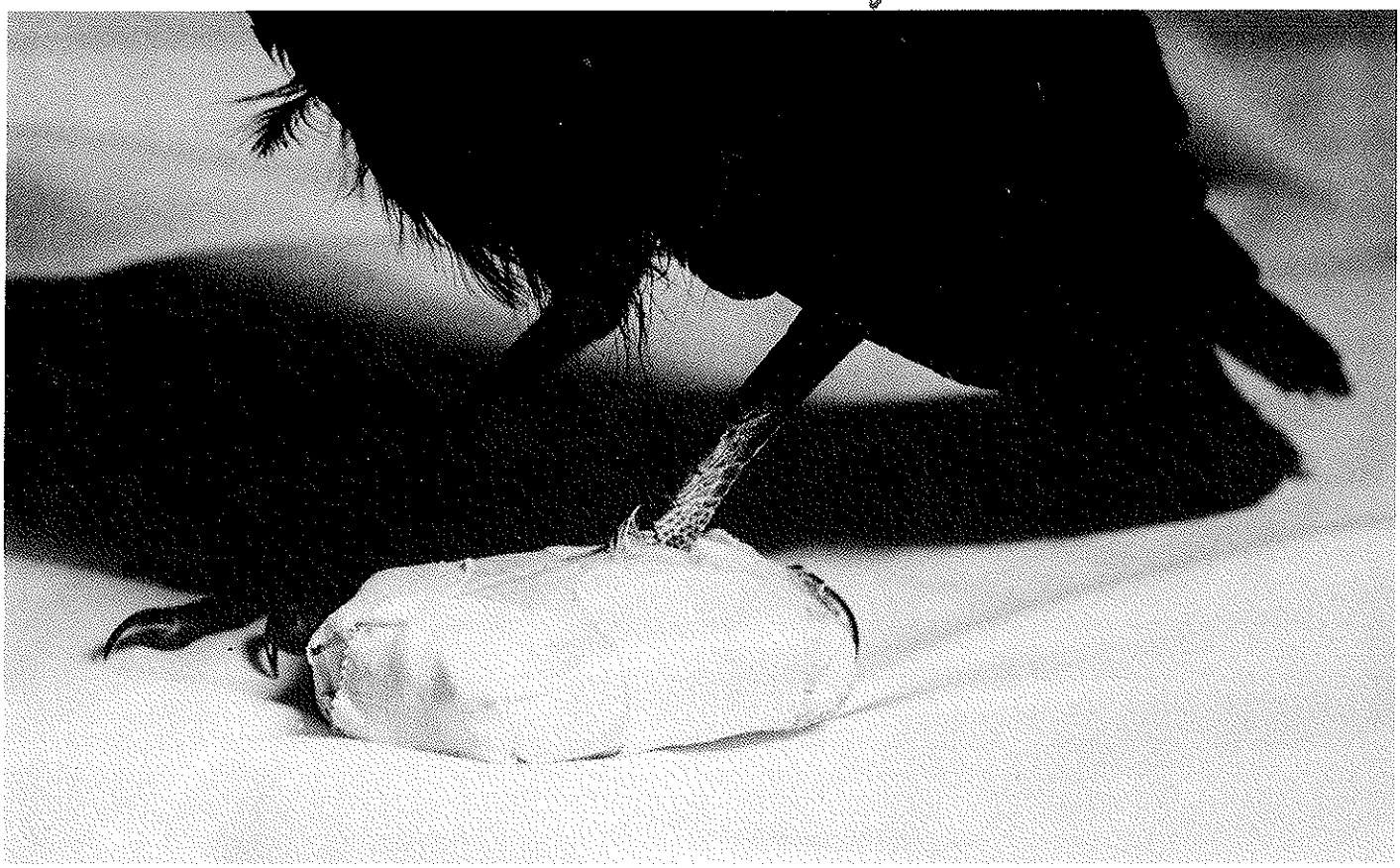
Vol. 17, No.4

JOURNAL of Wildlife Rehabilitation

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Sample



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Guidelines for Authors

The *Journal of Wildlife Rehabilitation* is designed to provide useful information to wildlife rehabilitators and others involved in the care and treatment of native wild species with the purpose of returning them to the wild. All feature articles are subject to a review process, and our staff and reviewers work with authors to produce the most accurate information possible in our ever-changing field.

The *Journal of Wildlife Rehabilitation* has various feature categories. We solicit submissions in the form of feature articles, rehabilitation notes, book reviews, news articles related to major events in the field, and selected case studies. Articles on veterinary medicine as it relates to wildlife rehabilitation are also welcome. We would like to expand the *Journal of Wildlife Rehabilitation* to include wildlife rehabilitation articles from countries outside the United States and welcome inquiries regarding such articles. We also have two short features we use for basic information: "For The New Rehabber" and "Simple Things That Make a Difference." They are intended for basic information or new ideas that are easily demonstrated with a short text and photos. All authors receive a $25 honorarium for each article accepted for publication or provide a one year membership or renewal.

Submission Instructions

1. An original and two copies of the manuscript should be submitted to the Editor, IWRC, 4437 Central Place, Suite B-4, Suisun, California 94585, USA. The manuscript should include references, photo legends, and footnotes, and should be typewritten, double-spaced, if possible. The author's name, address, and phone number should be placed on at least the first page of the article so it can be readily identified and the author contacted. Please note that each article should be accompanied by an abstract and a set of key words. If tradenames are used for products mentioned the author must indicate whether the product is ™ or ®. A product table at the end of the article should give readers the name and address of the companies involved and generic name or category of product.

2. The *Journal of Wildlife Rehabilitation* is prepared on a Macintosh personal computer with desktop publishing software. If papers are already on a personal computer disk, the submission cover letter should include that information, as well as what type of hardware and software systems were used. Obviously, being able to use the author's disk directly or translate it by machine to Macintosh format prevents input errors and speeds up the process. We are able to translate many IBM files provided that the software (including version) are written on the disk.

3. Manuscripts are received with the understanding that they have not been accepted for publication elsewhere. **It is the author's obligation to obtain permission or reprint rights if the submitted copy has been published elsewhere.** All accepted manuscripts are subject to editing. Unused manuscripts will be returned.

4. A separate page should be submitted with a short synopsis of information on the background of the author. Included should be the name, address, rehabilitation organization, phone number of the author and a biographical paragraph. Where appropriate, please list any academic degrees, special training, or experience that is relevant to the article (i.e., physical therapy—RPT, etc.) Articles pertaining to areas of veterinary medicine that involve tasks or decisions requiring a licensed veterinarian (e.g., soft tissue or orthopedic surgery) require a veterinarian as either the author or a co-author.

5. Black and white photographs are preferred for use in the *Journal of Wildlife Rehabilitation*. When no other option is available, color prints can be converted but this is costly and to be avoided when possible. Photo credits should be listed with the photographs.

6. Acknowledgments are limited to people who have contributed to the article in a major way.

7. References should be noted in the text with the last name of the author and the year published (i.e., Leighton, 1983) and listed at the end of the manuscript in alphabetical order in the following style:

LEIGHTON, FA; Peakall, DB; and Butler, RG. 1983. "Heinz-Body Hemolytic Anemia from the Ingestion of Crude Oil: A Primary Toxic Effect in Marine Birds." *Science* 20:871-873.

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Editorial . . .

1994 — A Year of Progress

Well, it's New Year's Eve and I am fulfilling one of this years New Year's resolutions today. We have been working hard to keep the issues of the *Journal of Wildlife Rehabilitation* current and it was my goal to have Vol. 17 #4 (Winter 1994) finished and ready to go to the printers by New Year's Day 1995. That will happen!

Looking back on the year, I am proud of both my achievements and that of the board, staff, committee members and volunteers of IWRC. It takes a lot of people to do what we do and when you read the annual report, I think you will agree we do it efficiently and well.

IWRC has also been growing. Besides our usual busy schedule of skills seminars and our annual conference, we have managed to complete a new membership directory (which will be mailed next month), produce our first international issue of the journal, computerize our bookkeeping, and are now in the process of joining the information superhighway. We bought a Macintosh Power PC this fall to increase our publishing capabilities and have just upgraded to using Pagemaker 5.0. This week we made one of several outreach mailings for new members. This mailing was to wildlife rehabilitators in countries outside the United States.

We have been working with board members and some new committee members to get our research committee organized. This committee will help pair wildlife rehabilitators with scientists and biologists to answer questions that we have all wanted to know for thirty years. By applying what we learn, we will better both our profession and wildlife care.

Parallel to IWRC's emerging efforts on research, I completed an oiled avian triage report as a part of my university work under contract with California Department of Fish & Game - Office of Oil Spill Prevention and Response (CDFG-OSPR). Using past oil spill responses as a base for future work, I performed survival analysis on over one hundred variables for each three oil spills (*Exxon Valdez*, *American Trader*, and *Western Transport*) to learn what factors predicted survival or death. This report went to the printers this week and will be available through the Wildlife Health Center next month. This kind of analysis is an example of what can be accomplished with the funding of research, both for the gathering of data and its analysis. It will, I hope, help wildlife rehabilitation become more efficient and science-based as opposed to anecdotal.

Speaking of the Wildlife Health Center, I received news this month that my faculty appointment in the researcher series was approved. As many of you know, I work part-time at UC Davis and have been hoping for a faculty appointment. This is a major career achievement for me and I am really thrilled.

I am looking forward to 1995 with all its many challenges. One thing is for sure—I don't think I will ever get bored!

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Avian Foot–Mold Wrap

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ABSTRACT

Correcting foot problems in smaller avian species (e.g., passerines/corvids) is often difficult because of their delicate foot structure. What is required is something rigid, yet lightweight – capable of correcting the problem without compromising the other limb or their balance, and is not stressful in application or when in place. The foot-mold wrap meets the criteria, is quick and easy to apply, and provides excellent corrective results with minimum stress factors.

