



Certified Wildlife Rehabilitator™

CWR™ Applicant's Handbook

CWR

International Wildlife Rehabilitation Council

**Post Office Box 8187
San Jose, CA 95155 USA**

**Phone: 408-271-2685
Fax: 408-271-9285
Email: info@iwrc-online.org**

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INTRODUCTION TO THE CERTIFIED WILDLIFE REHABILITATOR™ PROGRAM

What is Professional Certification?

Professional certification is a designation given to an individual who has demonstrated the knowledge and/or skills needed to perform a specific job. Certification is generally a voluntary process created by representatives of a specific vocation to establish and promote high standards among its practitioners. *An individual does not have to be employed within the profession to be eligible for professional certification.*

Individuals become certified through training and/or passing an exam. Once an individual achieves professional certification, they are allowed to promote their status by appending the certification abbreviation to their name. For example, “Ani Myotis, CMA” indicates Ms. Myotis is a Certified Medical Assistant.

Certifications may be valid for the life of the individual or may require periodic renewal; the latter is common in technically-oriented professions where standards and practices are constantly being updated. Often the renewal process requires evidence of continual learning, generally in the form of *continuing education units (CEUs)*.

Certifications are offered and administered by a *certification body*. Certification bodies are usually national or international professional organizations. The certification body determines the policies of the certification program, administers any required exams, and maintains certification records.

Why does wildlife rehabilitation need a professional certification program?

In much of the world, many vocations require a specific degree from an accredited educational institution that includes an established curriculum. These educational prerequisites are established in an attempt to insure that everyone involved has demonstrated a level of competency in related areas of study. In the care-giving vocations, these requirements are an attempt to ensure a minimum standard of care.

Because the field of wildlife rehabilitation is a fairly new vocation, the requirements for becoming a legal practitioner are in constant flux and they vary widely around the world. Depending on geographic area, a rehabilitator may be required to undergo a lengthy apprenticeship followed by a challenging qualifier exam prior to being allowed to practice, while in other areas the individual may not need to demonstrate any knowledge or skill at all. This challenges the credibility of our field and the work that we do.

The Certified Wildlife Rehabilitator™ program provides a reliable validation of training and experience that will accelerate professional development and enhance credibility. Certification shows permitting agency personnel, veterinarians, grant organizations, members of the public, and your fellow rehabilitators that you are committed to professionalism and providing the highest quality care.

Certification is a mark of excellence you carry wherever you go.

PROCEDURES AND FEES

Certification Body

The International Wildlife Rehabilitation Council (IWRC) acts as the certification body for the CWR™ program. It is important to note that you are NOT required to be a member of IWRC or any other organization in order to be eligible for certification, nor are you required to take any classes or purchase publications from any organization, permitting agency, community college, or university.

Certification Requirements

The only requirement to achieve certification status is to take and pass the CWR examination.

Certification Exam

The CWR examination consists of fifty randomly generated questions including true/false, multiple choice, and matching. As the questions for each exam are drawn from a database of over 12,000, each individual exam is unique. The exam is “open book” and candidates may access hard-copy study materials while taking the exam. The exam is timed and must be completed within 60 minutes.

The CWR examination is available in two formats: online and hard-copy.

Online exams: The online exam is administered via the CWR website using a temporary password. While the exam is open, the testing software does not allow access to any other files or programs, including the Internet.

Online exams are graded automatically upon submission and candidates receive immediate notification of their results. Hard-copy documentation is mailed to candidates who pass. Candidates who do not pass will receive information on re-testing opportunities via email.

Hard-copy exams: A hard-copy testing packet is sent directly to a candidate-identified and staff-approved proctor (see *Proctors* section below). The packet includes a paper copy of the exam, instructions for administering the exam and a self-addressed, stamped envelope with which to return the exam for grading. Proctors are not provided with an answer key.

Once the exam has been graded, candidates will be notified of the results via email (or mail if an email address has not been provided). Hard-copy documentation is mailed to candidates who pass. Candidates who do not pass will receive information on re-testing opportunities via email (or mail if an email address has not been provided).

Re-testing

Regardless of the exam format chosen, candidates who do not pass the exam are allowed as many re-take opportunities as needed. A re-testing fee is required for each attempt (see *Fees* section below) and a minimum of four weeks between each attempt is mandatory. A new, randomly-generated exam is provided for each attempt.

Proctors

A *proctor* is a person who supervises the taking of an examination to assure that all rules are followed. CWR candidates who choose the proctored hard-copy format must submit the name and contact information of the individual they would like to serve as proctor for approval. Potential

proctors must not be related to the candidate, or have a vested interest in the candidate's results (e.g., a center rehabilitation manager). Acceptable proctors include, but are not limited to:

- Secondary level or higher public or private school teachers and/or administrators
- Librarians
- Private testing center personnel
- Notaries public
- Members of the clergy

Grading

The CWR exam is graded on a Pass / Fail basis. In order to pass, candidates must correctly answer a minimum of 38 out of 50 questions.

