration

In justified individual cases and after completion of the specialized training for supervisors, a person can assume this function without having a full three years’ practical experience (TSchV, Article 59f, para.1, letter d), if
- in the course of his/her studies or work experience, he/she has already acquired knowledge of the procedures to be used and can demonstrate this knowledge in its practical implementation;
- and he/she works with a familiar animal species.

24 Partial exemption from specialized training

a. Theoretical training

The cantonal authorities may exempt persons from the need to attend parts of the theoretical training if they can prove that the relevant content stipulated in the training ordinance has already been taught on an adequate scale during the studies of the person concerned or in suitable supplementary courses.

Persons who already led animal experiments or already attended an equivalent course abroad before the new training regulations came into force are exempted from the specialized training for supervisors. However, they must undergo training with a competent person (e.g. animal welfare officer) for at least four hours or attend a suitable course to acquire the necessary knowledge of Swiss animal welfare legislation according to Articles 4 and 15 of the training ordinance.

b. Study-specific training

Study-specific training or parts thereof may be omitted if
- the person is familiar from his/her studies, from earlier animal experiments or from his/her professional experience with the behaviour and physiological characteristics of the animal species used in the experiment (for example, this person has worked as an experimenter with the same animal model);
- the person is skilled in the practical procedures because they are part of the job and are carried out routinely.

Persons who will not lead any experiments that are stressful to animals (prospective grade 0) are exempted from the study-specific training. This does not apply if experimental procedures or methods of sacrifice are used which only remain stress-free for the animals thanks to appropriate expert knowledge and skills (e.g. perfusion fixation using deep anaesthesia; see Article 59f, para. 1, letter c TSchV and Article 14, para. 3, of the training ordinance).

Examples illustrating the completion of specialized training and partial exemption can be found in Appendix 2. The requirements for secondary school teachers with regard to conducting animal experiments are shown in Appendix 3.
C Continuing education

1 General requirements

Supervisors and experimenters must engage in continuing education from time to time (Article 59d, para. 3, TSchV). The aim of this legal requirement is that their knowledge, especially in the area of their animal experiments and for the animal species which they use, is kept up to date. The compulsory continuing education can be completed by attending various kinds of meeting (Vereinigung der Schweizer Kantonstierärztinnen und Kantonstierärzte (VSKT) [Association of Swiss Cantonal Veterinarians] – continuing education events, specialist congresses, internal company meeting, etc. recommended for recognition). Information on the recognition of such meetings and on the documents that have to be submitted to the cantonal authorities can be found in Chapter E.

The continuing education as a rule comprises a total of 4 days within a 4-year period and must lead to some kind of documentary proof that can be presented to the cantonal authorities (confirmation of attendance, certificate etc.) (Article 21 and 25 training ordinance).

Before the introduction of newly selected methods or animal species, the requisite theoretical and practical knowledge must be acquired in an additional continuing education course, for example in an institute or laboratory familiar with the method or species (Article 22 training ordinance).

2 Start of obligation to undergo continuing education and duration thereof

a. The obligation to undergo continuing education begins on the date on which the person concerned is given regulatory approval and takes up the job involving animal experiments in the function of a supervisor or an experimenter. For persons who already performed these functions before the training regulations came into force, the obligation to undergo continuing education starts on 1 July 1999.

b. The person who is required to undergo continuing education has continually to show evidence of four days’ continuing education within the previous four years. Missing days of continuing education must be repeated (see Chapter D, para. 3, Review of training and continuing education requirements).

c. The specialized training for supervisors is counted as continuing education.

d. The duration of compulsory continuing education may be reduced to at least one day within a period of fours years if no animal experiments that are stressful to animals (prospective grade 0) have been carried out or supervised during the period in question.

e. The additional continuing education to be completed before the introduction of new methods or animal species may be counted as general continuing education. However, the additional continuing education must be completed and certificated if four days of continuing education course have already been attended within the last four years.

f. If the professional work related to animal experiments is interrupted, the obligation to undergo continuing education is not suspended. If the animal experiment is resumed, the missing days of continuing education for the last four-year period must be made up within 9 months.
g. Attendance of a course that is relevant to animal experiments is recognized as continuing education commensurate with the person's presence during the course. **Repetitions are not recognized.**

### D Review of training and continuing education

#### 1 Legal provisions

Every specialist is under obligation to furnish the cantonal authorities with proof of their continuing education (see Article 59d, para. 3, TSchV).

The responsible cantonal authorities review the qualifications of the specialists involved during the approval procedure for animal experiments, taking account the individual level of training and continuing education and the activities in the experiment (see Article 59f, para. 1, letter a TSchV).

Equivalent non-Swiss certificates of training and continuing education are considered accordingly (see Article 59f, para. 2, TSchV).

