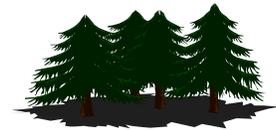

ITAM



Issue 9

Summer 1999

The Bridge

ITAM Supports Training Mission at Fort Lewis

By Inger Schmidt, Fort Lewis
ITAM Coordinator

Over the years, the use and utility of Fort Lewis's Range 10 tapered off due to tree and shrub overgrowth. The overgrowth made it difficult for soldiers to maneuver the areas and made some areas impenetrable by dismounted Infantry. But thanks to the cooperative efforts of trainers, range schedulers, and ITAM, Range 10 is in high-demand.

Range 10, which is the Squad Live Fire Exercise (LFX) facility, occupies the Southwest corner of the Central Impact Area, near the C5A on Fort Lewis. Paved roads border two sides of the range. An unimproved road winds throughout the range. From the paved roads, the terrain rises through open grasslands to a woodland comprised of oak trees and bordered by Douglas fir trees. At the top of the rise, the Douglas firs open into another grassland, which serves as the target engagement firing area.

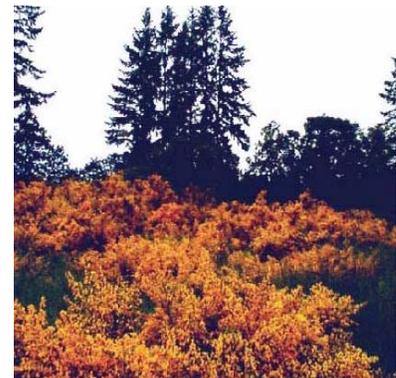
**THE BRIDGE IS
THE OFFICIAL
PUBLICATION
FOR THE UNITED
STATES ARMY'S
INTEGRATED
TRAINING AREA
MANAGEMENT
(ITAM)
PROGRAM.**

***BRIDGING THE
GAP
BETWEEN ARMY
TRAINING &
ENVIRONMENTAL
STEWARDSHIP***

**THE BRIDGE IS
PUBLISHED UNDER THE
GUIDANCE OF THE
ITAM EXECUTIVE
MANAGEMENT
COUNCIL (EMC).**

The Douglas fir (*Pseudotsuga menziesii*), which is a native evergreen tree, was encroaching onto the natural open areas. Scotch broom (*Cytisus scoparius*), which is an alien spindly deciduous invasive shrub capable of reaching 10 feet in height, was growing and spreading thickly. These June 1998 photos show the overgrowth on the rise and in the entrance leading to Range 10.

(Continued on page 2)



ITAM Supports Training Mission at Fort Lewis

(Continued from page 1)

When ITAM identified Range 10 as a prime candidate for rehabilitation, trainers worked with ITAM team members to convey how the rehabilitated Squad FTX facility should look. Then, ITAM team members worked with range schedulers to reserve Range 10 so that the actual land rehabilitation and maintenance could occur. After scheduling Range 10, ITAM hired a four person temporary field crew and began the rehabilitation efforts.

Using a bush-hog, a tractor, and gas-powered brush-cutters, the field crew mowed the Scotch Broom in the open areas of the entrance and at the top of the rise. They also removed many of the small Douglas firs growing in the open areas and edges of the tree line. Finally, the crew established pathways through the forest, creating a matrix of trails for the soldiers to use. As a result, the Squad LFX facility has the "good ground" and natural appearance critical to realistic training environments and scenarios.

These September 1998 photos show the rise and the entrance leading to Range 10, after the Land Rehabilitation and Maintenance (LRAM) field crew rehabilitated the area.



Handy Decision Tool Helps Installations Combat Dust

by Kim D. Michaels, USAEC

In recent years, Army installations have been plagued with ever-worsening dust problems. Increased training demands, decreased resources, and more stringent regulatory compliance requirements pose difficult problems for installation land managers. Uncontrolled dust production is not only an environmental problem—it also threatens the safety of soldiers and damages and disables expensive training equipment. To mitigate dust problems, installation managers need to implement readily available, appropriate, and cost-effective dust control strategies.

To assist installations with dust control strategies, the U.S. Army Environmental Center (USAEC), in cooperation with the Corp of Engineers Laboratories, i.e., the Construction Engineering Research Laboratories and the Waterways Experiment Station, developed the *Dust Control Guidance and Technology Selection Key*. The *Selection Key* provides installations with guidance to identify, select, and apply installation-specific dust control measures and comes in three compatible formats:

- Handy pocket-sized field guide
- Hardbound comprehensive handbook

(Continued on page 9)

1999 ITAM WORKSHOP

23-27 August, St. Cloud, MN

The Minnesota Army National Guard, Camp Ripley and the National Guard Bureau, would like to extend an enthusiastic invitation to you for the 8th Annual ITAM Workshop, to be held 23-27 August 1999 in St. Cloud, Minnesota. This year's theme is "Bridging the Gap-Working Together to Enhance Military Readiness into the 21st Century". The ITAM Installation Steering Committee (IISC) and Camp Ripley have worked furiously to develop a diversified and informative workshop, that focuses on how ITAM can benefit and work in conjunction with the military mission.