KEY WORDS: passerine, corvid, epidermal, foot wrap, splint

Introduction

A nestling/fledgling crow, the lone survivor of the fall from a tree of its entire nest, was presented with a closed fracture of the right tibiotarsus. This was corrected by closed reduction, rigid stabilization and confinement; perching capability, however, of both feet was compromised.

Stiff paper platforms or sponge wraps usually successfully correct passerine and/or corvid foot maladies of this nature. However, when those methods failed to maintain correction of the left foot (opposite of the fractured leg), the following wrap was devised and successfully corrected the bird's stance and capability to perch properly.

Problem

The forward three digits were curled back (Photo A) and the bird was unable to use its foot for grasping and perching. The application of stiff paper, secured with 3M Micropore® tape and strengthened with masking tape, or a sponge wrap secured in the same manner, did not alleviate the bird from continuing to manipulate the foot back into the same position of the forward digits curling distally towards the back.

Solution

Placing the foot and digits in a normal position into a rigid, light weight, foot-mold cast, inhibiting the foot from curling back (Photo B).



Photo A

Supplies

- 1/2 inch thick Styrofoam®
- X-ACTO® knife or wood burning tool
- Cotton* or surgical-type sponge
- 3M Micropore® Tape**
- Masking tape
- Adhesive tape

Preparation

Using 1/2 inch thick Styrofoam®, cut a block a little larger than the foot. Place the affected foot in a normal-stance position on top and outline the foot and all four toes with a ball point pen.

Allowing a greater margin on the side towards which the foot is inclined to turn (to alleviate motion in that direction), carve a 1/4" indentation foot-mold into the Styrofoam® block.

A wood burning tool may be used to carve the foot-mold in lieu of an X-ACTO® knife or scalpel, but the Styrofoam® melts quickly, and practicing on another piece first is recommended. Also, the heat process makes a more rigid surface, which may be either more or less desirable, depending on the bird's size and need.

When the proper mold has been carved-out to accommodate the bird's foot properly, line the bottom of the foot-mold indentation with a thin layer of either cotton or sponge (a thin strip of a surgical-type sponge) to comfortably cushion the foot pads, toes and talons.

Application

Place foot into mold indentation that has been lined with either sponge or cotton. Secure foot into place by wrapping with Micropore® tape first, to help avoid damaging the delicate epidermal layer of the leg and foot.

Once the foot is well secured into the foot-mold with the Micropore® tape, minor adjustments may be made in the mold to accommodate the talons. Using 1/4" wide strips of masking tape, the leg can be braced into the proper angle. Cover the entire top portion of the foot-mold with masking tape, to make it impervious to water. A small diameter water dish also helps to keep the bird from getting the foot-mold wet.

The final step is to apply adhesive tape to the bottom and sides of the foot-mold to make it impervious to curious beak inspections. This also provides a non-slip surface for safe perching.

Re-wrap in 7-10 days, based on the condition



Photo B

of the wrap. Improvement is usually evident in 2-3 weeks. Continue re-wrap procedure until foot-mold is no longer needed (Photo C).

Housing

A low perch can be easily adapted to safely and comfortably accommodate the bird, by screwing a 3/4" X 1" piece of wood onto an ample diameter perching branch. Be sure that the wood is attached onto the side of the branch where the foot with the foot-mold will be resting. Place the perch low in the cage. A large rubber ring (dog toy) is also a good alternative for accommodating perching of foot-mold or wing-wrap patients.

TrapperMat™(1) is recommended for birds being housed in small hospital-type enclosures, because it provides a sure-footing, theraputic-massage-type surface that not only helps to minimize fecal contact with feet and tail feathers but it is easily maintained and can be sterilized.

To avoid feather damage while confined in small hospital-type, hardware cloth enclosures, fasten plastic (yarn, needlepoint) canvas(2) in strategic places inside the enclosure with either twist ties or small cable ties. The plastic grids also provide a visual security barrier for the bird and they are easily cleaned and can be sterilized.



Photo C

Product Information

*Cotton— Webril® Handi-Pads— 3 1/4" sq. 100% cotton (absorbent, soft, strong, lintless) double pads (cost: $3–4 for 100) are available at graphic art or printing supply stores. Mfr.– Veratec, Inc., Graphic Arts Prod., Walpole, MA

**3M Micropore® Tape, 3M Medical/Tape Division, St. Paul, MN (available at drug stores)

(1) TrapperMat™ – available by the foot (27" wide off 30' rolls/colours: char-brn, char-grey, slate blue) at building supply stores. Mfr.– Tenex Corp., Elk Grove, IL — (800) 323-6699 or (708) 439-4020 within the state of Illinois.

(2) Plastic canvas is available in various sizes at craft stores. (Avoid bright colours—Tip: green is always on sale after Christmas).

Author Profile

Trish Drum spent many hours in operating rooms throughout the country as a medical laser-tech trainer, observing surgical procedures in ophthalmology, oto-rhino-laryngology and neurology, before becoming a wildlife rehabilitator six years ago. It was exposure to these very delicate procedures, plus the "let's try–can do" approach fostered by avian-surgical specialist and wildlife rehabilitator, R. Avery Bennett, DVM, MS, that inspired her to work with the delicate needs of passerines. Trish primarily rehabs passerines and corvids, but her favorite species and speciality is ravens. Besides training other rehabilitators, Trish has put together a unique nature education presentation for grade school children which focuses on passerines, the birds which they see most frequently right in their own backyards.

Her past life (pre-rehab) also includes training, management and sales with major corporations and fund-raising for non-profit organizations. When not attending to the needs of wildlife Trish works as a free-lance writer, business forms and graphic designer, plus she is the editor and publisher of an international-subscriber publication for women.

Information Request

Dear IWRC:

As a wildlife biologist with the Ontario Ministry of Natural Resources, I often receive calls about injured and orphaned wildlife. I usually perform an initial assessment and provide preliminary care to stabilize the animal before transferring it to someone with the proper facilities for rehabilitation. It is always frustrating to realize that there is nothing you can do to help the animal except to euthanize it. This really hit home for me two summers ago.

I had been studying loon populations in north-central Ontario for a few years, and after a while the individual birds start to seem like old friends! While conducting a survey on one of my study lakes, I observed one of the adult loons apparently having difficulty swimming. It was using its wings to paddle through the water, and seemed to be unable to dive. We were able to catch it in a landing net; something which would be next to impossible with a healthy loon. The legs appeared to be partially paralyzed, and a trip to the local vet for x-rays soon revealed the cause. The bird had swallowed a lead fishing sinker, and was exhibiting the classic signs of lead poisoning. I held the bird overnight in a wading pool, and it was able to catch and eat some minnows. By the next morning, however, it was having trouble holding its head up, and by noon it had died.

Shortly after this, I learned that Dr. Vernon Thomas at the University of Guelph has been conducting research into policy and legislative changes required to address this problem. I am now working toward an MSc degree, with this topic for my thesis, and with Dr. Thomas as my advisor. The Ontario Ministry of Natural Resources has recognized that we need answers to this problem, and they are allowing me the time to complete the research.

So how can you help? When Dr. Thomas and I attended an international conference in September, North American industry and sportfishing representatives were very resistant to any proposed changes in the regulations, and demanded proof that birds are dying from ingesting fishing sinkers. Do you have any record of birds becoming ill or dying from lead toxicosis after ingesting a fishing sinker? This can be a problem not only for loons, but also for other birds such as swans, herons, cormorants, terns and gulls. If you have treated birds of these species, what percent had ingested lead fishing sinkers, relative to dying from other causes? I would be very grateful if you would share this information with me.

By pooling our data and working together on this, I hope that we can build a strong case for banning the use of lead in fishing sinkers. At present, Dr. Thomas and I are the only people in Canada conducting research on the legislative changes required to prevent lead toxicosis in fish-eating birds. We will also use our data to support the ban on lead fishing sinkers which has been proposed by the United States Environmental Protection Agency. You can contact me at the following address: Merilyn Twiss, Dept. of Zoology, University of Guelph, Guelph, Ontario, Canada N1G 1W1. Phone (519) 824-4120 Ext. 8357 (FAX 519-767-1656).

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Survey of State Regulations Governing Wildlife Rehabilitation -- 1994

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ABSTRACT

This is the first of a two part article based on a 1994 study that reviewed the wildlife rehabilitation regulations from all 50 states in the U.S.A. This article presents a statistical tabulation of the regulations. As the extent and content of regulations varies greatly from state to state, both the differences and areas of commonality are profiled, for such topics as qualifications, caging, inspections, release requirements and recordkeeping. Interestingly, of the fourteen states currently reviewing their regulations, most appear to indicate a trend for more rather than less regulation of wildlife rehabilitation. Part two, to be published in *(Vol. 18, No. 1)*, will provide, in the authors' opinion, a summary of "best practices," highlighting those regulations that appear most relevant, workable and practical.

KEY WORDS: wildlife rehabilitation state regulations, wildlife rehabilitation applicant qualifications

Introduction and Purpose of Study

The State of Colorado has recently initiated a review of its regulations governing the activities of wildlife rehabilitators. As state licensed wildlife rehabilitators, we will be participating with others in providing input and comments. In preparation for this very important process, we have conducted a survey of all of the other states in the USA to gather and compile an analysis of the current form and content of state regulations for rehabilitation. This should allow us to gain insights from other states which have recently completed an update of their regulations. Hopefully, this will help avoid creating regulations that have otherwise proven impractical or unworkable, and identify a summary of "best practices." A summary of our analysis, compiled from all 50 states, is presented below.