#### 2 Proof of training and continuing education

The following information is to be submitted to the relevant authorities for review:

21 Details in the application:

The application must list all the specialists involved in the experiment, along with details of their respective function and the procedures to be performed.

An aid to compiling the information required is provided as a sample form (**Appendix to the licence application for animal experiments**) published on the website of the SFVO at [www.tierversuch.ch](http://www.tierversuch.ch).

a. **First-time** supervision or performance of an animal experiment in a canton

For supervisors of experimenters, details of the university qualification are required.

For all specialists involved a summary of their specialist knowledge and previous experience of animal experiments (brief curriculum vitae showing career) must be submitted.

Confirmations of completed courses and practical training must be enclosed as copies with the application (see Chapter E, para. 1 and 2).

b. **Renewed** supervision or performance of an animal experiment in the same canton

Only proof of the compulsory continuing education is necessary. Copies of documents confirming courses and, if necessary, the programmes of the conferences or courses attended must be enclosed (see Chapter E).
22 Notification of personnel changes

a. Experimenters

If during the course of an approval procedure for animal experiments new experimenters, i.e. those not yet officially registered, are appointed, this must be reported to the authorities before inclusion of the person in an experiment.

For the replacement of experimenters already officially registered during the approval procedure for animal experiments, a longer notification period may be agreed on between the authorities and the applicant.

The relevant authorities may agree with institutions that the announcement of experimenters already officially registered may take place at regular intervals instead of in the context of the approval procedure. In principle, it must be known who is conducting experiments with what animal experiment licence.

By means of a stipulation in the licence the supervisor must be made responsible for the fact that only specialists may conduct experiments which meet the requirements of this guideline.

b. Supervisors

An application for a change of supervisor must be submitted in the context of a supplementary application before this person takes up the function in the experiment concerned. By law, the supervisor in scientific and animal welfare terms has full responsibility for the animal experiment and this is stated in the animal experiment licence (order of authorities) (see also Guideline of BVET 800.116-1.02).

23 Notification of continuing education

Every specialist is under obligation to furnish the cantonal authorities with proof of his or her continuing education (see Article 59d, para. 3, TSchV).

Every specialist is responsible for ensuring that his or her attendance of courses or meetings is credibly documented. The submission of documents confirming attendance (see para. 21 above) prevents the authorities having to ask for missing information, which can delay the approval procedure.

24 Specialists abroad

In addition to proof of training and continuing education undertaken abroad, training in the field of Swiss law governing animal experiments (see Chapter B para. 12 + para. 24 letter a) must be submitted in good time to the responsible cantonal authorities. This requires a signed confirmation by the trainer.
3 Review of training and continuing education requirements

The cantonal authorities review the training and continuing education status of all persons during the approval procedure for animal experiments, taking into consideration the requirements stipulated in Chapters B and C.

If it is found that the requirements are not met, the following procedures are open to the cantonal authorities:

a. the animal experiment is **not approved**;

b. the animal experiment is only approved if the specialists concerned have been **replaced** by specialists who meet the requirements (see Article 61, para. 1, letter h, TSchV);

c. if the specialized training for experimenters (usually 40h course) has not been undertaken, the animal experiment is approved on condition that the person concerned undergoes the missed training within 9 months and until then **works under the direct supervision of a specialist registered with the authorities**;

d. if the theoretical part of the specialized training for supervisors has not been undertaken, but the person concerned can **furnish proof of training specific to the goals of the experiment**, the animal experiment is approved on condition that the person undergoes the missing part of the training within 9 months.

e. If proof of continuing education is missing, the animal experiment is approved on condition that the person concerned undergoes the continuing education within 9 months.

The **conditions** must describe the missing parts of the training and continuing education. The persons concerned are under obligation to send the confirmation of participation to the authorities after they have attended the training and continuing education meetings.

E Recognition of courses and meetings

1 Courses recommended for recognition by the Vereinigung der Schweizer Kantonstierärztinnen und Kantonstierärzte (Swiss association of cantonal veterinarians) (VSKT)

Courses and work experience for the training and continuing education of specialists are in principle organized by the organizations which carry out animal experiments, in collaboration with the professional associations. For specialized training, the content and scope of the subject matter, the duration of instruction, including work experience, as well as the continuing education are regulated in the training ordinance.

Both Swiss and equivalent non-Swiss training and continuing education courses have to be recognized by the cantonal authorities. To ensure that not every canton has to evaluate what are predominantly the same training and continuing education meetings separately, the VSKT has developed a **mutual recognition procedure** for use by the relevant cantonal authorities. To ensure that a standardized and
efficient procedure is ensured in the recognition of training or continuing education meetings and the use of quality-assuring criteria of assessment is promoted (a description of the procedure and the required forms for the recognition of meetings can be found at:

http://www.bvet.admin.ch >Tierschutz >Aus- und Weiterbildung >Tierversuche

Important non-Swiss meetings may be reviewed by the VSKT and recommended for recognition without submission of an application. This relates e.g. to events held by FELASA, AALAS and their national organizations.