It is important to note that candidates do not receive a numerical score, or information on which questions they answered incorrectly—only a Pass or Fail is given.

Certification Renewal

Wildlife rehabilitation is a rapidly changing field, and rehabilitators need to continually update their knowledge and skills in order to provide the best possible care to the animals they receive. To encourage the highest level of knowledge, skill and competence, CWR certification must be renewed every two years.

Renewal candidates must accrue and show proof of two continuing education units (CEUs) during the two-year period to qualify for renewal.

Continuing Education Units

Continuing Education Units (CEUs) may be obtained by any of the following:

- 8 hours of attendance at an approved wildlife-related conference = 1 unit
- 8 hours of attendance at an approved wildlife-related training class or workshop = 1 unit
- Presentation of a paper at an approved regional or national wildlife-related conference = 1 unit
- Publication of a paper in an approved peer-reviewed wildlife-related journal = 2 units

Classes, workshops, conferences and journals used for CEUs must be pre-approved. A list of approved CEUs and the guidelines and procedures for receiving approval are available upon request.

It is possible to earn CEUs in increments. For example, you might see a four-hour training class on the approved list; this specific class would be approved for four hours of continuing education, or 0.5 CEUs.

Acceptable proof of attendance includes a certificate of completion or a receipt signed and dated by a representative of the event coordinator.

Fees

The following are the fees associated with the CWR program:

Application fee:	\$65 <i>through December 31, 2006</i> (\$85 <i>after December 31, 2006</i>)
Re-testing fee:	\$20 <i>per attempt</i>
Renewal fee:	\$35 <i>per cycle</i>

Exam Topics and Concepts

The list below provides an overview of the twelve topics, and examples of specific concepts related to each topic. Each exam includes questions on each of the twelve topics listed, however as each exam is unique, there will be variation in the concepts covered.

1) ID, Natural History & Behavior

- i) Using field guides
 - ranges, habitats, classification, abundance
- ii) Identification
 - trophic category based on beak, trophic category based on dentition
- iii) Types of interrelations
 - commensalisms, parasitism, mutualism
- iv) Reproduction & development

2) Handling, Restraint & Human Safety

- i) Handler safety issues
- ii) Basic restraint
- iii) Major zoonotic diseases
- iv) Public health and safety

3) Basic Physiology

- i) Basic cell structure
- ii) Nervous system
- iii) Metabolism
 - glycolysis, cellular respiration
- iii) Heart and respiration
 - cardiac function, mammalian respiration, avian respiration
- iv) Osmosis and circulation
 - osmolality, blood components
- v) Skeletal & muscle systems
 - fracture response, muscle groups
- vi) Digestive & excretory systems
 - metabolic waste, filtration, digestive process

4) Intake, Triage & Stabilization

- i) Steps of intake exam
- ii) Triage concepts
- iii) Phone triage
- iv) Basic stabilization
- v) When to call in a veterinarian

5) Euthanasia

- i) What is euthanasia
- ii) Euthanasia assessment
- iii) Euthanasia methods
- iv) Legal necessity

6) Hydration & Fluid Therapy

- i) Dehydration assessment
- ii) Rehydration calculations
- iii) Routes of fluid administration
- iv) Types of solutions

7) Thermoregulation

- i) Traits of hyperthermia
- ii) Traits of hypothermia
- iii) Thermoregulatory therapies

8) Wound Management

- i) Initial treatment
- ii) Debridement methods
- iii) Assessing need for sutures
- iv) Stages of wound granulation

9) Medications

- i) Drug dosages and calculations
- ii) Reading and using a syringe
- iii) How antibiotics work
- iv) How steroids work

10) Nutrition

- i) Trophic categories
- ii) Micronutrients
- iii) Macronutrients
- iv) Calculating daily energy needs
- v) Calculating stomach capacity
- vi) Metabolic bone disease
 - symptoms and therapy
- vii) Emaciation

11) Captive Housing

- i) Isolation/quarantine
- ii) Substrates
- iii) Caging based on medical status
- iv) Basic housing design

12) Release Criteria

- i) Medical release criteria
- ii) Behavioral release criteria
- iii) Habitat assessment
- iv) carrying capacity
- v) Preventing human-wildlife conflicts
- vi) Coordinating with wildlife agencies

STUDY RESOURCES

The following is a list of resources from which candidates can acquire information on the twelve topics covered in the exam. This list is not intended to be comprehensive, nor does the listing of an organization or publication imply a recommendation by the certification body. This list is simply a starting point from which candidates may compile their own study materials.

Organizations

The following organizations, listed in alphabetical order, offer a variety of classes, conferences and other training materials that individuals preparing for the exam may find helpful. Any explanatory text used below was taken from the organization's website at the time this resource list was created. The certification body will attempt to keep the list up-to-date, but candidates should be aware that offerings may change over time.

Australian Wildlife Health Network

Information on wildlife rehabilitation resources in Australia.

Website: www.wildlifehealth.org.au

British Wildlife Rehabilitation Council

The BWRC organizes annual symposiums and regional workshops.