Methodology

The survey was conducted through a letter sent to each state's Wildlife Department in March 1994 asking for the following information:

1) Copy of current regulations governing wildlife rehabilitation
2) Permit application form
3) Annual report form
4) Study materials, exams, or certification requirements
5) Listing of current rehabilitators in their state

A second request was mailed in June 1994 if no response had been received. A third request via telephone was made in September if both mailings had been unsuccessful. Additionally, selected follow-up telephone calls were made during September and October to gain further information and insights into the information collected. The information received was categorized and tabulated as follows:

Permit Types (Duration, Requirements to Renew, Other Requirements/Restrictions)
Technical Qualifications (Experience, Apprenticeship, Testing, Continuing Education)
Application Form (Form, Contents)
Caging (Specified Requirements, Suggested Standard, Approval Process)
Inspections (Initial and Ongoing, Notice Requirements, Who Inspects)
Incoming animals (Examination or Notification Requirements)
Release Requirements (Maximum Holding Time, Location, Approval, Non-releaseables)
Recordkeeping (Format, Content, Time Required to Keep Current, Inspections)
Annual Report (Format, Content, Sub-

mission Requirements)

Restricted Wildlife (Threatened & Endangered, Zoonosis Concerns, Etc.)

List of Rehabilitators (Contents)

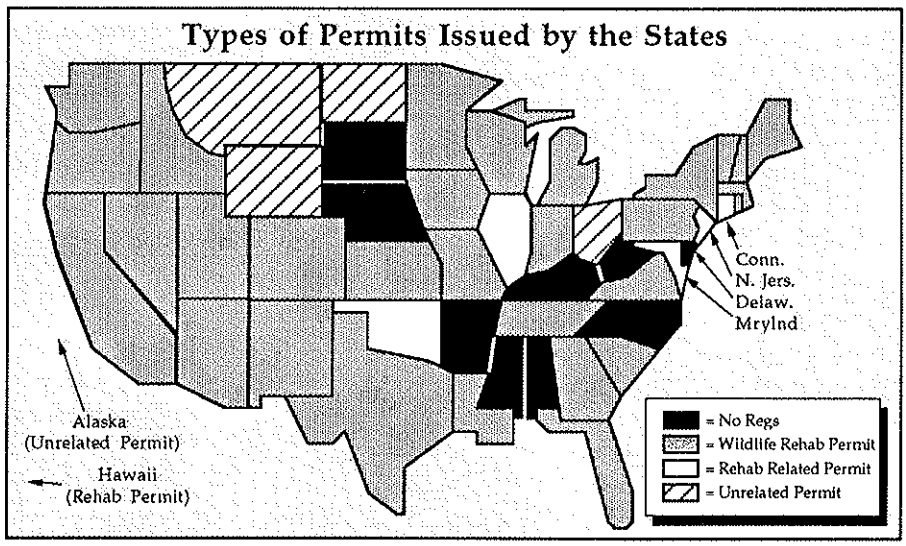
Of the 50 states supplying information, 9 do not have regulations covering wildlife rehabilitation. For statistical tabulation, information was gathered from the copy of the regulations and any other information that was provided. Additionally, statistics were compiled from information, which at times was identified as a working draft indicative of soon to be implemented changes, but which as yet were not final. If a piece of information was not specifically identified in the regulation, but was implied by inclusion in the application form, annual report form, etc; it was assumed to be the rule or regulation that is in fact in use. (Of the nine states that do not have regulations, several do allow rehab under a special arrangement, and others even maintain a list of rehabilitators that will work with orphaned or injured wildlife.)

Any omissions or errors in interpretation of the information received or in the analysis and statistical tabulation are unintentional and accidental, and the authors take full responsibility for any such errors or omissions.

General Findings

Permits

Permits specifically identified as "Wildlife Rehabilitation" are used in 31 states, with 5 other states issuing permits covered under other, but related regulations. These include Education, Scientific Collection, Salvage, or other special possession permits. Five other states allow rehabilitation activities, but under other animal or wildlife regs that do not specifically identify the activity as wildlife rehabilitation. Multiple categories of rehab permits are allowed in 13 states, with 4 states specifying a novice or apprentice level; a general level permit that requires some experience and may have a few restrictions; and a master level that has few restrictions, if any. The other 9 states having multiple levels have an apprentice level and a general/master level. Generally, advanced levels of permittees can designate sub-permittees, but must provide supervision and are responsible for the actions of the sub-permittees.



Most states (27) issue permits that are in effect for 1 year, with a small number that are good until revoked (assuming permittee continues to meet all other requirements of the permit). Most permits expire on December 31, with 2 states having expiration dates mid year on June 30. Most states (30) require submission of an annual report of activities as a condition of renewal, with 9 also requiring a specific renewal form or request. Only 2 require reinspection of caging as a condition of renewal. Fees are or can be charged by 5 states, ranging from $ 5 - 10.

Minimum age requirements are specified by 8 states, from 15 - 18 years old. Several states allow for permits to be issued to institutions in addition to individuals. Three states require that the permit not conflict with any local zoning ordinances. Four states restrict the number of permits by county (considering county population or geographic size), with a few others only issuing permits if a local need exists. Eight states require that the permit be displayed in a prominent place and/or be carried at all times that rehab (or transport) activities are being conducted. Only one state requires that no wildlife can be refused and that the permittee must have a minimum number of cages.

Most regulations stipulate that the state is not liable for any expenses or responsible for any actions of the permittee.

A few states that have statewide regulations appear to follow a local or regional interpretation and administration. Some that do not have regulations have issued special (rehab) permits that are administered on an informal basis.

Several states' regulations provide an appeals process for the disallowance, modification or revocation of a permit. Typically, the regulations cite the state's existing appeals process covering any and all permits that may be issued by the state.

Technical Qualifications of Applicants

Training and experience requirements vary greatly from state to state. Specific requirements are governed by the level of permit desired in those states that grant permits of different levels. Years of experience is the primary determinant for granting higher levels of permit. Generally, the applicant must demonstrate applicable knowledge and proficiency in rehab techniques and wildlife care.

Qualification Requirements:	No. of States
"...knowledgeable..."	18
Pass a test	10
Apprenticeship	8
Continuing education	7

Testing is a requirement in 10 states, with 4 states indicating they will probably begin testing in the near future. This is usually a test administered by the state, generally once per year. DVM's are generally exempted from the testing requirement. A small number of states also require the applicant to be interviewed by a local officer, with 1 state also using a council (presumably of rehabilitators) to conduct the interview.

Eight states require apprenticeship, ranging from 6 to 12 months, or longer, although very few describe these requirements in terms other than elapsed time. A few states will consider prior experience, rehab training or a valid permit from another state in lieu of this requirement.

Continuing education is required in 7 states. This requirement is usually expressed in terms of number of classes attended in a 1 - 3 year time frame, or in number of hours. Qualifying training is usually specified and approved by the state, and often the state sponsors the training in the form of an annual workshop.

Application Form

Most states (34) provide a standard application form for the applicant. Generally, the information is contained in 1-2 pages, but in a few instances ranges from 4 to as many as 7 pages. Most of the forms (30 states) ask for relevant experience and training; 36 ask for the applicant to identify species to be rehabbed; 32 ask for a description of caging and facilities; and all but 7 states ask for references, generally from DVM's, and in some cases, other rehabbers.

For the description of caging and facilities, 11 states ask for extensive detail on size, dimensions, materials used and encourage the inclusion of drawings or photographs. Several ask for specific location of the facilities.

References, when required, are usually from DVM's (23 states) who will be consulting with and/or assisting the applicant. A few states require the DVM to co-sign the application. Other reference requirements include other rehabbers (especially for apprenticeship permits) and in a few cases, just character references are required. In some cases, the local wildlife or conservation officer must sign the application.

Several states request listing Federal permit numbers, if any, with a copy attached. If sub-permittees or assistants are allowed, most states ask that they be listed on the application (and on the annual renewal form for any changes). In some cases, organization affiliation, if any, is requested.

Caging Requirements

Requirements vary greatly ranging from "...adequate..." to extensive descriptions of caging requirements and standards. Most states (28) have in their regulations a general description of caging standards addressing safety, sanitation, food and water, size, and inaccessibility from the general public. A smaller number of states (9) actually specify size dimensions (and in some cases materials) for specific species. Only 3 states refer to the IWRC/ NWRA caging standards as a minimum requirement. Twelve states require caging for all ages of the species to be rehabbed.

Ten states specifically require that rehab wildlife have no contact with or be on display to the public. Other miscellaneous requirements include separate caging for recuperating animals, separation from domestics, and 2 states require daily observation of all rehab animals by the rehabilitator.

Inspection of Facilities

Thirty-six states require inspection of the caging as a prerequisite of granting the permit. Generally, the local wildlife officer conducts the inspection of the caging. One state has prepared a checklist for the officer to follow in this inspection process. Three states can designate an ad-hoc committee, presumably of other rehabbers, to aid in the inspection process.

In 23 states, the right for the state to reinspect is specified in the regulations. This is generally specified to occur at any reasonable time and in a reasonable manner. And in 5 states, this reinspection is unannounced.

IWRC 1994 Annual Report



President's Message

As the year draws to a close, I look back on my first term as IWRC President with a sense of the great things that this organization has done and the great things still to be accomplished. IWRC continues to maintain the best educational programs of any organization in the field. Our Wildlife Rehabilitation 1 AB Skills Seminar[SM] trainings are the "gold standard" by which all other wildlife rehabilitation training is measured. The success of these trainings is due, in large part, to our dedicated teaching staff and the hard work of our office staff and I want to take this opportunity to thank them for the magnificent job they do.