The list of recognized courses is published with the respective dates and venues on the homepage of the SFVO (http://www.bvet.admin.ch >Tierschutz >Aus- und Weiterbildung >Tierversuche).

For meetings which are recommended by the VSKT for recognition, it is sufficient to submit the confirmation of participation. Data on the content and scope of the meeting do not have to be submitted in addition.

2 Other training or continuing education

21 In-house events

In-house events are assessed and recognized as individual courses or events by the cantonal veterinary office of the respective canton in which they take place. They require submission of documentation on the scope and content. In total, at least 4 or 8 lessons of 45 minutes each (or 3 or 6 hours) are necessary in order to be able to register a half or whole day, respectively, as training or continuing education time. The organization holding the event provides those who complete the course with a confirmation of attendance.

22 Personal theme-related training or continuing education

Knowledge on the performance or supervision of animal experiments using animal species which are not often employed, using rare experimental methods or using new techniques can often not be acquired in courses, but has to be gained through being assigned for work experience or instruction to institutes or companies which already work with these methods or animal species. In this case, the instructor concerned has to provide written confirmation of the nature, scope and duration of the instruction.

23 Compulsory continuing education for various special veterinary qualifications

The awarding of special titles in veterinary medicine (FVH, ECV) is dependent on regular and compulsory continuing education. The continuing education meetings attended in this context may be recognized as proof of continuing education in the field of animal experiments, provided their experiments do not go beyond their specialization (animal species, methods).
24 Multi-thematic symposia, congresses relating to animal experiments

Meetings attended either in Switzerland or abroad are evaluated and recognized by the cantonal authorities as individual cases at the request of a person, only as proof of that person’s continuing education.

Those contributions to be counted as continuing education within the meaning of the training ordinance must be specified in programme and submitted together with the confirmation of attendance.

25 Meetings without explicit reference to animal experiments

The same rule applies in the case of meetings which do not explicitly address subject areas defined in the training ordinance. In addition, the person concerned has to submit, together with the confirmation of attendance and the programme of the meeting, a written explanation of the relevance for the animal experiment work (e.g. improvement of the method hitherto used, reduction of stress on the animals, possibility of reducing the number of animals, substitution of in vitro methods for animal experiments).

26 Training or continuing education courses on the internet

The VSKT may recommend the recognition of courses that are completed on the internet if they meet the following criteria:

- the course is offered by a university, a state institution or a nationally or internationally recognized body in the field of laboratory animal studies or alternative methods for animal experiments;
- the modules must at least correspond to the subject areas mentioned in the training ordinance;
- the level must be comparable with Swiss courses for experimenters or supervisors.
- The course must include interactive tests that allow the level of knowledge acquired to be assessed.
- The course must last at least three hours (recognition of at least half a day of theoretical training or continuing education).
- The institution provides those who complete the course with a confirmation that the test has been successfully completed.

F Further information

1 Legislation

<table>
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<td>Animal welfare law of 9 March 1978 (TSchG)</td>
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<td>Ordinance of the SFVO dated 12 October 1998 on</td>
<td><a href="http://www.admin.ch/ch/d/sr/c455_171_2.html">http://www.admin.ch/ch/d/sr/c455_171_2.html</a></td>
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the training and ongoing education of specialists for animal experiments (training ordinance)

2 Contacts for information

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3 Useful documents

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<tr>
<th>List of recognized courses</th>
<th><a href="http://www.bvet.admin.ch">http://www.bvet.admin.ch</a> &gt;Tierschutz &gt;Aus- und Weiterbildung &gt;Tierversuche</th>
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<td><a href="http://www.bvet.admin.ch">http://www.bvet.admin.ch</a> &gt;Tierschutz &gt;Tierversuche</td>
</tr>
<tr>
<td>CD ROM “Der Tierversuch” (The animal experiment)</td>
<td><a href="http://www.tierversuch.ch/index.php?show=cd">http://www.tierversuch.ch/index.php?show=cd</a></td>
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SWISS FEDERAL VETERINARY OFFICE
APPENDIX 1

Experimenters: Examples of partial exemption for specialized training
(list not exhaustive)

1. **Degree in Veterinary Medicine** and performance of studies in:
   
   1.1 Farm animals and other domestic animals in which exclusively measures requiring no veterinary specialization are to be carried out. 
   
   The specialized training amounting to at least 8 hours must feature the following content:
   
   - Animal welfare legislation and ethics
   - Posture and behaviour, especially the characteristics of normal or changed behaviour in the species concerned and the principles of care in the handling of experimental animals
   - Alternative methods.
   