Website: www.bwrc.org.uk

Humane Society of the United States—Humane Society University

Through training and education, HSU provides animal care and control professionals and other animal advocates with the skills to maximize their ability to help animals.

Website: www.humanesocietyu.org

International Wildlife Rehabilitation Council

IWRC training courses are developed and peer-reviewed by professionals who excel in their fields. Courses are available in both traditional classroom settings and online. IWRC hosts an annual wildlife rehabilitation/training conference.

Website: www.iwrc-online.org

National Wildlife Rehabilitators Association

NWRA hosts an annual conference consisting of four days of concurrent sessions and seven different hands-on labs with limited enrollment to provide for high quality experiential learning.

Website: www.nrawildlife.org

St. Tiggywinkles

Europe's only wildlife teaching hospital also offers an introductory course in wildlife care.

Website: www.sttiggywinkles.org.uk

Wild Again

WildAgain supports wildlife and the wildlife rehabilitation community through research, publications, training, working with government agencies, and consulting services.

Website: www.ewildagain.org

Wildlife Center of Virginia

WCV hosts introductory wildlife rehabilitation training classes offered at locations across Virginia and hosts an annual "Call of the Wild" conference designed specifically for rehabilitators and other wildlife "first responders".

Website: www.wildlifecenter.org

General Organizations and Institutions

Community Colleges and Universities

Check in your local educational offerings—many organizations provide classes on topics related to wildlife rehabilitation, although few offer actual rehabilitation training. Look for classes at universities, community colleges, continuing education programs, adult learning programs, and the agricultural extension service.

Local/Regional Wildlife Rehabilitation Organizations

Check in your own community—many state and regional rehabilitation organizations offer training classes and/or conferences.

Master Naturalist Program

Many states now offer a Master Naturalist program through which volunteers are trained to provide education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities. Some classes offered, while not focused on wildlife rehabilitation, may be beneficial to rehabilitators.

Website: www.masternaturalist.tamu.edu/pdf/Nationalinfo.pdf

Written Materials

The following publications, listed in alphabetical order, address one or more of the twelve topics covered in the certification exam. Some titles may be available at public or university libraries.

Any Undergraduate Level Ecology Text

Basic Wildlife Rehabilitation (6th edition), International Wildlife Rehabilitation Council

This comprehensive manual covers rehabilitation methods and techniques from capture to release. Basic animal physiology, treatments and medications, nutrition, and husbandry are covered for mammals, birds, and reptiles. Also included are nutrition and housing charts which can aid the rehabilitator in determining how to care for and raise wildlife.

International Wildlife Rehabilitation Council, 2005. 190pp.

Field Guides

Field guides are invaluable for species identification as well as understanding classification, ranges, habitat, and abundance. Various publishers offer field guides to mammals, birds and herpetiles.

Initial Wildlife Care, Helene van Doninck, DVM

Topics covered include: intake procedures, basic physical examinations, emergency assessment and triage, basic shock cycle, wound care, nutrition for initial care, thermoregulation, use of pain medication in wildlife. International Wildlife Rehabilitation Council, 2003 42pp.

Living with Wildlife, Diana Landau and Shelley Stump

LWW identifies and describes more than 100 North American species, explains how wildlife-human interactions can lead to conflicts, and offers proven advice for how to resolve them. Sierra Club Books, 1994. 341pp. ISBN: 0871565471

Minimum Standards for Wildlife Rehabilitation (3rd edition)

An NWRA/IWRC cooperative project, this book reviews such topics as basic housing requirements for mammals and birds, euthanasia standards, and disease transmission. National Wildlife Rehabilitators Association and International Wildlife Rehabilitation Council, 2000. 77pp.

Practical Wildlife Care (2nd edition), Les Stocker, St. Tiggywinkles Wildlife Hospital, UK

Describes how to handle and provide first aid, how to feed and release, and many other disciplines not featured in veterinary or nursing training. Includes more than 150 photographs and covers a wide range of species including birds, mammals, reptiles, and amphibians. Blackwell Publishing, 2005. 352pp.

Principles of Wildlife Rehabilitation (2nd edition), A. T. Moore & S. Joosten,

This manual provides information on getting started, admitting patients, veterinary topics, animal handling and care techniques, general nutrition, release, and more. National Wildlife Rehabilitation Association, 2002. 667pp.

Wild Neighbors: The humane approach to living with wildlife, The Humane Society of the U.S.

Packed with detailed humane “how-to” solutions, this user-friendly guide assists people who are confronted with the problems caused by human-wildlife conflicts around homes and buildings. Fulcrum Publishing, 1997. 253pp.

Wildlife Feeding and Nutrition, Astrid MacLeod and Janine Perlman, PhD

Topics covered include: dietary patterns, nutrients, digestion, feeding captive adult wildlife, energy requirements, principles of formulating diets, feeding neonate and juvenile animals, emaciation, malnutrition and enrichment. International Wildlife Rehabilitation Council, 2003. 73pp.