



FAWN



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THE WILD SIDE

Mark Hagan - NMFWA President

Another year has gone by, and we mark its passing with the completion of our annual training session. It was good to see old friends again and make new ones. It is a tradition worth being a part of. The annual training session also brings about the transition of a new president of the National Military Fish & Wildlife Association. Thus, you are now subjected to my first Wild Side commentary.

For those of you that were not able to attend this year, there were a couple of important events that you should know about. At the Annual Business Meeting, the membership voted unanimously to allow the Board of Directors to pursue an investigation into taking appropriate action through the Office of Special Counsel and the Merit System Protection Board regarding outsourcing natural resource personnel. The very next day, the Board of Directors authorized the expenditure of funds to retain legal counsel for this endeavor. I am now in the process of retaining legal counsel and hope to begin our investigation very soon. Now is the time for the Association to rally and the members to stand united on this important issue.

Another notable event was the eloquent banquet speaker and Past President, Tom Warren, who elaborated on the beginnings of the Association and its struggle to survive. I cannot match the intensity of the impassioned speech that was given. But it is clear that the Association has come a long way since its inception. With the passage of time, we become more and more recognized as a professional organization. This is a fair and well-deserved reputation that each one of us should take pride in. It also means that we must continue to work hard to ensure we maintain and nurture this professional reputation.

The tradition of an active Board of Directors still continues. The Board is working on improving the web site and developing policies to guide its progress. Work has also begun on preparing for the next annual training workshop. These are large and ambitious efforts and any offer of help would be gratefully accepted. The Directors have agreed to contact as many members as possible, with an emphasis on those people we may have lost touch with. They will be working on getting the membership more involved in the Association. These are just a couple

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examples of the important work being accomplished by your Board of Directors.

I have been involved with the Association for many years and have heard many sentiments expressed about our organization. The most common theme is, "I have too many things going on and I don't have the time." I used those excuses for many years, but then realized that I had to give something to the Association. Another expression I have heard, "the Board of Directors do not listen, my opinion is not welcome or considered." Let's make sure this concern is resolved because everyone's input is important. On the back of this newsletter you will notice that the Board of Directors and Committee Chairs are listed with phone numbers and email addresses. I urge you to contact them

and offer your opinions and services. The Board of Director meetings are open to the members and everyone is encouraged to attend. The Annual Business Meeting is another valuable forum for members to express their views and opinions.

Spring brings a rejuvenation of spirit and a bustle of activity. So now is a good time to take pride in our accomplishments and with spirits high, dedicate some time and effort in improving our profession and the Association. I ask every one of you to get involved and help your Association continue to grow and improve on past accomplishments. I look forward to seeing everyone in Chicago next year.

Mark Hagan - Mark.Hagan@edwards.af.mil

National Military Fish and Wildlife Association Board of Directors Meeting, 28 March 1999

The Board of Directors (BOD) Meeting of the National Military Fish and Wildlife Association (NMFWA) was held in the Sandpebble Room, Hyatt-Burlingame, Burlingame, California. The meeting was called to order by President Marjorie McHenry at 17:40, on 28 March 1999.

The first order of business was to consider a request for the NMFWA mailing list. Mr. Tom Warren of Fort Carson, Colorado introduced Mr. Bill Howard, President and CEO of the Wildlife Habitat Council (WHC) in Maryland who spoke about his organization. Mr. Warren explained the unique partnership he has at Fort Carson with the WHC. The purpose of the WHC is to do wildlife conservation and habitat enhancement on certain properties. After some discussion, the Board voted to allow Mr. Howard to receive mailing labels for a one time mailing to the membership. Mr. Warren will edit the list to ensure it is sent to installation personnel.

Ms. McHenry introduced Mr. Jess Cobb, Webmaster, who designed and implemented a trial web site for the NMFWA. Copies of the Memorandum of Agreement for continuation of the web site for two years was distributed to the Board. Continuation of the bulletin board component was discussed, particularly regarding potential liabilities to the NMFWA. Mr. Cobb presented options for a "checks and bal-

ances" system for the bulletin board; specifically disclaimers, checkpoints that post a disclaimer, and submitting all requests to a specific person via electronic mail for approval. Mr. Cobb also discussed the turn around time of submittals and links. Ms. McHenry recommended four items: (1) approve the Memorandum of Agreement, (2) select individuals to decide what is appropriate to post on the bulletin board, (3) addition of an Addendum to the MOA to address the bulletin board, and (4) development of a policy or guidelines to address what type of information will be allowed on the web site.

A motion was made to accept the web site agreement. Ms. McHenry requested that the motion be changed so that the President and/or Vice President are responsible for what is posted on the bulletin board. The motion was restated with the clause to designate the President or someone he/she appoints to determine what is appropriate for the web site's bulletin board. The motion passed with one abstention.

The Government Affairs Committee Chair, Mr. Mark Hagan, discussed the committee's progress. The committee developed a NMFWA position paper on commercialization activities, sent letters to Secretary of Defense, Mr. William Cohen, and the Undersecretary of Defense, Personnel and Readiness, Mr. Rudy deLeon, and developed a draft handbook on commer-

cialization activities and outsourcing. There was discussion regarding NMFWA membership interest in this issue, the possibility of sending letters to Congressional staff and contacting other agencies regarding their support. Ms. McHenry reminded everyone of the special meeting regarding this issue on Tuesday evening.

Mr. Hagan also reported on the Legacy Funding resolution. Clarification regarding the current amount of Legacy funding (\$50 million) authorized by Congress was received from DoD. Mr. Peter Boice and the Legacy Staff were contacted regarding the development of guidelines for Legacy funding. Ms. Allison Dalismer will be speaking at Friday's Session to provide more information regarding Legacy. Additional discussion followed, and it was agreed to discuss the issue further at the Tuesday evening meeting.

Junior Kerns provided a revised Sikes Act Handbook, as Amended through 1998, including the Disabled Sportsmen's Access Act of 1998. This handbook will also be available for members at the registration desk, as well as at the Training Sessions.

Mr. Junior Kerns agreed to attend the National Defense Industrial Association Symposium, in Denver, Colorado on behalf of NMFWA. He will provide a report to the Board and anyone who is interested after that meeting, which was held during the same week as this NMFWA Training Workshop.

Mr. Jim Beemer provided a short summary of the NMFWA member's meeting held at the Buffalo, NY Wildlife Society Meeting. He encouraged all NMFWA members and the BOD to attend. He has also taken the lead in getting the NMFWA Training Sessions to be accepted as contact hours for The Wildlife Society's Professional Development Program.

Mr. Rick Griffiths updated the Constitution and By-Laws from last year's business meeting, and updated copies were distributed to the BOD. The proposed amendments to be voted on this year will be addressed at the Annual Business Meeting. As Nominations Committee Chair, Mr. Griffiths, spoke to the success of voting via the web site. Three quarters of the votes received were via the web site. Ballots were included with the last issue of the FAWN, but many members did not receive their ballots before they were due. Al-

though voting via email eliminates the anonymity of the ballot, this did not seem to be of concern in the following discussion. Photographs of all nominees were requested for the ballots however, it was difficult to copy the pictures that were received and therefore they were not used. An attempt will be made next year to scan the pictures and include them with the ballots.