The IWRC *Journal of Wildlife Rehabilitation* consistently presents articles of high professional caliber, outlining new developments in the field as well as renewing our knowledge of "tried and true" methodology and reminding us of the high ethical and technical standards that those of us who practice wildlife rehabilitation must maintain.

Our annual conferences continue to promote thought-provoking discussion on everything from "reversing" imprinting to building wind-tunnels for raptors. All of these are worthy accomplishments and well worth treasuring and maintaining in the years ahead.

But lately, I have detected a certain restlessness, both in myself and the rehabilitators that I work with locally and nationally. In those few moments a week when we are not busy raising funds or washing cages, some of the "big picture" questions are starting to surface. Questions like, "Now that we can bring over 50% of our animals to complete physical recovery, how do we determine if these animals are surviving after release?" and "After nursing these critters back to health, I'm finding fewer and fewer appropriate places to release them. Housing developments, shopping malls and airports are being built in all my favorite release spots. How can I limit man's impacts on wildlife habitat?"

IWRC is trying to stay ahead of the curve on these issues. Over the past few years, one of the most commonly heard questions from wildlife rehabilitators is, *"When are we going to start comprehensive post-release studies on rehabilitated wildlife?"* Well, I think the time is now.

The IWRC Board of Directors will be considering how to fund and conduct post-release research as well as other research topics at our next meeting in February. We hope to be able to present an outline of research areas to be pursued over the next few years by no later than the 1995 conference meeting. It is an exciting prospect and one that carries opportunities for both triumph and failure.

In addition, I hope that in the future we will be forging stronger and stronger bonds with wildlife educators, those people in our society who feel as strongly as we do that our precious wildlife is being driven from its natural habitat at a rate that cannot be sustained for many more years without resulting in losses too great to bear. It seems to me that these people are our natural allies and attempts should be made to recognize our common interests in maintaining both the animals we love and the wild areas in which they must live.

There is an ancient Chinese curse: "May you live in interesting times."

With the Endangered Species Act and many of the environmental protection statutes on the chopping block, we <u>are</u> living in interesting times. Times when wildlife rehabilitators can no longer focus simply on the one wounded animal which they hold in their hands but must begin to focus on the wounded planet and how we can heal Mother Earth as well. I look forward to working with all of you to find some part of the answers to these questions.

Looked at in the right light, "living in interesting times" presents us with both a curse and a blessing. I feel blessed, as I hope all of you do, to be affiliated with such a strong organization and I'm excited about the year ahead and all of the great things we can accomplish together.

-Marnie Allbritten-

1994 IWRC Membership Report

Mary Reynolds, Office Manager

The IWRC membership as of December 1994 stands at 1532. Of this number, 131 are foreign memberships, with members in Canada, Australia, Iceland, Africa, Taiwan, Denmark, France, England, Cameroun, Spain, Puerto Rico, Namibia, Mexico, Central America, and the United Kingdom! We are happy to welcome many of these countries as new members this year!

We had great success with our outreach mailings this year, which brought in 5% of our new memberships, with our highest percentage coming in from renewals (56%). *Thank you to all of our faithful members who continue to support us.* Many of our members gave memberships as gifts this year, accounting for 2% of our new members. Keep this in mind when you want to give a special "thank you" to an outstanding volunteer or to the veterinarian who has given so many hours of free time to your organization.

This year was the first year that our members received the conference proceedings as part of their membership benefits. This change in policy was met with great enthusiasm by the membership, who know a good deal when they see one. We are very excited about this opportunity to reach so many people with the valuable information contained in this publication!

Our newest membership directory should be completed by early January and we hope to have it out to the members by February, so watch for your copy.

Many of our organizational members have been requesting copies of our brochures to hand out at their meetings and training classes. If you would like copies of brochures for outreach, please give us a call and we will gladly supply them to you. We appreciate all of these efforts on behalf of IWRC to spread the word and share the information! We still have a goal we would like to meet of 2,000 members and working together we know we will make it!

Thanks to all of you who support the International Wildlife Rehabilitation Council and its programs. Best wishes for a happy, healthy, and prosperous New Year!!

"A Second Chance" 1994 Conference Report, San Diego, California

Mary Reynolds, IWRC Conference Coordinator

The IWRC's 1994 Conference was held in the exciting town of San Diego, California, at the Town & Country Hotel. It was co-hosted by two local groups, *Project Wildlife*, with Donna Allen-Barron as Co-chairperson and *The Fund for Animals*, with Chuck Traisi as Co-chairperson. They and their volunteers did a fantastic job and we all thank them all for their hard work and enthusiasm!

We had 300 attendees and over 50 speakers who presented a wide variety of papers, workshops, and roundtable discussions on everything from Bushtits to Mountain Lions! Two keynote speakers, Dr. Milton Friend of the National Wildlife Health Center, and Dr. Don Hunsaker II of San Diego State University, opened the proceedings each day with their timely presentations on "Diseases of Wildlife: Changing Patterns & Emerging Trends" and "Animal Rehabilitation: Urbanization & the Effects on Wildlife," respectively. Pre-conference IWRC Skills Seminars[SM] (both basic and three advanced skills seminars) were offered prior to the conference and were well received by those who participated.

Our hosts arranged three wonderful field trips: behind-the-scenes tours of some of the different departments at both the world famous "San Diego Zoo" and "Sea World," and Chuck Traisi sponsored a free tour of his facility to over 40 of our conference participants!

The hotel offered all the amenities and was within driving distance of some of San Diego's most popular attractions. The hotel conference staff were very helpful and accommodating and helped to make things flow smoothly. Special thanks goes out to Patti Bareno, the hotel Convention Coordinator.

The Silent Auction and Raffle were both big successes and we wish to thank everyone who donated items for these events and/or bid on them, with special thanks to Joanne Richards and Marnie Allbritten for handling the bids and taking in the proceeds. Thanks also goes out to those Board members who helped with the set-up of the auction items, to Susan Patton for inputting the information into a database and to Frances Logan for her help with both the set-up and for her numerous donations to the auction. I think the award for most donations collected has to go to the Lindsay Museum of Walnut Creek! They did an outstand-

The 18th Annual Call for Papers for the Conference of the International Wildlife Rehabilitation Council

November 2-5, 1995
The Virginia Beach Resort Hotel and Conference Center
in
Virginia Beach, Virginia

Each year at our annual conference IWRC invites wildlife rehabilitators and professionals working in associated fields to make presentations which will assist those working in our field. We encourage papers that describe new and current methods in wildlife rehabilitation, natural history, management of medical problems (e.g., trauma, pesticides, toxins, parasite control, nutrition-related disorders), diseases that occur in wildlife, health and safety issues including zoonotic diseases, post-release studies, and papers discussing current organizational methods (administration, fundraising, volunteer/employee management, computerized records managment, etc.). Papers on shorebirds, small mammals, and basic care techniques are of special interest at this conference. International papers on wildlife rehabilitation are also invited.

Proposals may be for paper presentations, workshops, roundtable discussion sessions, or poster sessions. Proposal applications include your agreement to provide a complete manuscript by the deadline.

*Proposals for the 1995 Conference **must** reach the IWRC office postmarked no later than April 14, 1995.*

Policies and Procedures for Presenters

Speakers' Compensation

Upon acceptance of the proposal, the paper, workshop and roundtable presenters are entitled to receive full, non-transferable complimentary registration for the Main Conference Program. (Skills seminars, field trips, banquets, etc. are *not* part of the Main Conference Program).

Poster presenters not otherwise scheduled on the program are entitled to 50% discount off the Main Conference registration fee.

Individual key note speakers may be granted travel expenses and/or hotel lodging depending on their location in relation to the conference.

Manuscripts for Proceedings

Manuscripts are submitted for publication in the IWRC's copyrighted Conference Proceedings. When previously published and/or copyrighted material is submitted, it must be **clearly stated**. The ***author is responsible*** for securing permission to publish in the proceedings and documentation should be submitted with the manuscript. Requests to reprint proceedings articles are routinely granted. Authors wishing to use their articles in other publications should contact IWRC for reprint forms.

Manuscripts are due in the IWRC office no later than November 30, 1995. Guidelines for authors are given to all selected speakers. IWRC performs its desktop publishing using a Macintosh™ system on a Power PC™. Papers written on Macintosh™ utilizing Microsoft Word™, Microsoft Works™, Mac Write™, or Pagemaker™ can be submitted on disk. IBM formats can be translated if they are sent on a **3 1/2" disk** with the software clearly marked. A hard copy of the paper must accompany the disk.

Lead roundtable or lead workshop speakers are expected to submit a short summary or extended abstract (1-2 pages) that discusses their topics. Because registrants sign-up for workshops in advance, workshops are *not cancelled once the brochure is mailed.* Workshop leaders are responsible to find a replacement if they choose to cancel after registration has begun.

Conference Schedule

Wednesday-Thursday November 1-2, 1995	Skills Seminars℠
Thursday, November 2, 1995	Icebreaker
Friday-Sunday, November 3-5, 1995	Main Conference

Deadlines

April 14, 1995—Proposal Applications due in the IWRC office.
May 15, 1995—Written confirmation of papers selected mailed to presenters with Proceedings and Poster guidelines.
September 15, 1995—Presenter information and AV requests due.
December 1, 1995—Completed papers are due at the IWRC office.

Information:

Questions regarding presentations should be directed to Mary Reynolds at the IWRC office. The office can be reached between 9 a.m. and 4 p.m., Pacific Time, weekdays at (707) 864-1761.

