



Certified Wildlife Rehabilitator™

CWR™ Candidate Handbook



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Disclaimer:

This handbook contains important and necessary information about the Certified Wildlife Rehabilitator examination. Candidates are responsible for reading the information in this handbook thoroughly and should retain a copy for future reference. This handbook is subject to change.

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Certification

In 2007, the International Wildlife Rehabilitation Council (IWRC) formed the Certified Wildlife Rehabilitator™ (CWR™) program and an independent Certification Review Board (CRB) responsible for the evaluation and certification of wildlife rehabilitators. The CWR CRB endorses voluntary certification by examination for all wildlife rehabilitator professionals, including those who act as volunteers and are not employed in the field. Individuals who meet Certification Eligibility Requirements on page 5 are eligible to be a CWR. Certification as a professional wildlife rehabilitator distinguishes individuals who demonstrate a competent level of professional practice and conduct and a high quality standard of care.

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 hours (CE's) or continuing education units (CEU's).

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.

Purpose of Wildlife Rehabilitation Certification

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 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.

Certification Body

The International Wildlife Rehabilitation Council (IWRC) acts as the administration body and the Certification Review Board (CRB) 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 Eligibility Requirements

- Completion of the application for the Certified Wildlife Rehabilitator exam
- Payment of required fees
- Take and pass the CWR examination

Attainment of Certification and Recertification

Candidates who pass the Certified Wildlife Rehabilitator examination will receive a certificate indicating their certification status and will be permitted to use the trademarked designation CWR™ after their names. A registry of Certified Wildlife Rehabilitators will be maintained by the CWR CRB and publicly displayed on the CWR website. Certification status is recognized for a period of 2 years at which time the candidate must either submit 16 hours of approved continuing education hours (CE) or retake and pass the current Certified Wildlife Rehabilitator examination to retain certification.

Revocation of Certification

The CWR CRB reserves the right to revoke certification for any of the following reasons:

- Falsification of any part of an application
- Misrepresentation of certification status
- Violation of the IWRC Wildlife Rehabilitator Code of Ethics

Revocation appeals may be submitted to the CWR Certification Director by email at cwrdirector@theiwrc.org

Completion of Application and Payment Submission Instructions

The CWR application may be filled out and submitted online through the CWR website or may be download and submitted, by email, fax, or mail. Complete all information requested on the

application. An application that is not completed in its entirety will be sent back to the candidate and will need to be resubmitted. CWR candidates who choose the proctored hard-copy examination format must submit the name and contact information of the individual they would like to serve as proctor for approval (See proctor requirements below).

Mailing Address:

Certified Wildlife Rehabilitator Program
PO Box 3197
Eugene, OR 97403 USA
Fax: 408-876-6153

Email: cwrdirector@theiwrc.org

Step 1: Candidate Personal Information: Fill in your name, address, daytime phone number, evening phone number, e-mail address, occupation, and place of employment in the appropriate row of empty boxes. Indicate if you do not want your name published in the CWR registry by checking the box on the bottom row of this section.

Step 2: Testing Method: Indicate the testing method of your choice by checking the box to reflect either online or proctored hard-copy examination. If proctored examination is chosen, fill in the proctor's name, occupation, and contact information in the appropriate row of empty boxes. Page 8 contains more information on proctor selection.

NOTE: For proctored hard-copy examinations, the name submitted on your application must exactly match the name found on your current government-issued photo ID (e.g. driver's license or passport).

Step 3: Optional Information: These questions are optional.

Step 4: Signature: When you have completed all required information sign and date the application in the space provided. If the online version of the application is being used, you may sign electronically.

Step 5: Payment: This may be submitted online during the application process or can be mailed or phoned to the IWRC office. Payment must be in US dollars and may be made by check, money order, or credit card (Visa, Mastercard, Discover, American Express). Registrants may also request an invoice from director@theiwrc.org

Fees

The following are the fees associated with the CWR:

Application fee:	\$115 per application
Re-testing fee:	\$40 per attempt
Renewal fee:	\$40 per cycle

Refund Policy

There will be no refund of any fees.