The Membership Database Chair, Mr. Greg Lee, was not in attendance so Mr. Griffiths spoke to the issue. There were 75 updated applications received and problems still exist in changing the database platform. Mr. Lee should be consulted for a complete recommendation on how to update the database.

The Host Committee Chair, Ms. Julie Eliason, reported that 145 people had preregistered for the NMFWA Training Sessions. Approximately 37 people signed up for Bat Conservation International Bat Workshop and 36 persons were in attendance. The poster was supposed to have arrived, but had not been located yet.

The Program Chair, Mr. Dave Tazik, discussed the program and commented on the quality of the speakers this year. The professional appearance and quality artwork by Mr. Chester Martin were also recognized and commended.

Herpetology Working Group Chair, Mr. Jim Beemer, discussed the charter and suggested that it should be approved at the working group meeting. Mr. Beemer also discussed informing the membership on how easy it is to develop/begin a working group.

Mr. Beemer also brought up the issue of distributing correspondence to the membership. He suggested getting a first class bulk mailing permit instead of simple bulk mail. Discussion followed regarding mailing costs, updates of mailing addresses, and how much mailing might be reduced in the future with the development of the web site. First class mailing seems to be the best method to distribute election ballots.

Next year's NMFWA meeting will be in Chicago, Illinois and the Program Chair is Mr. Don Pitts. A Host Committee Chair still needs to be determined. Interest was expressed in involving the Corps of Engineers Research Laboratory in Champaign, Illinois.

There was a final discussion on the issue of registration fees for retired persons and students. There was open discussion on the issue and it will be addressed later by the new BOD.

A motion to adjourn was passed and the meeting ended at 1945.

Mark Hagan - Mark.Hagan@edwards.af.mil

National Military Fish and Wildlife Association Board of Directors Meeting, 2 April 1999

The National Military Fish and Wildlife Association (NMFWA) Board of Directors (BOD) meeting was called to order by President Mark Hagan at 13:18, on 2 April 1999. The meeting was held in the Bayside Room, Hyatt-Burlingame, Burlingame, California. The Board of Director Handbook was distributed to all new board members.

The BOD went over the list of standing and ad hoc committees and appointed chairs. The following is a list of the committees and chairs. Vacancies were also noted.

Nominations	Marjorie McHenry
Awards	Glen Wampler
Membership	Greg Lee
Poster	Vacant
Archives	Tom Warren
Audit Chair	Jim Bailey
Host Committee	Vacant

Suggested possible Host Committee Chairs included Randy Berry, Kim Mello, Rick Clewell, Tom Borak, and Jay Rubenoff. MCB Camp Pendleton is currently holding the poster.

The Audit Committee report was presented to the BOD by Valerie Morrill. The purpose of an audit is to protect the office of Secretary/Treasurer and the NMFWA. Committee members were Valerie Morrill and Rick Griffiths. There were some findings, but no evidence of wrongdoing. They did find some discrepancies in the accounting system. Corrections should be made. The starting balance of December 31, 1998 should be \$26,484.86. One major item that was found from the audit are the different types of cash flow. Payments made in cash are difficult to track. The Audit Committee made several recommendations. Basic accounting procedures should be implemented. Monthly comparison of all expenses should be made so that they are kept up to date. Perhaps the Audit Committee should review the books on a regular basis, such as monthly or quarterly. There should be consistency among Treasurers. There should be a three-point audit tracking system: (1) Ledger, (2) Re-

ceipts, and (3) Bank Statements. On cash only exchanges, income should be checked twice, by different people, to protect the Treasurer. Deposits should be made on a daily basis. Convert the credit card to an ATM card. Receipts are needed for all expenses. It was suggested that the NMFWA purchase a bank keeping software system. This would allow establishment of income and expense categories, assist with reporting to the IRS, and assist with documenting cash flow. It was suggested that a Standard Operating Procedure (SOP) be developed for the Treasurer and Audit Committee. Rick Griffiths might be able help with SOP. The BOD discussed software requirements. The systems should be very quickly accessible and that the speed and ease of use is important. Purchasing a multi-license version so other Treasurers can use it was mentioned. The software can be purchased since it is within authorized spending limits. Further discussion involved establishing an account in the city that the conference is held in so that all collected funds can be deposited on a daily basis. It was suggested that the Audit Committee and the Treasurer work on a policy. It was decided that the President-Elect (Dave Tazik) and the Secretary/Treasurer (Tammy Conkle) will be on the account.

The BOD discussed the issue of staying with the Wildlife Management Institute (WMI) Conference. It was stated that NMFWA is currently committed to stay with WMI until 2001. Dave Tazik will investigate the opportunity to leave WMI to and pursue other alternatives, such as meeting with The Wildlife Society.

The Herpetology Working Group charter was approved by the Herpetology Working Group. The motion passed to approve the Herpetology Working Group and to accept the charter. It was requested that a herpetology workshop and/or a herpetology session be organized and sponsored by the working group for the next NMFWA training session. The BOD were provided with the guidelines for forming NMFWA Working Groups.

The BOD discussed the need to formulate guidelines and policies for material that is posted on the bulletin board and web site. Rhys Evans volunteered to draft the policy and guidelines. The webmaster, Jess Cobb, has been asked to post a disclaimer on the web site. Rhys Evans is also going to draft policy and guidelines on distribution of NMFWA mailing addresses and vendor participation.

Jim Beemer explained the mailing process associated with the FAWN and the benefits of the bulk rate permit. He stated that the bulk rate permit is \$350.00 and that Bulk Rate Mailing would cost an extra \$91.00. An additional \$295.00 per mailing of the FAWN would be expected. The motion passed to send out all mailings bulk rate, especially the FAWN, and some mailings, such as ballots, should be sent out first class in order to get information to the membership more quickly.

The motion passed to authorize the President to spend up to \$5000.00 to obtain legal counsel in pursuing action through the Merit System Protection Board or other alternatives. This was in support of the motion that passed at the Annual Business Meeting.

The motion passed to allow the Secretary/Treasurer to purchase stationary and create an electronic template, both using the new NMFWA logo.

A request was made that the Eastern and Western Directors determine all the installations in their respective regions and provide maps to post on the web site.

Scott Smith agreed to investigate financial spending procedures for the NMFWA. All At-Large Directors

and Regional Directors need to make contact with the members in their respective areas. The Secretary/Treasurer will develop a list of all the information that could be placed on the web site. The BOD agreed that the President would be responsible for all material placed on the web site until the policy is completed.

It was stated that communication with outside groups is encouraged. It was also mentioned that information about the Herpetology Working Group should be disseminated.

Thomas Wray requested input for the next WMI meeting, specifically items for the program next year. Session topics need to be received by 21 April 1999. Dick McCabe of WMI has offered to have NMFWA host a session in the upcoming meetings, perhaps for the 2001 meeting. Concern was expressed that the WMI meetings are getting less and less attractive, but it was also noted that NMFWA really benefits from meeting with WMI. They are extremely helpful, and have suggested NMFWA could start holding workshops on Tuesday afternoon. Therefore, NMFWA has an opportunity to expand its sessions. It was requested that Army Corps of Engineer activities might be included as a future session.

It was stated that Bat Conservation International (BCI) wanted to partner with NMFWA. Also, BCI wanted to investigate the possibility of presenting information at future meetings.

There being no further discussion, the meeting was adjourned at 1539.