Additionally the IISC will be hosting a geographic information system (GIS) seminar on Monday, 23 August 1999. This seminar will include technical presentations by GIS representatives from installations, government agencies and private vendors.

REGISTRATION

A registration packet provides information about the workshop, registration process, lodging, transportation (including maps & directions), and local attractions. The packets have been mailed and are also available on the ITAM website – www.army-itam.com.

If you plan to attend this great event, please fill out and submit a registration form by 2 August 1999. To email your registration form, use the online registration form available on the ITAM website. You may also mail or FAX your completed form, using the information provided on the form. One completed registration form is required for each attendee.

HOST WORKSHOP FACILITY & LODGING INFORMATION

Three hotels have guaranteed their rate to be at or slightly above government per diem. Both the Best Western Kelly Inn and the Radisson are connected to the St. Cloud civic center, where the workshop will be held. Please call early to make your reservations because all hotels will release these room blocks on various dates. All room blocks are under the name "ITAM Workshop".

HOST WORKSHOP FACILITY

- **Best Western Kelly Inn**
Hwy. 23 & 4th Avenue South
St. Cloud, MN 56301
Telephone 320-253-0606
215 Rooms Available at \$50:00 Rate
Room Release Date - 9 August 1999

ADDITIONAL LODGING

- **Radisson**
404 W. St. Germain
St. Cloud, MN 56301
Telephone 320-654-1661
74 Rooms Available
Rates - \$69 to \$84 a night
Room Release Date - 9 August 1999
- **Best Western Americanna Inn**
520 South Highway 10
St. Cloud, MN 56304
Telephone 320-252-8700
31 Rooms Available
Rates \$48 to \$52 a night
Room Release Date - 1 August 1999
- **Days Inn**
420 SE Hwy. 10
St. Cloud, MN 56304
Telephone 320-253-0500
30 Rooms Available at \$56.00 Rate
Room Release Date 14 July 1999

8TH ANNUAL ITAM WORKSHOP REGISTRATION FORM

St. Cloud Minnesota, 23-26 AUGUST 1999

PLEASE COMPLETE A SEPARATE REGISTRATION FORM FOR EACH PERSON REGISTERING.

REGISTRANT'S NAME: _____

INSTALLATION: _____

MAILING ADDRESS: _____

CITY/STATE/ZIP: _____

TELEPHONE: DSN: _____ COMMERCIAL: _____

FAX: _____ E-MAIL: _____

FOR PLANNING PURPOSES, PLEASE ANSWER THE FOLLOWING QUESTIONS:

Do you plan to attend the Thursday evening Grilled Trout /Roasted Chicken Banquet at Molitors Trout Heaven Park? Yes__ OR No__ If YES, indicate your preference: Trout__ OR Chicken__

Do you plan to purchase a 1999 ITAM Workshop Hat? Yes__ OR No__

Do you plan to attend the Monday GIS Seminar? Yes__ OR No__

BILLING/PAYMENT INFORMATION:

FEE SCHEDULE: Workshop registration: \$80.00

Thursday Evening Banquet: \$20.00

Hat: \$15.00

ACCEPTABLE FORMS OF PAYMENT:

CASH OR CHECKS ARE ACCEPTED IN U.S. FUNDS ONLY. MAKE CHECKS PAYABLE TO "ITAM WORKSHOP."

- Advance payments for the registration fee only may be sent to **Training Site Environmental Office
Camp Ripley Attn. Jay Brezinka
15000 Highway 115
Little Falls, MN 56345-4173**

- You may also provide payment of the registration fee at the workshop, at the time you register.
- Payment for the banquet and/or hats must be made during Monday evening or Tuesday morning registration.

Participants must pay for these items with personal funds (i.e., cash or checks) only. Please note that these items are **NON-REIMBURSABLE** expenses that **CANNOT** be claimed on your travel voucher.

REMINDER: Please indicate above if you plan to purchase a banquet ticket or hat.

NOTE: Include on your travel orders that reimbursement for the registration fee is authorized. (See sample wording below for block 16 of the DD Form 1610, Request and Authorization for TDY Travel of DoD Personnel.)

SAMPLE WORDING FOR BLOCK 16, REMARKS, OF THE DD FORM 1610

"GOVERNMENT QUARTERS AND MESSING FACILITIES NOT AVAILABLE AT TDY STATION. A RENTAL CAR IS AUTHORIZED. ALL ARRANGEMENTS MUST BE MADE WITH SATO. COST OF INSURANCE FOR RENTAL VEHICLE NOT OTHERWISE INCLUDED IN THE BASIC AGREEMENT IS NOT REIMBURSABLE. REGISTRATION FEE IS AUTHORIZED AND NOT TO EXCEED \$80.00. (TRAVELER SHOULD CLAIM THE REGISTRATION FEE ON DD FORM 1351-2, BLOCK 16). REIMBURSEMENT VOUCHER IN SUPPORT OF THIS TDY WILL BE SUBMITTED BY TRAVELER CONCERNED TO FINANCE OFFICE NLT 5 DAYS AFTER RETURN TO DUTY."