INTERNATIONAL WILDLIFE REHABILITATION COUNCIL

1995
Wildlife Care Catalog



IWRC
Literature Order Form

IWRC Skills Seminars[SM]	Qty.	Total
Session I - Basic Wildlife Rehabilitation 1AB[SM] by Jan White, DVM **Revised 1992** **ISBN 1-884196-02-0** ***Reinforced covers and wire binding for longer wear!*** With the purpose of standardizing rehabilitation skills through a professional packet, the author 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. This 150 page manual also includes individual rehab notes on common species. **Price $25.00** ****Also available in Spanish translation 1988 edition** **Price $20.00**		
Session II - Wildlife Restraint Handbook by the Wildlife Investigations Staff, California Department of Fish and Game **Revised 1992** This 172 page book is designed for the wildlife rehabilitator and field biologist. It has sections on mechanical capture of animals, transportation of captured animals, restraint equipment (ropes, gloves, hobbles, Ketch-All Pole™, pole syringes, dart guns, etc.), pharmacology of restraint drugs, legal information on scheduled drugs, medical concerns in restraint, safety, and specific information on various species (including drug dosages) such as Black Bear, Mountain Lion, Bobcat, Coyote, Fox, Skunks, Badgers, Fishers, River Otters, Beavers, Raccoons, and Sea Otters. **Price $20.00**		
Session III - Laboratory Procedures & Diagnostics in Wildlife Care[SM] by Tami Anderson, AHT **Revised 1987** Procedures covered include the various aspects of hematology, laboratory tests, urology, parasitology, testing done for heartworm, and basic information on bacteriology and culture sensitivity testing. **Price $7.50**		
Session IV - Physical Examination & Initial Care[SM] by Jan White, DVM, Sandra Emanuuelson, DVM, and Louise Shimmel **Revised 1994** Topics covered include intake procedures, initial exam, treatment for basic shock and for selected poisons. **Price $7.50**		
Session V - Feeding and Nutrition of Animals in Rehabilitation Centers[SM] by Murray Fowler, DVM Various aspects of feeding and nutrition in wildlife care are addressed including requirements for energy, protein, minerals, vitamins and hydration. In addition, sections are included on thermoregulation, zoonosis, and metabolic bone disease. **Price $7.50**		
Session VI - Physical Therapy in Raptors[SM] by Nancy Horowitz, RPT A registered physical therapist, the author brings to our field her knowledge of the principles, application and cautions in the use of physical therapy on wild raptors. This packet also includes a "New Method for Exercising and Rehabilitating Raptors" by Terry Schultz, Julie Klingman and Russell Tucker, DVM; and "The Goniometer: Its Indications and Use" by Kathie Giblett, RPT. **Price $6.00**		
Session VII - Basic Necropsy Procedures[SM] by Pat Gullett, DVM This packet provides rehabilitators with procedures for both avian and mammal necropsy, complete with diagrams. Reptile illustrations are included for reference along with a necropsy form for the rehabilitator. **Price $6.00**		
Session VIII - Fluid Therapy in Wildlife Care[SM] by Michael Murray, DVM Dr. Murray explains the different types of fluids available, when to use them, criteria for their use and routes of administration. Basic and acid-base balance is also covered in this packet. **Price $ 7.50**		

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Session IX - Basic Wound Management for Wildlife Species℠ **1994.** by Scott Newman, DVM This packet offers step-by-step instructions on how to deal with wounds. The information includes sections on wound debridement, lavage antibiotics, wound closure and open-wound management. **Price $6.00**		
Session X - How to Develop and Organize a Wildlife Rehabilitation Program℠ by Sally Lewis This packet is designed to accompany the actual seminar. The information is for everyone who wants to start a wildlife rehabilitation program as well as for those who want to see their existing wildlife group get better organized. Topics include; starting up, finding an effective board of directors, managing a volunteer program, qualities in a good leader and in a good worker, fund-raising, public relations, working with difficult people, conflict resolution, preventing burnout, and more. **Price $7.50**		
IWRC PROCEEDINGS **"Handle With Care"©** **1991** Collection of papers from the 1991 conference in Vancouver, BC, Canada. **Limited copies left in stock!!** **Close out price!!** **Price $10.00**		
"Under Our Wing"© **1992** A collection of papers from the 1992 conference in Naples, Florida. Editor, William Marshall. **ISBN 1-884196-00-4** **Price Reduction!** **Price $15.00**		
"Wildlife Rehabilitation: A Perpetual Learning Process"© **1993** From the 1993 conference in Lake Tahoe, Nevada. Editor, William Marshall. Papers include: The Sex life of Owls by Katherine McKeever; You Can't Catch a Meal If You Ain't Got the Feel: Prevention & Treatment of Bumblefoot by Marnie Allbritten & Joanne Richards, DVM; Working Procedures for Non-Releasable Raptors by Diana Granados & Jenny Papka; Preventing Diseases & Death in Young Passeriforme Birds by Donna Burt; Gambel's Quail: Rescue, Rehabilitation, and Release by Barbara Maxwell; Tunnel Rats: Ground Squirrel Rehabilitation by P. C. Hanes; Raising Orphan Raccoons by Susan Kelly; Hepatic Lipid Accumulation in a Captive Raccoon by Jessica Lainson, DVM; A Review of Harbor Seal Nutritional Uptake on Two Artificial Formulas at a Rehabilitation Center by Patty Chen-Valet, et al; Striped Skunks: Care of Orphaned & Injured Babies & Injured Adults by Meryl Faulkner; Rehabilitation of the Woodchuck by Dale Carlson; Raising Fawns Wild by Cheryl Millham; Fecal Diagnosis for the Detection of Parasitism in Wildlife by Toni Guarnera; Good Guys vs. Bad Guys: Understanding the Immune System by Rebecca Picton; The Use of Friendly Plastic™ in External Fracture Fixation & Wound Management by Joanne Richards, DVM; Avian Hematology: Changes With Disease by Victoria Joseph, DVM; Reptile Hematology: An Outline by Victoria Joseph, DVM; Ninja Turtles & Heavy Metal Snakes: The Effects of Popular Culture on Reptile & Amphibian Rehabilitation by Melissa Kaplan; Computers in Wildlife: An Overview by Bob Hanes; The Development of a Quality Internship Program in a Wildlife Rehabilitation Facility by Mary Kmak; Oh, By the Way, Don't Forget to Laugh: Coping With Burnout by Hope Douglas & Dale Carlson; Creating a State Organization : A Roundtable Discussion by Hope Douglas; Living in Cold Country: Treatment of Hypothermia by Cheryl Millham; Cleaning & Disinfection Processes in Avian Rehabilitation by Jan White, DVM; Importance of Establishing Serum Chemistry & Hematological Reference Ranges for Species of Seabirds Commonly Affected by Oil Spills: An Abstract by Scott Newman, DVM. **Price $20.00**		

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Medical Management of Birds of Prey© by Patrick T. Redig, DVM, Ph. D. 2nd. Edition, 1993 Published by The Raptor Center at the University of Minnesota, St. Paul, MN. A collection of notes on selected topics. Includes: Ethics, Medical Emergencies, Anesthesia, Lab Diagnostics, Fluid Therapy, Nutrition and Feeding, Orthopedic Techniques, Bandaging and Splinting, Soft Tissue Surgery, Treatment Protocols, Parasitic Diseases, Anemia, Lead Poisoning, Release Criteria, and Health Management. Also includes a Formulary of Pharmacological Agents for Emergency Care of Raptors, an Annotated Summary of Medications for use in raptors, and Guidelines for Perch Design. This 176 page manual covers every aspect of raptor care! **Price $20.00**		
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Minimum Housing Guidelines for Rehabilitation of Mammals

Volume 7, No. 2 _____

Rehabilitation Notes: Northern Mockingbird
Avian Haematoza Survey in Fairfield, Ca.
Stress Management for WL Staff & Volunteers
Imprinting and Wildlife Rehabilitation

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Rehabilitation Notes: Woodpeckers
Fluid Therapy in Birds (Part 2)
Physical Examination of Songbirds

Vol. 7, No. 4 _____

Rehabilitation Notes: Barn Owl
IWRC Skills Certification Class Begins
Raising White-tailed Deer "Wild"
Avian Trichomoniasis
Netting Wild Mammals

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Rehabilitation Notes: Anna's Hummingbird
Inner Ear Infection in a Badger
Wildlife Rehabilitation Today

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Rehabilitation Notes: Fox Squirrel
Mourning Dove: Natural History and Captive Care
Veterinary Corner: Cryptosporidiosis

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Rehabilitation Notes: American Goldfinches
How to Read & Use a Syringe
Natural History Notebook: Turkey Vulture

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Rehabilitation Notes: Black-necked Stilt
Pre-anesthetic, Anesthetic, and Post-Anesthetic Care for Raptors
Mealworms: Their Care & Feeding

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Natural History Notebook: The Western Gull
For the New Rehabber: Feather Imping: History and Technique
WL Statistics & Their Importance
1986 Pacific States Fall Graduates

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WL Rehabilitation and the Media
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Volume 11, No. 3_____

Direct Mail is Not a Four Letter Word!
Let Me Tell You a Story
Sea Lion's Share of A Whale of a Job
How to Get Media Coverage
Internship Programs: An Overview
For the New Rehabber: Newsletters

Volume 11, No. 4_____

Rehab. Notes: Green-backed Heron
A Review of Avian Hematozoa Parasites
Euthanasia
1988 IWRC Annual Report

Volume 12, No. 1_____

Rehab. Notes: Kingfishers
Physiological Assessment of Rehabilitated Raptors Prior to Release
Alaska Oil Spill Bird Rescue Efforts

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Rehab. Notes: House Finches
San Miguel Sea Lion Virus
Simple Things: Y - Perch Holders
Guidelines for Exercising in Rehabilitated Raptors