   1.2 Wild animals in which the person performs exclusively measures such as capture, marking or behavioural observation in an environment to which the animal is accustomed. The specialized training is to be completed as follows:
   
   - Training as defined in para.1.1
   - In addition at least 1 day of capture and marking methods, wild animal narcosis (theory and practice).

2. **Degree or work for licentiate in the area of Agricultural Sciences**, with domestic animal sciences as a main subject, or in **Biology**, with zoology as main subject, or **Environmental Sciences**, with biology as main subject, and performance of applied studies in:
   
   2.1 Farm animals and other domestic animals without or with only very little invasive procedures (prospective grade 0 or 1), such as z. B. behavioural observations or sampling. 
   
   The specialized training is to be completed as follows:
   
   - Training as defined in para.1.1
   - In individual cases, additional suitable practical training – after consultation with the responsible cantonal authorities – depending on the measures and procedures to be performed (e.g. blood sampling, sedation, anaesthesia).
   
   2.2 Wild animals in the context of which the person will perform exclusively measures such as capture, marking or behavioural observations in an environment to which the animal is accustomed. 
   
   The specialized training is to be completed as follows:
   
   - Training as defined in para.1.1
   - In addition at least 1 day of capture and marking methods
   - In addition at least 1 day of anaesthesiology and wild animal narcosis

3. **Animal attendants with certificate of proficiency** according to animal protection or vocational education law and studies in which they sacrifice, mark or take samples from exclusively laboratory animals: **no specialized training** has to be completed. However, the continuing education requirements are applicable.

4. **Technical specialists**: this term serves as **supplementary information** to distinguish them from experimenters. These are persons who perform measurements or procedures in animals that are **limited in time** using highly specialized instruments. If they work **in the presence of or under the direct supervision** of a supervisor or an experimenter, they do not come into the category of experimenter and **do not have to complete specialized training**.
APPENDIX 2

Supervisors: Examples of partial exemption for specialized training
(list not exhaustive)

1. **Degree in Veterinary Medicine** and supervision of studies in:

   1.1 Farm animals and other domestic animals in which exclusively measures requiring no veterinary specialization are to be carried out.

   The specialized training amounting to at least 8 hours – in addition to the requirements defined in Appendix 1. para. 1.1 – must feature the following content:
   - Animal welfare legislation
   - Scientific literature and alternative methods
   - Planning and performance of animal experiments

   If studies are carried out which require special knowledge of veterinary medicine (e.g. complicated surgical intervention), proof of this must also be furnished in addition (training specific to the goals of the experiment).

   1.2 Wild animals in which the person performs exclusively measures such as capture, marking or behavioural observation in an environment to which the animal is accustomed. The specialized training – in addition to the requirements defined in Appendix 1. para. 1.2 – is to be completed as follows:
   - Training as defined in para.1.1.

2. **Degree in Agricultural Sciences**, with domestic animal sciences as a main subject, or in **Biology**, with zoology as main subject, or in **Environmental Sciences**, with biology as main subject, and performance of applied studies in:

   2.1 Farm animals and other domestic animals without or with only very little invasive procedures (prospective grade 0 or 1), such as z. B. behavioural observations or sampling.

   The specialized training – in addition to the requirements defined in Appendix 1. para. 2.1 – is to be completed as follows:
   - Training as defined in para.1.1
   - An additional suitable practical training – in individual cases after consultation with the responsible cantonal authorities – depending on the measures and procedures to be performed (e.g. blood sampling, sedation, anaesthesia).

   2.2 Wild animals in the context of which the person will perform exclusively measures such as capture, marking or behavioural observations in an environment to which the animal is accustomed.

   The specialized training is to be completed as follows:
   - Training as defined in para.1.1
   - If studies involving capture and marking of birds are planned, a ringing course (e.g. at the ornithological institute in Sempach) must be attended (training specific to the goals of the experiment).
APPENDIX 3

Teachers who supervise animal experiments in secondary schools

According to animal protection information 800.116-4.04 of the SFVO, only animal experiments which do not entail stress for the animals may be performed at secondary schools. These animal experiments must comply with the legal requirements regarding animal keeping that is appropriate to the species, handling of the animals in conformity with animal welfare principles and proper sacrifice of the animals (see also Article 15, para. 2, TSchG).

Instructions for submitting an application for a licence to perform animal experiments and the minimum conditions for specialized training:

- When the application is submitted, the cantonal authorities must be furnished with proof of adequate basic training (completed course of study or vocational training, experience in animal experiments).
- For teachers with a university degree in Biology, with Zoology as main subject, this is to be seen as adequate basic training.
- The theoretical knowledge must be supplemented with completion of the specialized training or parts thereof, at least in the field of animal protection law, ethics and alternative methods.
- The practical skills must be reviewed and, if necessary, training specific to the goals of the experiment must be completed with regard to methods of sacrifice. It is also conceivable that the sacrifice of the animals may be delegated to another appropriately qualified person.