Mark Hagan - Mark.Hagan@edwards.af.mil

WILDLIFE SOCIETY-WESTERN CHAPTER MEETING

The 2000 Annual Conference of the Western Section of The Wildlife Society will be held 27-29 January 2000 at the Riverside (CA) Convention Center. The session on "The future of military lands in wildlife conservation" will be chaired by Dr. Jerry R. Boggs of the Department of Navy in San Diego, CA. This session will consist of 9-10 presentations of 20 minutes each. If you would like to make a presentation, please submit an abstract to Dr. Jerry R. Boggs, Code 4PLN.JB, Southwest Division, 1220 Pacific High-

way, San Diego, CA 92132-5190. Abstracts should be submitted no later than 30 September 1999. Abstracts representing issues within the geographical extent of the Western Section (California and Nevada) may receive some priority; however, abstracts outside that area that are obviously pertinent to the central theme of this session are sought also. Dr. Boggs may be reached at 619-532-1850 or boggsjr@efdswnavfac.navy.mil, if you wish to discuss this meeting.

National Military Fish and Wildlife Association Annual Business Meeting, 1 April 1999

The Annual Business Meeting of the National Military Fish and Wildlife Association (NMFWA) was called to order by President Marjorie McHenry at 14:40, 1 April 1999. The meeting was held in Salon Rooms A and B, Hyatt-Burlingame, Burlingame, California.

The motion passed to defer reading the minutes of the last annual business meeting and accept them as published in the Fish and Wildlife Newsletter (FAWN).

The Secretary/Treasurer read the financial report. The motion passed to accept the financial report as read.

Valerie Morrill and Rick Griffiths provided a report from the Audit Committee. They reported that overall everything appeared to be in order. Tom Warren, Archives Committee Chair, stated that the archives were a detailed history of the NMFWA. Glen Wampler, Awards Committee Chair, announced that the awards would be presented at the Annual Awards Banquet. Members were encouraged to submit nominations for next year. The Law Enforcement Committee will be hosting a 1999 training workshop. Details have been made available at the registration desk. Greg Lee, Membership Committee Chair, asked each member to ensure their information is correct so the database can be updated. Thomas Wray has done another good job this year as the Wildlife Management Institute (WMI) Coordinator. It was noted that the Poster Committee Chair had resigned and the position was now vacant. Anyone interested in becoming the Chair of the Poster Committee was asked to contact any of the Board of Directors. It was also mentioned that a Chair was needed for the Host Committee in support of the 2000 Conference to be held in Chicago, IL. The President thanked all of the Committee Chairs for their dedication and service in making it another successful year for NMFWA.

The Government Affairs Committee (GAC) Chair, Mark Hagan, presented a report on its activities of the past year. The GAC made several contacts with the Department of Defense (DoD) Conservation Committee to increase communication and coordination between the two groups. The GAC had also worked on Legacy funding issues. There is still more work that needs to be accomplished regarding Legacy funding. Most of the work done by the GAC involved the issue of outsourcing, downsizing, and A-76 studies. A NMFWA position paper was written and published in the FAWN. Letters were written to Secretary of Defense, Mr. William Cohen, and Undersecretary of Defense for Personnel and Readiness, Mr. Rudy de Leon, expressing the NMFWA position regarding A-

76 studies and outsourcing. The motion was made to authorize the Board of Directors to proceed with appropriate actions through the Office of Special Counsel and the Merit System Protection Board regarding the legality of using OMB Circular A-76 and/or other rules and laws to determine natural resource staffing levels which result in adverse personnel actions, in spite of the Sikes Act. The motion was seconded and passed unanimously.

The new NMFWA logo has been approved and will enhance the Association's recognition by other organizations.

Two proposed amendments to the constitution and bylaws were proposed. The first amendment called for eliminating the specific reference to the FAWN and just referring to it as newsletter. The motion passed to change the bylaws and just make reference to newsletter. The second proposed amendment involved splitting the Secretary/Treasurer position into two Board of Director positions. After discussion, the motion passed to have two positions, one Secretary and one Treasurer. Both are voting members of the Board of Directors.

A question was raised regarding the acceptance of credit cards at the registration desk. The Board of Directors agreed to research this matter.

Jim Beemer discussed NMFWA working groups and offered to provide more information to anyone that had interest in starting a working group.

It was stated that the ballots next year would be placed on the NMFWA web site. Tim Burr offered to assist on development of the web site and related policies and guidelines.

It was mentioned that Ms. Sherri Goodman might be considering combining environmental, including natural resources, and safety into one office. The GAC will investigate this possibility. Tammy Conkle asked for donations for the Show-and-Tell next year. She is also looking for photographs.

Marjorie McHenry thanked everyone for attending the meeting and requested everyone to get involved in NMFWA activities.

There being no further discussion, the meeting was adjourned at 1540.

Mark Hagan - Mark.Hagan@edwards.af.mil

ABSTRACTS OF THE TECHNICAL PRESENTATIONS AT THE 1999 ANNUAL TRAINING SESSION

Session: Department of Defense Integrated Natural Resources Management Planning. Don Pitts, Chair. 7CES/CEVA, 710 Third Street, Dyess Air Force Base, Texas 79607, (915) 696-5665, donald.pitts@dyess.af.mil.

Impacts of Sikes Act Amendments on Integrated Natural Resources Management Plans (INRMP). Roy L Barker, HQACC/CEVPN, 129 Andrews Street, Suite 102, Langley Air Force Base, Virginia 23665-2769, 757-764-9338, roy.barker@langley.af.mil.

Nineteen ninety-seven saw significant changes to the Sikes Act. Some of these changes affect Integrated Natural Resources Management Plans (INRMP). Installations must complete and begin implementing their INRMPs by 17 Nov 2001. Existing plans that follow the format in AFI 32-7064 should not be redone prior to their current expiration date. All plans must be coordinated with the U.S. Fish and Wildlife Service and the responsible state fish and wildlife agency, and must reflect their mutual agreement regarding conservation, protection, and management of fish and wildlife resources. During preparation of changes and revisions to plans, bases must advertise the availability of the plan for public review and comment. INRMPs do not need environmental impact analysis unless the base opts to complete one. Failure to perform all projects in the plan does not violate the Act, since compliance is measured by a good faith effort to meet the plan's goals and objectives. The funding process for individual projects remains unchanged.

Innovations in Integrated Natural Resource Management Plan Preparation and Uses. Gene Stout, Gene Stout & Associates, 4307 Crane Court, Loveland, Colorado 80537, 970-663-4393, gstout@webaccess.net.

Integrated Natural Resources Management Plans (INRMP) are rapidly evolving throughout the Department of Defense, primarily driven by individual installation initiatives. It is becoming increasingly common to embed National Environmental Policy Act (NEPA) documentation within INRMPs. These plans are becoming the sole natural resources management plan, including (rather than duplicating or incorporating) erosion control, endangered species, forestry, and other plans. On at least one installation, the INRMP has evolved into the sole land use plan, including the military mission plan (with NEPA). Several installations are preparing INRMPs with formats similar to the Environmental Program Requirements format; thus, the INRMP directly drives the budget

process. Several installations are using an objectives-based format for individual projects that directly supports the adaptive management process. Military commands should continue to guide, rather than dictate, policy on the development of INRMPs.

INRMP/Wildlife Strike Hazard Integration. Gene Leboeuf, Air Force Bird Air Strike Hazard Team, Kirkland Air Force Base, New Mexico 87117-5671, 505-846-5679, leboeuf@smtps.saia.af.mil.