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The Goniometer: Its Indication & Use
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Rehab. Notes: Sea Otter Pups *(Enhydra lutria)*
New Advances in Captive Housing for Common Murres
Nutrition Support of Oil Contaminated Wildlife: Clinical Applications and Research Potentials
Rehabilitating Oiled Seabirds During the Exxon Valdez Oil Spill
Advances in Rehabilitating Oiled Sea Otters: The Valdez Experience
Evaluating the Long-term Effects of Crude Oil Exposure in Sea Otters
Results of the Eagle Capture and Short-term Rehabilitation Program

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Simple Things That Make a Difference: Screen Doors for Wild Bird Caging
Wire Cage Draining Tray for Avian Housing

Volume 15, No. 3_____

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Simple Things That Make a Difference: Good Avian Smears Make Good Results
Avian Hematology: An Overview of Specimen Processing, Sample Evaluation and Interpretation
A Literature Review of Selected Hematologic Parameters of Raptors

Volume 15, No. 4_____

"What Do You Mean, Look It Up", Research Resources for Wildlife Rehabilitators
Cottontail Feeding Problems: Part II, The Big "D": Diarrhea in Rabbits
A Warming Shelf for Nestling Song Birds
Simple Things: Feeding Chutes for Raptors

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Journal of Wildlife Rehabilitation

Volume 16, No. 1 _____

Avian Emaciation: Unraveling the Mysteries of Recovery
Constructing Perches for Healthier Feet in Captive Birds of Prey
IWRC Newsletter, Vol. 1, No. 1

Volume 16, No. 2 _____

Feeding Fawns: A Strategy for Wild Returns
Rehabilitation Notes: Tree Squirrels
Intraosseous Fluid Administration Utilizing the Avian Femur
Book Review: "Health & Management of Free-Ranging Mammals"

Volume 16, No. 3 _____

Euthanasia in Wildlife Rehabilitation
Current Guidelines for Euthanasia in Wildlife Rehabilitation
How to Make a CO_2 Chamber
IWRC Newsletter, Vol. 1, No. 2
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Immunoglobulins and Their Function in Colostrom
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Rehabilitation Notes: Northern Harrier
The Digestive System of the Monogastric Herbivore: With Comparisons to the Ruminant
IWRC Newsletter, Vol. 1, No. 3

Volume 17, No. 2 Out of Print

Volume 17, No. 3 _____

Gibbon Rehabilitation Procedures in Thailand
Rescue & Rehabilitation of Badgers in Britain
IWRC Newsletter, Vol. 1, No. 4

Volume 17, No. 4_____

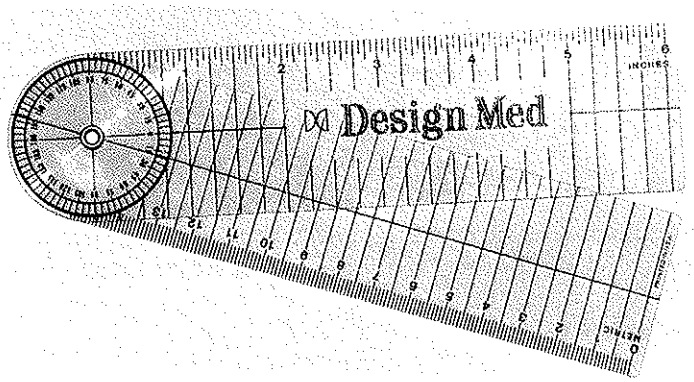
Avian Foot-Mold Wrap
Survey of State Regulations Governing Wildlife Rehabilitation 1994
Swallowed Fish Hook Removal Technique
A Simple Duck Brooder
1994 Annual Report
IWRC 1995 Literature Catalog

IWRC Products for Sale

Goniometer: Finally, an inexpensive way to measure wing extension! This instrument is used in the assessment of normal range of motion in animals that have recovered from injuries.

Price $5.00

Qty. _____ **Total** _____





IWRC Logo T-shirts!

Made of 100% Cotton (pre-shrunk) these are sturdy and wearable for working with the animals! Available in black & white with logo as pictured. **Also now available** in new two new colors; lt. blue & dk. green, as well as black & white!! New "pocket-logo" design also now available!

Circle Color: Black White Blue Green
Circle Design: Large logo Pocket logo
Circle size: **S M L XL**
Price $14.00
Qty. _____ **Total** _____

IWRC Logo Tote Bag:

Heavy canvas, roomy, black with bright IWRC logo!

Price $ 15.00

Qty. _____ **Total** _____





Wildlife Cards!!

Developed at Cascades Raptor Care Center, these beautiful cards by Nancy Allen and Karen Pidgeon, will make your thank you's and note writing easy! Four wildlife design notecards, two of each for a set of eight cards, or eight "Thank You" cards in a set. Printed on recycled paper with envelopes.

Circle one: **Thank Yous** **Raptor Card Set** **Price $5.00/set**

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Membership benefits: Four issues of the *Journal of Wildlife Rehabilitation*, a membership directory, an annual conference proceedings, and discounts on conference registrations, skills seminar registrations plus a 10% discount on literature purchases!

Memberships outside the US, add $4.00 per year for Canada and Mexico and $6.00 per year for all countries. Please submit payment in US funds.

Proposal Application Call for Papers 1995 IWRC 18th Annual Conference

Please review the introduction and presenters "Policies and Procedures" before completing this proposal application. All proposals must be submitted on this form, preferably typewritten. Only one proposal per form is acceptable. Applicants are encouraged to duplicate the form to submit multiple topics. No supplemental materials need come with the proposal.

Name: _____

Organization: _____

Address: _____

City: _____ Ste/Province: _____ Country/Zip Code: _____

Business Phone: ( ) _____

Home Phone: ( ) _____

Best time to contact: _____

Categories of Presentations: **Time Requested:** (If you wish to include Q/A time, please allow for this in your time request. Workshop presenters allow for set-up & break-down time if needed).

Poster Session / Case Report	15	20		
Paper	15	20	30	45
Workshop	45	90		
Roundtable Discussion	45	90		

Presentation Title: _____

Conference Abstract (minimum of one paragraph): _____

_____

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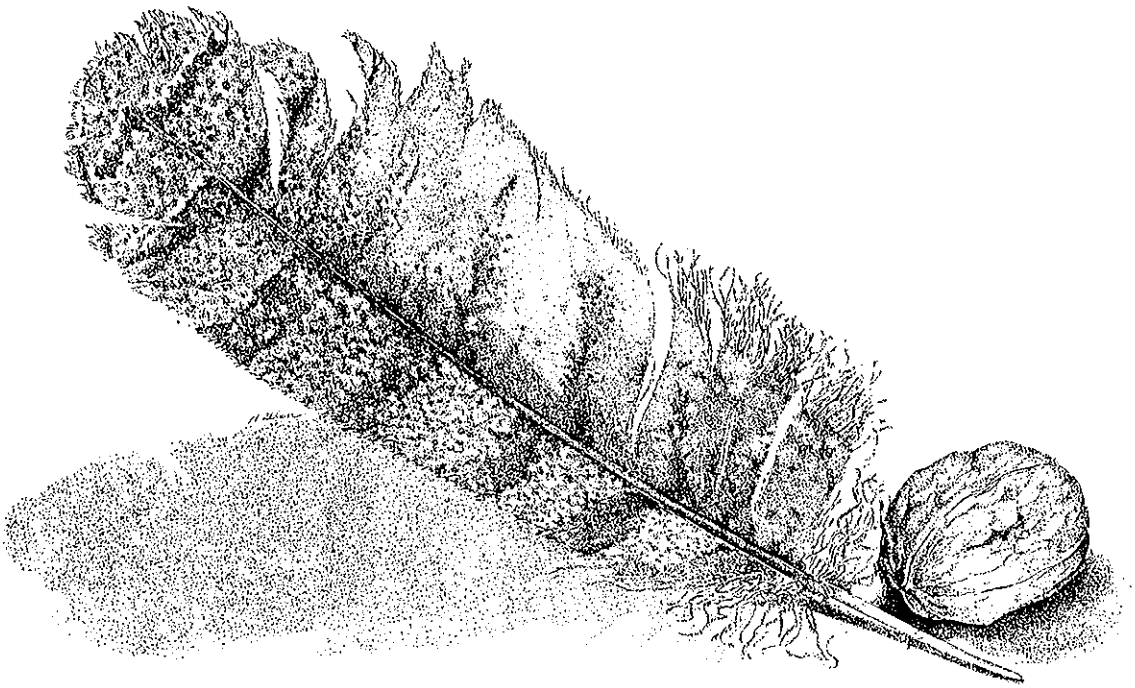
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Above is my presentation proposal for the 1995 IWRC Annual Conference. I hereby acknowledge and agree to IWRC policies, procedures, and deadlines for presentations.

Signature _____

IWRC
Call for Papers



Proposals must reach the IWRC office, 4437 Central Place, Suite B-4, Suisun, California 94585, postmarked by April 14, 1995.

From:

Address Correction Requested

IWRC
4437 Central Place, Suite B-4
Suisun, California 94585
USA

ing job of soliciting donated items and their efforts are much appreciated!

The Saturday night banquet was well attended and several awards were handed out to some special folks. Plaques were presented to our two hosts for their efforts, and special achievement certificates were given to Marge Gibson for her membership outreach work, and to Judy Shaffer for her unselfish giving of her time and energy to help out every year at the conference. Two of our Skills Seminar instructors, Debbie Daniel and Kathy Hobson, were presented with plaques and IWRC logo watches for 10 years of service to IWRC!

We hope that all of you who attended the conference left with some new and helpful knowledge and information and that you enjoyed yourselves as well. Hope to see all of you at next year's conference in Virginia Beach, Virginia, where we will be focusing on "Uncommon Care for Common Creatures!"