Accommodations for Candidates with Special Needs

Special testing arrangements may be made for candidates with special needs. A Request for Special Accommodations Form, available on the CWR website and as an appendix in the back of this handbook should be submitted with your application. The Request for Special Accommodations Form may also be submitted online through the CWR website. You will need to provide documentation to demonstrate candidate's Specific Learning Disorder (SPL) or Emotional needs (ED) and that you require the accommodations you have requested. It should state the diagnosis and recommend reasonable accommodations.

Acceptable Documentation

- CWR Special Needs Application filled out and signed by a psychiatrist or psychologist (PsyD or PhD)
- A letter from a psychiatrist or psychologist (PsyD or PhD) including diagnosis/es and a request for specific accommodations
- A neuropsychological evaluation/psychoeducational evaluation
- An Individual Education Plan (IEP) from secondary school/college
- A 504 plan

List of Acceptable Test Accommodations with Accompanying proof of Specific Special Needs

- Provide special test preparation
- Extended test times: 1.5 X; 2X
- Allow rest time or frequent breaks
- Instructions read aloud by proctor and reread as many times as requested
- Instructions reread aloud by proctor when page changes
- Questions read aloud by proctor and reread as many times as requested
- Frequent time prompts by proctor
- Prompts for redirection/on task performance by proctor
- Allow proctor to assist test-taker with organization of open-book materials
- Administer test in several timed sessions or over several days
- Scribe to write down or input answers
- Exams in alternate format (e.g., from multiple choice to essay)
- Use of assistive computer software (e.g., Optical Character Recognition, allowing scanned text to be read aloud by the computer's sound card; or speech recognition for converting the spoken word to printed word on the computer screen)
- Provide any reasonable accommodation that a student needs that does not fit under the existing categories

Certification Exam

The CWR examination consists of fifty randomly generated questions including true/false, multiple choice formats. As the questions for each exam are drawn from a database of over 250, each individual exam is unique. The exam is "open book" and candidates may access hard-copy study materials while taking the exam. Website searches are prohibited. The exam is timed and must be completed within 60 minutes.

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

Online Exam

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 other open browser windows.

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

Proctored Hard-Copy Exam

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 pass/fail 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).

Confidentiality

The CWR CRB will release fail test results only to the individual candidate. Any questions concerning test results should be submitted to the CWR™ Certification Director by email at cwrdirector@theiwrc.org. The CWR Registry is available for public view on the CWR website. The CWR CRB can also verify the certification status of a candidate upon request from individuals and/or the public.

Retesting

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 two 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 a supervisor, co-worker, related to the candidate, live at the same address as 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

Rules for Proctored Hard-Copy Exam

- Electronic devices such as cell phones, bluetooth devices, voice recording devices, cameras, MP3 players, iPods, laptop computers, and tablets may not be used to connect to the internet or to record any portion of the exam. However, test takers are allowed access to electronic books. Devices used for ebook access during the exam must be in airplane mode with wireless internet turned off. Proctors must confirm this at the start of the exam and can reconfirm at anytime throughout the exam period.
- Only simple, nonprogrammable calculators are permitted. Cell phone calculators are prohibited.
- Questions concerning the content of the examination are not permitted during the examination session. The candidate should carefully read the instructions that are provided at the beginning of the examination session. The proctor will also review the examination instructions with the candidate.
- Candidates are not permitted to leave the testing room during proctored examinations unless urgent circumstances arise.

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.

Examinees who pass the exam will receive notification that they passed, but will not be presented with a numerical grade. Examinees who do not pass the exam will receive an email with a breakdown of the number of questions missed in each of the thirteen categories along with information on retesting. Information will not be provided on which questions were answered incorrectly.

Exam of Breakdown of Exam Questions for Failed Examinations

You answered 35 questions correctly. You missed 0 out of 6 questions on basic physiology, 2 out of 3 on calculations, 2 out of 6 on housing, 1 out of 2 on euthanasia, 1 out of 3 on hydration and fluid therapy, 0 out of 4 on handling and restraint, 3 out of 6 on natural history and behavior, 1 out of 4 on intake and triage, 1 out of 4 on medical topics, 2 out of 5 on nutrition, 1 out of 2 on release criteria, 0 out of 2 on thermoregulation, and 1 out of 3 on wound management.