There are 4,937,429 acres under the control of the US Air Force (active) and Reserve Guard facilities (USAF). This immense land holding provides natural resource managers a tremendous challenge and an obligation to be good stewards. Along with this obligation of stewardship is a primary mission of supporting our nation's defense capability. Coupling our environmental responsibilities with war readiness can complicate management decisions. For Air Force biologists, implementing Integrated Natural Resource Management Plans (INRMP) can literally mean managing wildlife activity around aircraft activity. If not managed wisely, wildlife can seriously threaten USAF assets and lives. Birds and other forms of wildlife have caused 33 deaths and are responsible for nearly 40 million dollars damage per year to USAF aircraft. A successful INRMP for a base with a flying mission must serve more than one need. Such a plan relies on creativity, accounts for aircraft movements, and does not jeopardize the flying mission.

Updating the Forestry Component of the INRMP Using the NEPA Approach. John Whitesides, 20 CES/CEV, Shaw Air Force Base, South Carolina 29152, 803-895-9993, john.whitesides@shaw.af.mil.

The evolution of the Integrated Natural Resource Management Plan has invoked an interdisciplinary approach. Planning ahead for annual updates to the Forestry Component Plan (FCP) will eliminate the need for a major update every two years. The environmental impact analysis process, required by NEPA, follows the fundamental principles of any sound decision making procedure. If applied efficiently, this procedure can greatly increase the quality and timeliness of agency decisions. The procedural approach will automatically update the FCP annually. Scoping of projects two years in advance and budgeting one year in advance will allow sound decisions to be made prior to budgeting and implementation.

Integrating Mission Activities in the INRMP at Yakima Training Center. Steven Kruger, Yakima Training Center, Directorate of Environment and Natural

Resources, Yakima, Washington 98901, 509-577-3402, krugers@lewis.army.mil.

Ecosystem management (EM) has become DoD's most recent policy initiative to improve natural resources management on defense lands. In 1997, the Yakima Training Center (YTC) completed development of its Cultural and Natural Resource Management Plan (CNRMP) utilizing an EM approach to resource management on its 500 square miles of arid training land in central Washington. Development of the CNRMP required close coordination and cooperation between the installation's natural resource staff and trainers, and was developed with the assistance of a federal advisory board, which included representatives from various federal, state, county, local and tribal governments. Preparation of the plan has led to significant improvements in the installation's natural resource management program, coordination with installation trainers, and Command Group support, thereby increasing the installation's ability to support its long-term training requirements while meeting stewardship goals. Methods used to implement EM in support of the installation's training mission and the five major components of the CNRMP will be discussed. The latter includes (1) resource goals and objectives, (2) resource management strategies, (3) resource monitoring plans, (4) resource thresholds, and (5) adaptive management.

Integrated Natural Resources Management Planning at Camp Ripley, Minnesota. Marty Skoglund, Minnesota Army National Guard--Camp Ripley, 15000 Highway 115, Little Falls, Minnesota 56345-4173, 320-632-7201, skoglundm@mn-arng.ngb.army.mil.

This presentation focuses on the procedure used in development of an INRMP for the Camp Ripley National Guard Training Site located in Central Minnesota. Camp Ripley's 53,000 acres of diverse terrain supports a wide variety of military and civilian training activities. Additionally, the Camp comprises a broad range of habitat types that support an array of flora and fauna unique to Minnesota. The greatest challenge facing resource managers and military leaders in developing the Camp Ripley INRMP was ensuring that the mission of Camp Ripley could be accomplished without sacrificing its precious resources. A rigorous planning effort was initiated to address not only natural resources management at Camp Ripley but also site development. This two-pronged approach coupled with an interdisciplinary planning team, has resulted in a very successful INRMP for Camp Ripley that is in its second year of implementation.

What Environmentalists Want in Habitat and Wildlife Conservation Plans on Military Lands. Bruce Hamilton, Sierra Club, 85 Second Street, San Francisco,

California 94105-3441, 415-977-5678, bruce.hamilton@sierraclub.org.

Public lands controlled by the military have important ecological and public recreational values, but they are largely unknown and unappreciated by the American public and the environmental community. For most of our country's history, the environmental movement has focussed on preserving wilderness, restoring endangered species, and combating destructive development proposals on non-military public lands. When we were concerned about air and water pollution, we also focused on non-military lands. Historically, military lands have been viewed as being outside the bounds of environmental public policy debate. Recently, the public and the environmental community have become more aware of the important ecological and recreational values of lands under control of the military and are becoming increasingly aware of the significant environmental impacts that military operations can have on the environment. At the same time, the military has become more accountable to the public, more environmentally aware, and more open to adopting environmental protection strategies. This is a steadily evolving relationship. While there are promising success stories, disappointing areas of serious conflict remain where environmentalists believe that the military has failed to live up to its environmental responsibilities.

Bird Conservation Planning in INRMPs. Chris Eberly, Department of Defense Partners in Flight, P.O. Box 54, The Plains, Virginia 20198-0054, 540-253-5675, ceberly@dodpif.org.

Installations are now in the process of creating or updating Integrated Natural Resources Management Plans. Due to current workloads and funding priorities, nongame landbirds usually are not adequately covered in these plans unless they are state or federal threatened or endangered species. The objective of the national Partners in Flight (PIF) program is simply to keep common birds common. The Department of Defense Partners in Flight program is applying the framework of the national PIF bird conservation planning strategy to individual installations. Successful integration of nongame landbirds into the existing INRMP must mesh with the current management plan, provide benefits to the installations, and support the military mission. Bird conservation plan status will be maintained on the DOD PIF web site <<http://www.dodpif.org>>. The PIF strategy and its application by DOD PIF within the structure of the INRMP will be presented.

Session: Southwest Desert and Arid Lands Management, William Fisher, Chair. Southwest Division, Navy Facilities Engineering Command, 1220 Pacific Highway, Code 5731WF, San Diego, Califor-

nia 92132-5190, 619-532-1488, wsfishe@efdswest.navy.mil.

Honey Mesquite as a Tool in Restoration and Protection of Abused Rangeland. Don Pitts, 7CES/CEVA, 710 Third Street, Dyess Air Force Base, Texas 79607, 915-696-5665, donald.pitts@dyess.af.mil.

The much maligned mesquite tree, an invader species in most of West Texas, offers habitat and food for wildlife, stabilizes soils and reduces erosion, and serves to rehabilitate abused land while protecting it from further abuse. Dyess Air Force Base in the plains of West Texas serves as host to several million honey mesquite trees, *Prosopis juliflora* var. *glandulosa*. Several hundred acres were severely abused by 50 years of poor ranching and farming practices, followed by 40 years of extreme mowing by the military. Topsoil was severely eroded and native grasses and forbs were unable to survive. Only invading mesquite could grow, beginning the rehabilitation process. At Dyess and other arid areas of the world, *Prosopis* is successful in surviving degraded conditions, caused by human abuse, that no other plant can. It stabilizes soils from wind and water erosion, provides organic litter to rebuild topsoil, and uses root action to loosen compacted soils. As a legume, its root system adds nitrogen to depleted soil. The taproot uses little surface water, leaving it for grasses and forbs, and the airy shade allows grass growth under its protective canopy. Meanwhile, it provides habitat and food for wildlife.