State and Provincial Representatives Report

Marnie Allbritten, Board Representative

The State and Provincial Representatives Project is continuing to grow. This year, we have 18 states and Canadian provinces represented and one additional application is presently being processed by the selection committee.

During the past year, we completed a continent-wide survey of state and provincial regulations for wildlife rehabilitation. Forty-three states, 1 territory and 2 Canadian provinces replied to our survey and a summary of the data is included in this report. Many of the respondents also included copies of regulations pertaining to wildlife rehabilitation in their locales and these will be stored at the IWRC offices in Suisun after completion of the project.

Many state representatives presented papers at this year's conference. Karl Grantmyre, one of our Canadian representatives, did an outstanding job on two technological advances in raptor rehabilitation. Becky Picton, our representative from Oregon, succeeded in scoring another hit with her paper on avian tuberculosis.

The reps. meeting, which took place on Friday evening, concentrated mainly on a discussion concerning the development and adoption of consistent wildlife rehab. standards for all states. While this is a tall order in terms of accomplishment, the folks present were more than willing to pitch in. They felt that IWRC could best represent their views on standards to state and provincial governments and this is something that we will continue to pursue.

One of my goals is to see all states and provinces represented on the project. I am hoping that we can accomplish this before the next national meeting. If you or someone you know would like to represent the rehabilitators of your state through this important project, please contact me at (503) 440-3353 or 440-6895 and I will be happy to talk with you about becoming a representative. With your help, we can continue to grow and do great things for rehabilitation.

1994 Skills Seminar Summary

Christina Casey, Skills Seminar Coordinator

This year there were 12 Wildlife Rehabilitation 1AB Skills Seminars[SM], 10 advanced classes and two Advanced Skills Seminar Series (consisting of seven advanced classes each). We served 409 students with the basic classes and 460 advanced participants for a grand total of 869 rehabilitators taught this year. Our program is the only one of its kind, nationwide, that offers "hands-on" supervised basic and advanced skills training sessions for the rehabilitators of sick and injured wildlife.

The Basic Skills Seminar classes were held in seven states: Massachusetts, Texas, California, Florida, Wisconsin, Virginia, and North Carolina. We also provided Basic classes to two Canadian province, Alberta and Manitoba. Our Advanced Skills Seminars were held in Florida, New Jersey, Ohio, and Alberta, Canada. The two advanced skills series were held in California and Oregon.

Dr. Celia Valverde traveled to Honduras with the Humane Society of the United States in July to teach a modified basic course using our Spanish version of the 1AB manual. The class incorporated local veterinarians and biologists who team-taught with Celia. This is our third class in central America and we hope to have more in the future. Celia, who speaks in English and Portugese fluently, also has gotten good at lecturing in Spanish. We have also developed a set of work slides in Spanish for these classes.

Each year our program grows, reaching more and more rehabilitators around the world. If you are interested in hosting a skills seminar, contact our office and we will gladly explain the planning process. We look forward to continued growth of the program and the many benefits that it brings to wildlife rehabilitators as well as the animals they work so hard to return to the wild.

IWRC Revenue & Expenses Statement - 1/1/94-12/31/94

Beginning Balance 1/1/94		$29,392.34
REVENUES		
Conference	32,774.77	
Literature	20,414.46	
Membership	54,302.50	
Skills Seminar	62,363.00	
Research Committee	1077.00	
Other Income	910.49	
Interest Income	401.02	
	$172,243.24	
EXPENSES		
Administration	39,794.44	
Conference	12,175.50	
Skills Seminars	45,711.18	
Journal	24,416.84	
Literature	18,350.86	
Board of Directors	2,985.67	
Membership	14,340.92	
Standards	680.92	
Raptor Symposium	1,378.89	
Research Committee	61.25	
Miscellaneous	337.25	
	$160,233.72	
Ending Balance 12/31/94		$41,401.86

Treasury Notes

Jan White, Executive Director

In 1994, the IWRC continued to grow and develop its various programs in spite of the fact that our income was essentially the same. We increased our efficiency and did more with our funds than was previously possible. For example, we leased an upgraded copy machine (for only $10/mo more) that enabled staff to do more in-house printing thus reducing the amount of funds that were spent on "outside" printing.

Last year we announced we were computerizing all our financial records. We did so but our acccounting project turned into a "larger than life" experience. We switched from a cash to accural basis and lived to regret it! It was too complicated. After consulting with our accountant, Al Beane, we discovered that most non-profits work on a cash basis and with good reason. So, beginning this year, we will simpify our accounting and become even more efficient! The computerized records enabled our accountant to review our records faster and thus reduced the amount of money we spent on our annual compilation report.

For the last several years we have been trying to build a reserve fund capable of carrying IWRC for three months in the event we needed it. Luckily, we have not but thanks to careful management and efficient operations, we do have a savings account now that would carry us through 2.5-3 months of no income. Hopefully, we will not ever have such a period, but it is nice to know that if we need it, it is there. Meanwhile, it generates interest income that can be used to assist IWRC programs. This is a far different financial picture from just two years ago, when we spent virtually all of our annual revenue on our programs by design. However, the organization has grown to the point where such an approach is no longer appropriate, especially with our cyclic economy here in California. We have come a long way and have a long and productive journey a head of us! We thank all our members for their support and look forward to serving all of you!

Incoming Wildlife

Regulations upon receipt of wildlife are generally minimal, and generally relate to Threatened & Endangered (T&E) or state sensitive species, or other (large or game) species. Eight states require that the state be notified upon receipt of T&E. Only 1 state requires all wildlife to be seen by a DVM, with another 3 requiring that wildlife by seen by a DVM only if treatment is required. A few states (3) allow for the rehabber to accept wildlife outside the scope of the permit in emergency situations, but notification is required for special instructions, if any.

Release Requirements

Maximum time to hold an animal:	No. of States
None specified	17
"...as soon as possible..."	10
No longer than 30 days	1
60 days	3
90 days	2
120 days	1
180 days	3
365 days	1

Generally, most states require that wildlife be released as soon as the animal is recovered and/or is physically and behaviorally capable of survival on its own. Eleven states have maximum holding times, ranging from 30 - 365 days. For the states that specify maximum holding times, extensions can usually be granted in certain circumstances (generally if it enhances chances of survival).

The location of the release is usually specified as "...the wild..." or the animal's "...natural habitat...." In 10 states, the release site is specified at the point of capture or near vicinity. In 20 states, the wildlife officer must approve the release site or location.

Most states do not allow for non-releaseable animals to be held by the permittee unless they are held for an approved use. However, only a few states, and only in infrequent circumstances, stipulate that euthanasia is the only option. Most states (23) allow for non-releaseables to be used for educational purposes, research, zoos, propagation, or transferred to other institutions which are properly permitted to receive such wildlife. Six states specifically allow for the rehabber to retain non-releaseables for cross-fostering, surrogate parenting, and/or orphan imprinting.

Transfers between rehabbers is specifically allowed in 5 states, especially if it results in enhanced care or more appropriate facilities.

Only 1 state specifies in its regulations that wildlife be marked or tagged prior to release.

Recordkeeping

A specific format for ongoing recordkeeping is specified by 14 states. In some cases, the annual report format is the same format for current records. Most states do not specify requirements for keeping records, although 9 do specify "current or up-to-date," while another 4 specify "daily or within 24 hours." Twenty states require that the permittee's records be available for inspection, generally at reasonable times and in a reasonable manner. Two states require that the permittee's facility records be maintained for 5 years.

Annual Report

Twenty seven states specify the format to be used for the annual report. Only one allows for joint reporting with the Federal report. Six states do not currently require an annual report to be submitted. Most are due between Dec 31 and Feb 1. Thirty six states require listing of each individual animal (some ask for species, age, and/or sex); 14 require identification of the cause, nature of injury or illness, and/or location (some also require the name and address of the rescuer); 24 require date in; 26 require date out; and 34 require final details of disposition (i.e., release, transfer, deceased, etc). A few, 7, require details of any treatments administered. Only a few require the rehabber to provide totals as to numbers of different animals, species, etc.

Restricted Wildlife

Restricted wildlife species, if any, are generally T&E, state sensitive, big game, or species seen as vectors for disease. Nineteen states indicate restrictions of some type. Generally, special permission is required for rehab activities for these species. The states that list concerns for rabies, mostly confined to east of the Mississippi River, may require that rehabbers be pre-immunized, have special training, work closely with a DVM, or, in a few cases, may not allow for the rehab or release of rabies vector species.

A few states do not require permits for possession or rehab of certain common, generally small species such as sparrows, rodents, rabbits, etc.

List of Rehabilitators

From the lists of rehabilitators provided by 27 states, the list always included the reha-

bilitators name and address, 24 listed the telephone number, 19 indicate the species for which the rehabber is currently permitted, while a smaller number, 4, also indicate species specialty or facility specialty. Two states also provide a map of the state, by county, indicating location of all permitted rehabbers.

One state requires permission from the rehabber to include certain or all information on the list.

Conclusions

As expected, the content and extent of state regulation governing wildlife rehabilitation varies widely from state to state. As shown, most states do recognize wildlife rehabilitation as an activity, with the extent of regulation seemingly a function of whether the state desires to merely "allow for such activity" or actively "regulate the activity". The list of rehabbers provided by 27 states indicates over 4000 permitted rehabilitators nationwide. And this number does not include the other 23 states, nor does it include all of the sub-licensees, transporters, and other volunteers connected with wildlife rehabilitation. Clearly, this presents a challenge to states as the public becomes increasingly concerned with the welfare of a single animal they may come across in need of aid or assistance, and as more people become interested in taking up some aspect of wildlife rehab. As regulations come up for review and revision, the consideration of testing and more stringent requirements suggest a trend towards more rather than less regulation, presumably with the intent of raising the standards of care given to our nation's wildlife in distress.