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 either accrue and show proof of 16 hours of continuing education hours (CE's) or two continuing education units (CEU's) during the two-year period to qualify for renewal

or retake and pass the current Certified Wildlife Rehabilitator examination to retain certification. Renewal fees are must be paid in full at the time of each renewal.

Continuing Education

Continuing education may be obtained by any of the following:

- Attendance at an approved wildlife-related conference
- Completion of an approved wildlife or veterinary related training class or workshop
- Wildlife, ecology, or veterinary related courses from accredited colleges or universities
- Presentation of a paper at an approved regional or national wildlife-related conference (1 CEU)
- Publication of a paper in an approved peer-reviewed wildlife-related journal (2 CEU)

Classes, workshops, conferences and journals used for CE should be pre-approved to ensure approval will be granted. A list of approved CE and the guidelines and procedures for receiving approval are available on the CWR website and as an appendix in the back of this handbook. Please note this list is subject to change.

Acceptable proof of completion includes a certificate of attendance or completion, a receipt signed and dated by a representative of the event coordinator, or an email or letter from the instructor or similar personnel confirming attendance and successful completion.

Exam Topics and Concepts

The list below provides an overview of the thirteen topics, and examples of specific concepts related to each topic. Each exam includes questions on each of the thirteen topics listed, however as each exam is unique, there will be variation in the concepts covered. The questions for the examination are assembled from those with expertise in wildlife rehabilitation and are reviewed for structure, accuracy, and appropriateness by the CRB.

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
 - iv. Heart and respiration — cardiac function, mammalian respiration, avian respiration

- v. Osmosis and circulation — osmolality, blood components
 - vi. Skeletal & muscle systems — fracture response, muscle groups
 - vii. 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. Reading and using a syringe
 - ii. How antibiotics work
 - iii. How steroids work
10. Nutrition
- i. Trophic categories
 - ii. Micronutrients
 - iii. Macronutrients
 - iv. Metabolic bone disease — symptoms and therapy
 - v. 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

13. Calculations
 - i. Drug dosages and calculations
 - ii. Calculating daily energy needs
 - iii. Calculating stomach capacity

Appendix A

STUDY RESOURCES

The following is a list of resources from which candidates can acquire information on the thirteen 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.

Written Materials

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

Any Undergraduate Level Ecology Text

Field Guides

Field guides are useful for understanding classification, ranges, habitat, and abundance. Various publishers offer field guides to mammals, birds, and herptiles. **However, you will not need any specific field guides in preparing for or taking the certification exam. Nor will you need to identify any specific species from any region for this exam.**

Initial Wildlife Care (3rd edition), 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, 2011.

Living with Wildlife, Diana Landau and Shelley Stump

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. ISBN: 0871565471

Minimum Standards for Wildlife Rehabilitation (3rd edition and later)

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, 2012.

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. ISBN-13: 978-1405127493 ISBN-10: 140512749X

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.

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.

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.

Wildlife Rehabilitation: A Comprehensive Approach

A foundational text for studying and practicing wildlife rehabilitation. This book is an excellent resource for active rehabilitators, a cover to cover read for those considering the field, and a great companion book for biologists and veterinarians who may encounter wildlife needing assistance and who work alongside wildlife rehabilitators. International Wildlife Rehabilitation Council, 2016.

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

Cornell Lab of Ornithology

A world leader in the study, appreciation, and conservation of birds through Cornell University.

Website: <http://www.birds.cornell.edu>

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: <https://www.humanesociety.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.

Website: <https://theiwrc.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.nwrawildlife.org

Raptor Academy from The Raptor Center, University of Minnesota

Courses provide expanded access to information on raptor rehabilitation, medical care, and management of captive raptors. Raptor Academy was created to fit the growing need for continuing education to be more accessible. In addition to providing on-site training opportunities, Raptor Academy provides on-demand access to education courses from anywhere at any time.

Website: <https://www.raptor.umn.edu/raptor-academy>

St. Tiggywinkles

Europe's leading wildlife teaching hospital also offers an practical training courses in wildlife care.

Website: www.sttiggywinkles.org.uk

Wildlife Center of Virginia

WCV hosts introductory wildlife rehabilitation training classes offered at locations across Virginia, online 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 in the US 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: <https://txmn.org/about/curriculum/>