Exotic Species Control: The Use of Aerial Photography to Identify Tamarisk, and Applied Eradication Methods. Rhys Evans and Margaret Maher, Marine Corps Air Ground Combat Center, Twentynine Palms, California 92278, 760-830-7396 (x234), evansr@29palms.usmc.mil.

Tamarisk or Saltcedar (*Tamarix* sp.) is an invasive exotic species, highly damaging to fragile desert ecosystems. Detection of this invasive exotic is the first step toward eradication, but is problematic over large areas. Aerial photography of the 594,000 acre Marine Corps Air Ground Combat Center has been digitized to 1/2 meter spatial resolution. Using this digital product, we have evaluated spectral profiles for this species, and used a typical spectral profile to locate individual plants while they are small and removal is less costly. In areas too remote and rugged for routine vehicular patrol, appropriate use of herbicides allows for the return of native species such as desert willow (*Chilopsis linearis*), smoke tree (*Psoralea argyrea*), and acacia (*Acacia greggii*). The Marine Corps Air Ground Combat Center is not yet infested to the same degree as other areas in the desert southwest. We believe it will be possible to control this exotic species on land under our stewardship.

Recovery Efforts for the Endangered Sonoran Pronghorn: Cooperative Strategies between a State and a Federal Agency. John Hervert, Linden Piest, and Jill Bright, Arizona Game and Fish Department, 9140 E. County 10 1/2 St., Yuma, Arizona 85365, 520-342-0091, jhervert@gf.state.az.us, and William Fisher, Navy Facilities Engineering Command.

The United States Marine Corps and the Arizona Game and Fish Department are implementing the Sonoran Pronghorn Recovery Plan in cooperation with the United States Fish and Wildlife Service, Bureau of Land Management, and National Park Service. Central to this undertaking has been investigation of factors that influence Sonoran pronghorn (*Antilocapra americana sonoriensis*) fawn recruitment (estimated to be at least 1.4 fawns per doe), namely: rainfall, associated forb growth in the spring and summer seasons, and high summer temperatures. Above average levels of rainfall in the winter and spring seasons are required to produce adequate forage for lactation (March - May). Water stress and a lack of high quality forage are likely the primary cause of high fawn mortality during the summer season, although this may be mitigated by early summer rains. Predation of fawns appears to have an insignificant impact on total recruitment. Sonoran pronghorn are attracted to habitats in the vicinity of soils and vegetation disturbed by human activity perhaps in response to food and water availability. Strategies to enhance fawn recruitment include development of food and water resources. Location of military training targets relative to preferred pronghorn habitat should be further investigated in order to minimize negative impacts.

The Mojave Desert Ecosystem Program: A Spatial Database for the Ecoregion. Clarence A. Everly and Christine A. McAllister, Mojave Desert Ecosystem Program, ATTN: AFZJ-PW-EV, P.O. Box 105097, Fort Irwin, California 92310-5097, 760-380-5291, everlyc@mojave.army.mil.

The Mojave Desert Ecosystem Program (MDEP) is designed to enable informed decision-making for sustainable land management across an ecoregion spanning over 44,000 square miles. MDEP has emerged as a multi-agency cooperative effort that transcends both administrative and geopolitical boundaries. The project goal is to develop and implement a database, deployed through the world wide web <<http://mojave.army.mil>>, to facilitate collection, storage, transfer, sharing, and analysis of information regarding inventories, resource assessments, scientific documentation, and land management by all federal, state, and local agencies. The database consists of topographical, geological, and biological GIS data layers, satellite imagery, a bibliography of over 18,000 scientific references pertaining to the Mojave, and links to other pertinent web sites. The project emphasizes the im-

portance of maintaining and improving the native biodiversity and sustainability of ecosystems.

Development of an Interagency Strategy for Protection of Sensitive Species. Sandy Vissman, U.S. Fish and Wildlife Service, Carlsbad, California, 760-431-9440, sandy_vissman@fws.gov and William Fisher, Navy Facilities Engineering Command.

This paper will provide direction for positive actions to prevent species listing under the Endangered Species Act. The U.S. Fish and Wildlife Service notified all agencies with management responsibilities for a certain species of lizard for which the Service intended to start the listing process unless immediate action was taken to halt the decline of the species' habitat. A coalition of agencies was formed in an attempt to produce an action plan that will provide for species protection and recovery. This paper will illustrate the steps taken to develop and implement the plan.

Following the Life Cycle of the Desert Tortoise: Telemetry, Radiography, and Threadtrailers. Curtis Bjurlin and John Bissonette, Cooperative Fish and Wildlife Research Unit, Utah State University, Logan, Utah 84322, 435-797-3598, curtis.bjurlin@usu.edu.

Very little is known about the early life history stages of the desert tortoise (*Gopherus agassizii*), a federally listed threatened species in the Mojave Desert ecoregion. Radio transmitters were attached to 19 adult female tortoises from a wild population at the 29 Palms Marine Corps Air Ground Combat Center. Females were tracked and x-rayed on a ten-day schedule from late May through July 1998. Eggs are readily visible in the x-rays of gravid tortoises. Threadtrailing devices attached to the carapace of each gravid female unspooled a clear trail of the animal's movements. Females were visited daily and checked for a weight loss commensurate with the estimated clutch weight. If weight loss occurred, the thread was followed to the nest site. Nests were monitored during the incubation period for predation, and surviving nests were fenced to capture hatchlings. Hatchlings were fitted with transmitters and tracked during dispersal. Techniques and preliminary results of this inquiry are discussed. This information will provide managers with a crude estimate of survivorship from the period of egg calcification to hibernation of hatchlings during the first winter.

Scientific Contributions to Management of Playa Systems in the Arid Southwest. Wanda Deal and Mark Hagan, Environmental Management, AFFTC/EMXC, 5 East Popson Avenue, Edwards Air Force Base, California 93524-1130, 805-277-1426, wanda.deal@edwards.af.mil and William Brostoff,

US Army Engineer Research and Development Center, Vicksburg, Mississippi 39180-6199, 601-634-3435, brostoff@mail.wes.army.mil

Edwards Air Force Base lies within the Antelope Valley of southern California at the terminus of 14 drainage basins. Major landscape features include dry lakes, small playas, and clay pans. Large projects planned for the area combined with limited data present difficulties in predicting the effects of disturbance on the system's sustainability. The DOD Legacy Natural Resource Management Program funded a research project to build an ecosystem model of the area. A 25 square km study area representing these landscape features was established in a relatively unimpacted area uninfluenced by roads. Transects were established across clay pans and dunes to document spatial variability. Perennial vascular plants, small mammals, branchipods, cryptobiotic crusts, and fungal and bacterial communities were examined. Findings presented focus on those unique to the arid southwest, and strategies for environmental management of habitats for which there is limited technical knowledge and scant funding.

Session: Monitoring DOD Activities to Meet Regulatory Requirements, Nancy Read, Chair. 30 CES/CEVPN, 806 13th Street, Suite 116, Vandenberg Air Force Base, California 93437-5242, 805-734-8232 (x58399), readn@comm2.vafb.af.mil.

Monitoring to Meet Regulatory Requirements... Will There Ever Be an End in Sight? Nancy Read, Vandenberg Air Force Base.