We deeply appreciate and personally thank the Wildlife Offices from all 50 states for taking the time to respond to our survey. This summary analysis is offered as additional input for both wildlife officials and rehabilitators involved in a review of the regulations in their states. Fourteen states indicated that their regulations were either in the process of being changed or will be in the near future. A number of those which have recently completed the review process have indicated that input from a number of constituencies was solicited, most notably from the rehabbers themselves. And, as we will profile in our next article, many of these regulations appear to be the most workable and practical.

(A more detailed and comprehensive report of the survey data and findings, state by state, is available from the authors through WildAgain at 29319 Northstar Lane, Evergreen, CO 80439.)

Late Breaking Jobline Announcement

Marine Mammal Center
Golden Gate National Recreation Area
Ft. Cronkhite,
Sausalito, California

Assistant Stranding Coordinator

Salary Range: not given, write for details.

Duties: Handling distressed animal reports, coordinating rescue efforts while working with private and public agencies, completing stranding reports for government agencies, maintaining the database, coordinating releases, maintaining rescue equipment and vehicles. Schedule varies, weekends required.

Qualifications: Successful candidates have excellent communication skills, are computer literate, and work well with others.

Application Procedure: Send resume and cover letter to: Director of Animal Care at the address given above.

About the Authors...

Allan and Shirley Casey, wildlife rehabilitators since 1986, are the founders of WildAgain Wildlife Rehabilitation, Inc., based in the foothills west of Denver, in Evergreen, Colorado. In addition to providing direct wildlife care, they also conduct and sponsor statewide training on introductory and advanced rehabilitation subjects. WildAgain's goals also include enhancing relationships between rehabbers and regulatory agencies.

The Casey's both hold the degrees of Master of Business Administration from Southern Methodist University. When not rehabbing, Allan works for a major international coal mining and marketing company and Shirley manages her own consulting company. Shirley is also very active statewide in the Colorado Environmental Coalition and the Colorado Audubon Council.

J. Wildlife Rehab 17(4):11.
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Simple Things That Make A Difference:

Swallowed Fish Hook Removal Technique

David Thraen
All Wildlife Rescue International
420 Redondo #102
Long Beach, CA 90814-1541

ABSTRACT

A method for removal of swallowed fish hooks is described using a catheter.

KEY WORDS: fish hook removal

Procedure Description

While running a wildlife rehabilitation program at the Long Beach Animal Hospital, Dr. Bill Ridgeway showed me this easy technique for removing swallowed fish hooks in seabirds and turtles. We have used this technique to remove hooks in 48 birds and 6 turtles and it worked in all but 2 cases.

After determining the swallowed fish hook is beyond the reach of instruments, check to see that there is about three feet of line extending beyond the patient's mouth. If the line is too short, tie an additional piece of line, being sure to use a secure knot that will not slip.

Using an appropriately sized French feeding catheter, squarely cut off the end just before the opening at the tip. Discard the end. (See Figure 1.) The fishing line is then threaded through the catheter, starting at the small (sliced) end. (See Figure 2.) Without the use of a long rod with the line tied to it, it can be quite difficult to feed the fishing line through the catheter.

Holding the patient securely with its mouth open, (obviously this is at least a two-person procedure) hold the fishing line and slide the catheter along the line through the patient's mouth and down the esophagus. The catheter will stop when it reaches the bend in the hook. By gently pushing on the catheter, the hook can be disloged by it.

Once the hook is dislodged, great care must be taken to prevent re-hooking the patient. Holding the catheter securely, gently but firmly pull on the fishing line to draw the hook inside the catheter. The catheter then becomes a kind of cover for the hook. Now, with the fish hook safely inside the catheter, pull the catheter out of the patient.

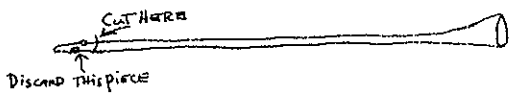


Figure 1. French feeding catheter with end cut off.

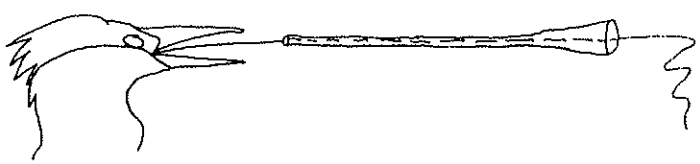


Figure 2. Threading the catheter down a fishing line.

Book Review

Urban Wildlife Habitats: A Landscape Perspective

Lowell W. Adams
University of Minnesota Press
Minneapolis, Minnesota
1994
186 pages

This book represents the best and the worst aspects of the latest trend in wildlife biology to try to preserve or enhance wildlife habitats in urban settings. The book starts out with an excellent introductory primer on the basic concepts of wildlife biology. The author explains the theories of trophic levels, succession, and Gause's principle of competitive exclusion in easy to understand language. If the reader of this review is unfamiliar with any of these concepts, this reviewer highly recommends this book. It will not only give an understanding of these basics but will also paint a very realistic picture of the kind of challenges that wildlife and wildlife biologists are facing in urban settings.

However, the limitations of this book are somewhat disturbing. While such topics as habitat patterns in the landscape and managing urban habitats for wildlife are covered well on the theoretical level, practical suggestions on methods and techniques of urban habitat improvement are much too general for a novice to the field. When specific techniques are mentioned, they are often out of date. For example, the author suggests the use of riprap and gabions for stopping streambank erosion. These techniques are no longer preferred due to their total elimination of streambank habitat for both fish and amphibians. In addition, the author's knowledge of wildlife diseases is sadly lacking. He refers to aspergillosis as a disease caused by moldy bird seed and seems to feel that histoplasmosis is a major zoonotic threat associated with wildlife. Although his motives in mentioning both of these diseases are laudable, his knowledge leaves much to be desired.

Lastly, in his chapter on "Managing Animals That Become Pests," the author suggests the use of both PA-14, the wetting agent that is used to freeze birds to death, and "sticky, non-toxic repellents" for controlling such species as rock doves (the common city pigeon). These methods are mentioned casually and are clearly considered acceptable by the author. No mention is made of the inhumanity of allowing birds to slowly freeze to death or the fact that the so-called "non-toxic" sticky repellents frequently trap non-targeted species such as hawks and can cause eventual death from dehydration or starvation. This type of indifference to the suffering of "nuisance" animals typifies the worst aspect of scientific objectivity and has no place in responsible wildlife biology.

In spite of these drawbacks, however, this reviewer still recommends this book to wildlife rehabilitators. It is the first concise, well-written treatment of this topic that has been made available to the general public, it offers an excellent list of source materials in its appendices, and it gives an excellent overview of the possibilities for both preserving and creating urban wildlife habitats.

-Marnie Allbritten-

A New Year's Message for IWRC Members

The International Wildlife Rehabilitation Council would like to take this opportunity to say *"Thank You"* to all of our members for their support in the past year. Whether you attended an IWRC Skills Seminar[SM], renewed a membership or became a new member, submitted or reviewed an article for the *Journal of Wildlife Rehabilitation* or the conference proceedings, attended our annual conference or made a presentation at the conference, donated time, money, or materials, or offered your assistance to someone who may have called you on a referral from our *Wildlife Hotline*! Our appreciation goes out to each and every one of you! We hope that you will have a wonderful 1995 and may all your troubles be "wee" ones!

Non-releasable Animal Request

The Brookfield Zoo is developing a native cypress swamp exhibit. Education is a major component of this exhibit with a crucial focus being a conservation message about swamps and other wetlands. In accordance with this, we hope to house non-releasable animals appropriate for this habitat. This will help emphasize our message and give homes to animals that cannot survive in the wild.

The following is a list of species being considered for inclusion. We will have to look at their individual 'handicaps' carefully to be certain that they will thrive in our enclosures. If you have any of these species and are licensed to relocate them, please contact me.

Snowy Egret
Green-backed Heron
Glossy Ibis
Anhinga
Purple Gallinule
Black-necked Stilt
Clapper Rail
Sora Rail
Limpkin
Wood Duck
Blue-winged Teal
Green-winged Teal
Pileated Woodpecker
Prothonoatary Warbler
Common Yellowthroat
Hooded Warbler
Black & Warbler
Swainson's Warbler
Louisana Waterthrush
Ovenbird
Indigo Bunting
Lazuli Bunting
Varied Bunting
Painted Bunting
Wood Thrush
Northern Cardinal
Summer Tanager
Scarlet Tanager
Eastern Screech Owl
Hepatic Tanager

All transactions will be subject to review of appropriate licensing and permits. For more information, contact Celia Falzone at (708)485-0263 ext. 473 or fax to (708) 485-3532.

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Get a helping hand from your colleagues!

Wildlife rehabilitation can be challenging or frustrating depending upon how quickly you find answers to those first-time problems. When you are faced with a new situation or looking for a new solution to a recurring problem, avoid that feeling of hopelessness or isolation and give us a call. The Wildlife Hotline is designed to help *wildlife rehabilitators* by connecting you to an expert who can give you the answers you need. IWRC office personnel staff the hotline and make referrals to any number of specialists in our diverse field. So if you are stumped or just want a second opinion from someone who's been there—give us a call and we will try to help. Calls should be placed during business hours (PST) for the fastest response, however, the answering machine will take messages at any hour of the day.

To use the hotline: call (707) 864-1762; leave a message detailing your question, problem or what specific information you need. The Wildlife Hotline will return your call COLLECT with the help you need.

Photo of Dr. Dennis Bartlemeir and Marge Gibson by Don Gibson