To fulfill regulatory requirements for DOD activities, federal regulators such as the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the U.S. Army Corps of Engineers often require installations to monitor impacts of their activities on federally protected resources. On Vandenberg Air Force Base in California, monitoring threatened and endangered species and pinnipeds is required for all space launch programs. Presently, monitoring is being conducted for four space launch programs affecting nine federally listed species and several species of pinnipeds that occur on the base and the Channel Islands. Important considerations for continuity of mission activities that have adverse impacts on protected species include: (1) requirements for program-specific monitoring, (2) evaluation of cumulative impacts, and (3) potential to replace launch-by-launch monitoring with management to mitigate negative impacts and enhance species' recovery.

Does Regulation or Biology Drive Endangered Species Monitoring Programs on Army Installations? Tim Hayden, U.S. Army Engineer Research and Development Center, P.O. Box 9005, Champaign, Illi-

nois 61826, 217-398-5220, t-hayden@cecer.army.mil, Tim Beaty, DPWENRD Fish & Wildlife Branch, Ft. Stewart, Georgia 31314, 912-767-7261, beaty%dpw2@stewart-emh4.army.mil, and John D. Cornelius, Natural Resources Branch, AFZF-PW-ENV-NR, Fort Hood, Texas 76544, 817-287-3114, corneliusj@hood-emh3.army.mil.

Is endangered species monitoring for regulatory compliance complimentary to monitoring objectives based on tracking biological factors of concern? In the purest sense, monitoring programs for biological resources are implemented to determine trends in some biological parameter of concern or to evaluate effects of actions or management prescriptions on the resource. For endangered species, a third factor, regulatory compliance, is often a major driver in implementing monitoring programs on military installations. Fort Stewart, Georgia and Fort Hood, Texas provide case studies for the implementation of long-term, endangered species monitoring programs in response to regulatory requirements. This paper explores the development, implementation and effectiveness of these monitoring programs in relation to endangered species regulatory requirements and related land use constraints faced by these installations. Recommendations are made for ensuring that monitoring for compliance is compatible with monitoring programs based solely on biological concerns.

Ecosystem Monitoring: Development of a Cost Effective System for Determining Ecological Condition. Rick McWhite, Natural Resources Branch, and T.A. Christiansen, SAIC, Eglin Air Force Base, Florida 32542, 850-882-4164, mcwhiter@ntserver.eglin.af.mil.

The Natural Resources Branch of Eglin Air Force Base is developing terrestrial and aquatic ecological monitoring programs for the 463,448-acre reservation. Eglin has 34 plant communities within the largest remaining old-growth longleaf pine ecosystem in the world, and 67 plant species and 35 animal species that are listed as either endangered, threatened, or species of concern. Various data and analysis tools (remote sensing, ground data, GIS, etc.) are being investigated to help apply limited personnel and funds most efficiently and effectively within an adaptive management process. Monitoring can be used to help adaptive management decisions that can't always wait for in-depth ecological research. Monitoring may save money in the long term by identifying potential ecological problems before they become more costly to fix. The program considers the military mission, public recreation, and land stewardship.

Performance Indicators for Ecosystem Management. L. Jean O'Neil, U.S. Army Engineer Research and Development Center, Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, Mississippi

39180-6199, 601-634-3641, oneill@mail.wes.army.mil.

When designing a monitoring plan to track progress and judge success in the new arena of ecosystem management, complications arise over single element management. This paper will discuss the components of a monitoring plan (metrics, scale of measurement, reference conditions, thresholds, and adaptation), and some characteristics of good metrics. The drivers for ecosystem monitoring (regulatory, testing and training, stewardship, and social) and determination of monitoring objectives will be discussed. The basis for the talk is a committee report prepared by The Wildlife Society to help managers and planners who are interested in using an ecosystem management approach to manage wildlife resources. Illustrations of the monitoring components will come from that report.

Session: Managing Riparian Corridors and Buffers. Chester O. Martin, Chair, U.S. Army Research and Development Center, Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, Mississippi 39180-6199, 601-634-3958, martinc@mail.wes.army.mil.

Opening Remarks: Overview of Riparian Issues and Concerns on DOD Installations. Chester O. Martin, U.S. Army Engineer Research and Development Center.

Riparian corridors and buffers are important natural resource features on DOD lands throughout the U.S. Although riparian zones typically comprise only a small part of the total land surface on DOD installations, they are rich in plant and animal life and are critical to regional environmental quality. They provide erosion control, buffer the impacts of adjacent land activities, enhance water quality, provide numerous wildlife benefits, and contribute to biodiversity. Riparian ecosystems on DOD lands are subject to a variety of impacts, including those resulting from military training and testing, forest management, grazing, fire, installation housing, and construction activities. Many installations are also increasingly affected by adjacent land uses, especially urbanization. These impacts may be cumulative over time and can threaten the integrity of entire landscapes. Thus, it is important for DOD land managers to understand the function of riparian systems and develop procedures to protect, restore, and manage these valuable resources. An overview of riparian issues on DOD lands is presented and current efforts to protect and restore riparian corridors and buffers are described. Session papers present information on regional planning strategies, recommended design criteria, and case studies of riparian restoration and management efforts in several regions of the country.

Riparian Ecosystems on Air Force Lands. Mary C. Anderson, HQ Air Force Center for Environmental Excellence, Brooks Air Force Base, 3207 North Road, San Antonio, Texas 78235-5363, 210-536-3808, mary.anderson@hqafcee.brooks.af.mil.

The US Air Force (AF) is responsible for millions of acres worldwide. These lands comprise desert, tundra, temperate, and tropical climates, and are managed primarily to support the AF Mission. Natural resource managers are finding that they can manage AF lands to meet mission needs and preserve and enhance the environment, including riparian ecosystems. This presentation will focus on successful management practices at a wide range of riparian ecosystems across AF lands. It will discuss what natural resource managers do to meet the needs of all relevant parties through effective partnering efforts and lessons learned. Selected examples of how the AF manages its riparian zones and buffers are also described. Beale Air Force Base, California, is developing a plan to set aside 1,000 acres of riparian habitat as a conservation area to enhance and protect endangered species habitat and allow local educators and researchers a place to study those species. At the Air Force Academy in Colorado, management of a large resident population of Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*), a sensitive species, includes improving existing riparian habitat and exclusion and education of personnel. At Pope Air Force Base, North Carolina, Tank was redirected to reduce its attraction to birds and other wildlife, yet apparently continues to function as a healthy system.

DOD Commitments to Riparian Forest Buffers in the Chesapeake Bay Watershed. Aileen C. Smith, Navy Regional Environmental Group, Code 910, 9742 Maryland Avenue, Norfolk, Virginia 23511, 757-444-3009, acsmith@pwnorva.navy.mil, and Scott English, U.S. Army Environmental Center, Aberdeen Proving Ground, Maryland 21010, 410-436-7078, sdenglis@aec.apgea.army.mil.

The Chesapeake Bay Program Riparian Forest Buffer Initiative commits the state and federal Bay signatories to "... restore riparian forests on 2,010 miles of stream and shoreline in the watershed by 2010..." The federal land-holding agencies and District of Columbia are designated to contribute 200 buffer miles towards this total. The Bay Program's goals are one of the most aggressive endorsements of the value of riparian forests in the country. With over 60 facilities in the 64,000 square mile watershed and many on-going and planned riparian restoration projects, DOD is on the forefront of the federal restoration effort. The many miles of stream already maintained in a forested or other conservation buffer condition on DOD lands provide tangible benefits to Bay restoration efforts. Challenges remain to better account for such conservation measures as a means to improve DoD's image

and support equitable allocation of restoration commitments among all landowners within the watershed.

Riparian Corridors: Improving Designs for Biodiversity on Military Installations. Richard A. Fischer and Chester O. Martin, U.S. Army Research and Development Center, Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, Mississippi 39180-6199, 601-634-3983, fischer@mail.wes.army.mil.

Although riparian zones typically occupy a very small proportion of the landscape on most DOD installations, they provide innumerable functions and values, including water quality, flood storage, pollution abatement, wildlife habitat and travel corridors, aquifer recharge, subsistence living use, recreation, and aesthetics. Most riparian buffer zone studies have addressed the influence of buffer zone width on filtering non-point source pollution in runoff before it enters aquatic systems. Unfortunately, recommended design criteria for buffers and corridors are highly variable and there have been few systematic attempts to mesh water quality width requirements with management for biodiversity. Many DOD land managers need biodiversity-related design criteria when planning for corridor restoration and management. Objectives of this presentation are to address the suitability of riparian zones to enhance biodiversity on DOD installations, and to discuss recent strides in providing ecologically based guidance for riparian corridor and buffer design.

Supporting Military Training through an Integrated Management Approach to Riparian Areas at the Yakima Training Center. Margaret A. Pounds, Yakima Training Center, Directorate of Environment and Natural Resources, Building 810, Yakima, Washington 98902, 509-577-3151, poundsm@lewis.army.mil.

The 326,000-acre Yakima Training Center (YTC), located in South Central Washington State, is one of the largest contiguous pieces of shrub steppe habitat remaining in the state. YTC has 15 mainstem drainages totaling 119 miles; additional riparian areas are associated with 198 springs on the installation. Although riparian zones within this arid region comprise only about 1% of the land area, most wildlife species depend entirely on or spend disproportionately more time in this habitat. Besides the importance to wildlife and fisheries, these areas also contribute to ecological diversity, enhance water quality through sediment control, and are associated with a large number of cultural sites. Management of these areas at YTC has changed drastically since the early 1990's. An integrated five-step management approach is being utilized. This presentation provides an overview of activities undertaken by

YTC to improve management of riparian areas while supporting its military training objective, including: cessation of livestock grazing, a comprehensive riparian assessment, protection of sites through the Siber stake program and trainer education, restoration of designated sites, and coordination with trainers.

Riparian Habitat Improvement in an Inhospitable Environment. Gerald T. Johnson, 92 CES/CEVN, 100 West Ent Street, Suite 155, Fairchild Air Force Base, Washington 99011, 509-247-2313, gerald.johnson@fairchild.af.mil.

Fairchild Air Force Base, located in eastern Washington, consists of 4,500 acres, with over 300 acres characterized as high quality wetlands. Land uses over the last sixty years have severely impacted and degraded portions of the riparian areas around these wetlands. Debris was placed in the wetlands, herbicides were sprayed near these areas, and various training activities have taken place in wetlands and riparian habitats. Restoration efforts are constrained by shallow soils, limited precipitation, and persistent winds. Measures implemented to improve the riparian areas include planting over 200 acres of conifers and native deciduous trees and shrubs. A biological weed control program was implemented to eliminate spraying of herbicides near the wetlands. A 300 acre designated wildlife area has been set aside and another large area protected from traffic because of the presence of a state listed plant species. These actions and other measures have resulted in a marked increase in wildlife populations, as well as increased protection of the wetland areas.

Managing Forest Ecosystems. Robert Decker, Chair, U.S. Army Environmental Center, ATTN: SFIM-AEC-EQN, Aberdeen, Maryland 21010-5401, 410-671-1586, rhdecker@aec.apgea.army.mil.

Forest Management on Fort Bragg--A Paradigm Shift. Scott Bebb, Public Works Business Center, Endangered Species Branch, Fort Bragg, North Carolina 28376, 910-432-5325, bebb@bragg.army.mil.

Fort Bragg's timber harvest activities date back to World War II. During peak harvest in the late 1940s, there were sixteen sawmills in operation on the installation. The first forest management program was established in 1951 and five cutting cycles have occurred since 1955. Reductions in harvest volumes followed passage of the Endangered Species Act, a 1980 Jeopardy Biological Opinion, and adoption of the Henry Guidelines for Preparation of Biological Assessments and Evaluations for the Red-cockaded Woodpecker. A comprehensive forest inventory, completed in 1993, now provides the basis for RCW forage assessments, with forest stand data readily

available as a GIS layer. Future cutting cycles will be aligned with landscape unit management prescriptions, with timber harvest prescribed as a habitat restoration tool. A habitat restoration working group, composed of all stakeholders, is in-place and charged with designing and implementing an integrated approach to land management based on identified landscape planning units.

Vegetation Management at Naval Radio Station (T), Jim Creek. Joe DiVittorio, Engineering Field Activity Northwest, 19917 7th Avenue, NE, Poulsbo, Washington 98370, 360-396-0923, divittoriojm@efanw.navfac.navy.mil.

Jim Creek is the site of a Very Low Frequency radio relay transmitter station in the west slope Cascade Mountain foothills near Arlington, Washington. Jim Creek's mission is to relay communications to the Navy's Pacific Fleet. Vegetation control is essential for mission accomplishment at the Naval Radio Station (T), Jim Creek. Vegetation reaching a height of seven feet on the 1000-acre transmitter antenna field intercepts transmitted radio signals. Signals are weakened or distorted as a portion of the signal is shorted to ground by plant stems. Mechanical and chemical vegetation control methods have been used since site construction in 1952. In 1987, herbicide use was discontinued resulting in a significant vegetation control challenge. In 1997, direct cut-stump herbicide application was resumed. A new approach to manual cutting and limited chemical control integrated with vegetation type conversion through competition seeding is proposed. The proposed approach and its desired results are discussed.

How Can Restoration of an Atlantic White Cedar Forest Ecosystem Help the Air Force? Scott Smith, Dare County Air Force Range, P.O. Box 2269, Manteo, North Carolina 27954, 919-736-6318, 4cevdare@ces4.seymourjohnson.af.mil.

In 1992, the Department of Defense Legacy Natural Resource Management Program provided initial funding to restore approximately 3,000 acres of an Atlantic white cedar (*Chamaecyparis thyoides*) ecosystem at Dare County Air Force Range. Over a twenty-year period prior to Air Force ownership, the forest had been clear-cut and was left in a severely altered condition. One goal of the project is to restore the natural hydrological regime to improve the growing conditions for Atlantic white cedar forests. With the advent of mitigation banking, we hope to negotiate with the U.S. Army Corps of Engineers to establish credits for the purpose of compensatory mitigation in advance of authorized impacts associated with establishing targets for the military training mission.

Ecosystem Management Considerations and Restoration Planning for Forest Management at Avon Park Air Force Range, Florida. Paul F. Ebersbach, Det 1, 6 SPTG/CEV, 29 S. Boulevard, Avon Park Air Force Range, Florida 33825-0043, 941-452-4119, (x303), paul.ebersbach@avonpark.macdill.af.mil.

Avon Park Air Force Range, a 106,174 acre air-to-ground training installation located in central Florida, has had a forest management program since 1966. Management activities concentrate on southern pines, primarily slash pine (*Pinus elliottii*), on approximately 28,000 acres. Timber resources include naturally regenerated stands as well as plantations. In recent years, we have modified our forest management practices to better meet the intent of DoD's ecosystem management principles and guidelines. The paper will provide specific examples of such practices including: reducing impacts during harvesting, use of growing season burns, inventory and monitoring of ecological condition in managed stands, modifying rotations, and uneven-age management and restoration of native species.

Management of Forested Lands at Fort Campbell, Kentucky, to Support Military Training, Enhance Endangered Bat Habitat, and Stimulate the Growth of Desirable Hardwood Species. Linda Alderdice and Jeff Jones, Public Works Business Center, Environmental Division, AFZB-PW-E-R, Building 865, 16th Street and Ohio Avenue, Fort Campbell, Kentucky 42223-5130, 502-798-2626, alderdicel@emh2.campbell.army.mil.

The unique mission of the 101st Airborne Division (Air Assault) and the presence of federally listed endangered Indiana bats (*Myotis sodalis*) on Fort Campbell require efficient and effective natural resources management to provide forested lands that support the division's training and enhance and maintain Indiana bat habitat. To meet this requirement, Fort Campbell natural resources managers have developed an integrated, long term management strategy that employs systematic thinning of loblolly pine (*Pinus taeda*) plantations, selected hardwood silvicultural practices, and extensive use of prescribed fire. The application of these management activities is expected to improve the condition of forested areas for military training by opening the stands, stimulating the growth and density of hardwood species desirable to Indiana bats, and allowing for sustained forestry income through the sale of timber products.

Session: Working With the U.S. Fish and Wildlife Service. Chair: Slader G. Buck, Environmental Security, Marine Corps Base, Camp Pendleton, California 92055-5008, 760-725-4637, bucksl@pendleton.usmc.mil.

Speaking the Same but Differently - Why Do We Think the Way That We Do? Slader G. Buck, Marine Corps Base, Camp Pendleton.

With more species being listed under the Endangered Species Act, military installations engage in more consultations than ever with the U.S. Fish and Wildlife Service. Recent experience, particularly on installations in southern California, has shown many consultations to be lengthy and difficult, and to result in a product that over time is not agreeable to either the installation or to the Service. This presentation briefly explores - from a military point of view - some of the differences in the way the military and the Service "cultures" view the consultation process. Both parties have the same underlying goal to ensure that resources are maintained. However, there is often apprehension and mistrust associated with the consultation. Differences in the background of the parties, past consultation experience, views on acceptable science/best available data, and what each sees as "reasonable" all figure in the consultation process. In particular the understanding of agency "mission" and agency credibility are extremely important. The approach to these hurdles can mean the difference between a consultation success and a failure.

U.S. Army and the U.S. Fish and Wildlife Service: Partnering to Reach Resource Conservation Goals. Thomas Glueck, U.S. Army Engineer Center and Fort Leonard Wood, Missouri 65473-5000, 753-596-2814, glueck@wood.army.mil

The U.S. Army Engineer Center and Fort Leonard Wood is implementing provisions of two Biological Opinions (BOs) received from the U.S. Fish and Wildlife Service (USFWS). These BOs were issued following formal consultation on Biological Assessments (BAs) for the Ongoing Mission/Master Plan (December 1996) and BRAC (February 1997). Successful completion of these projects result from a coordinated, proactive effort on the part of the installation, USFWS, U.S. Army Corps of Engineers, Missouri Department of Conservation, and private contractors. The key is recognizing that the USFWS is a partner in endangered species conservation, not an adversary. Contact the USFWS early in the project. Invite them to the installation to observe the proposed training activity. Identify specific aspects of the project that THEY would like to see addressed. Develop a BA Study Plan around those issues and allow sufficient time for them to review the Study Plan. Schedule an early coordination meeting to introduce all the players and lay the ground rules; be up front about the different agency missions, i.e. military training vs. resource conservation. Focus on the issue of endangered species conservation. Conduct periodic coordination meetings to update participants so there are no surprises. Provide draft copies of BAs to

the USFWS for review; they can begin formulating a response before formal consultation is initiated. Their feedback allows the installation to identify conservation measures and alternatives that can minimize impacts to species and military activities. Remember, your job is resource conservation in support of the military mission. A positive, professional relationship with the USFWS is essential to getting that job done.

Lessons Learned: Experiences with a Difficult Endangered Species Act Section 7 Consultation. Roy Barker, HQACC/CEVPN, 129 Andrews St, Suite 102, Langley Air Force Base, Virginia 23665-2769, 757-764-9338, roy.barker@langley.af.mil.

This presentation describes an extreme case of the difficulties that can be associated with Endangered Species Act consultations. The proposed beddown of additional German Air Force aircraft at Holloman Air Force Base, New Mexico, seemed initially to involve no endangered species issues: there was little con-

struction, the aircraft were not new to the area, and the method and location of operations would be unchanged. The environmental analysis of the current mission was only a few years old, and had been unproblematic. Unfortunately, a sequence of unanticipated events made endangered species issues the single greatest challenge to the project. Regional animosity toward foreign military using U.S. airspace brought intense interest in the project, and Section 7 provided a convenient way to challenge it. Concurrently, the area was experiencing a growth in environmental litigation. Contrasting this was State Department and DOD interests in a quick and favorable consultation. Additional complicating factors involved the arrival in mid-consultation of new U.S. Fish and Wildlife Service policies regarding Native American involvement, and the increased workload on the local Service office due to an unrelated court order. These and other conflicting external demands overshadowed the entire consultation process, resulting in a consultation that was never a fully cooperative two-party effort to address genuine issues.

Dave Tazik - tazikd@mail.wes.army.mil

WEB SITE/ADVERTISING GUIDELINES 'UNDER CONSTRUCTION'

The NMFWA Board of Directors has requested the establishment of policies and guidelines for our web site (www.nmfwa.org). These guidelines will also include web links and related issues, and the potential inclusion of advertising on the web site and in future editions of the FAWN.

Input from members is encouraged. Draft copies of the policy will soon be available for comment. If you would like to assist in the writing of these guidelines, or review them, please contact Western Regional Director Rhys Evans, DSN 957-7396 x234 (Pacific Time) or evansrm@29palms.usmc.mil.

DOD FORESTRY WORKSHOP

The annual DoD Forestry workshop will be held 15-16 September 1999 in conjunction with the Society of American Foresters national convention in Portland, Oregon. The DoD workshop will consist of Service breakout sessions on 15 September followed by technical presentations to all DoD attendants on 16 September. It is expected that approximately 100 Defense personnel from installations, research or-

ganizations, headquarters, and other commands will participate in this year's Forestry meeting. The Navy is the designated DoD host for the 1999 workshop. Anyone interested in providing a forestry related presentation at this event is encouraged to contact Mr. Craig Woods, 202-685-9330, woodscw@navfac.navy.mil.

CALL FOR PAPERS/HOST COMMITTEE-CHICAGO MARCH 2000

The NMFWA meeting in Chicago, March 26-31, 2000 needs you! The program is currently being put together. Check out the tentative schedule and if you've got some good experience, research, or just a confounding problem, we're interested! Contact the Program Chair, Don Pitts, at 915-696-5664, DSN 461-5664, or donald.pitts&dyess.af.mil.