**FAX YOUR COMPLETED REGISTRATION FORM TO
(320) 632-7473 ATTN: MARIE HEGNA**

1999 ITAM WORKSHOP

Scheduled Events

Monday, 23 August 1999

- Registration (0800-2200)
- Poster Session Setup (0800-2000)
- GIS Day
 - 0800 - 1100 Presentations
 - 1115 - 1215 ITAM GIS Users Mtg
 - 1215 - 1630 Demos, technical support, poster sessions, & vendor activities
- Social/Mixer (1930)

Tuesday, 24 August 1999

- Late Registration (0800-1600)
- Poster Session Setup (0800-1000)
- General/DA Session
- Concurrent Oral and Poster Sessions

Wednesday, 25 August 1999

- Concurrent Oral and Poster Sessions

Thursday, 26 August 1999

- Concurrent Oral and Poster Sessions
- General/Plenary Session
- Camp Ripley Field Tour
- Molitor's Trout Heaven Park Banquet

GIS Day Monday 23 August

The ITAM GIS Day is a technical training opportunity specifically designed for installation GIS operators. The morning session includes a series of presentations that focus on installation GIS applications and a one-hour GIS users meeting. The afternoon session includes vendor and Government GIS demonstrations, technical support discussions, and GIS free-play on workstations equipped with ArcView software.

GIS day is a tremendous opportunity for installation GIS operators to demonstrate scripts or extensions developed at their installation; to exchange ideas, opinions, and knowledge on state-of-the-art GIS applications; and to network with other GIS end-users and technical experts.

So, bring your questions,
Bring your ideas, and
Don't miss this opportunity!

CAMP RIPLEY . . . AT A GLANCE

Camp Ripley occupies a gross area of 51,160 acres and is located in the central portion of Minnesota approximately 100 miles northwest of the Minneapolis/St. Paul metropolitan area.

Camp Ripley supports the state mission for military reserve component training as a 7,800 person, year-round training facility for the National Guard, primarily consisting of units from Minnesota, North and South Dakota, Wisconsin, Iowa, and Illinois. Ripley is used for weekend inactive duty training, two-week annual training, and other training activities of both active and reserve components.

The military training mission is supported by several broad areas of activity, including maneuver training, weapons familiarization, and qualification.

ITAM Transfers From AMC to ATEC

By Thomas Vorac, AMC I&SA

On 18 Nov 1998 the Vice Chief of Staff for the US Army directed activation of an Army Test and Evaluation Command (ATEC) by 1 October 1999. The ATEC will be responsible for Army developmental and operational testing and evaluation.

Currently four ITAM installations are part of the Test and Evaluation Command (TECOM): Dugway Proving Ground (DPG), White Sands Missile Range (WSMR), Aberdeen Proving Ground (APG), and Yuma Proving Ground (YPG). TECOM will become ATEC's Developmental Test Command (DTC). The transfer of TECOM to ATEC includes all test ranges and responsibilities for installation management at Dugway Proving Ground, White Sands Missile Range, and Yuma Proving Ground. APG will probably transfer to the Soldier and Biological Chemical Command (SBCCOM). To facilitate a smooth transition, the Commanding General of Operational Testing and Evaluation Command (OPTEC) established an Implementation Process Action Team (IPAT).

The following individuals from the following organizations participated on the IPAT:

HQ Operational Testing Evaluation Command? (OPTEC) - Colonel Crabtree and a Range Management representative

TECOM - Mr. Simmons, Ms. Kitchens, Ms. Leonard, Mr. Roller, Mr. Early, and Mr. Carter

Garrison, APG - Col Spidel and Mr. Craten

SBCCOM - Colonel Galles, Mr. Parker, and a Range Management representative

Army Materiel Command (AMC) - Ms. Harrison and Mr. Howard

The organizational changes will not affect AMC Installations and Services Activity (I&SA) responsibilities as regards management of the ITAM Program for AMC. To that end AMC I&SA and ATEC will develop a Memorandum of Understanding (MOU) to ensure continuous support for this and future fiscal years.

The bottom line is that for ITAM *nothing* should change except that ATEC ITAM funds will be programmed through ATEC.



Armed Forces Day

*By Michelle Rosenberger, NTC
ITAM - LRAM Program*

Each year the City of Torrance, CA sponsors a three day celebration in conjunction with Armed Forces Day. This event, which has been held for over 40 years, includes all branches of the service and provides a great opportunity to educate the public on Department of Defense (DOD) activities. This year, Ruth Sparks and Michelle Rosenberger of the National Training Center (NTC) ITAM Program, along with members of the Fort Irwin Environmental Division, created displays about the Army's environmental stewardship efforts.

The ITAM booth showed the variety of ways that ITAM assists the units who live and train at the NTC. The display had a poster describing the ITAM Program, environmental awareness and erosion control materials, GIS-based project designs, and 15 species of native Mojave Desert plants and seeds. It highlighted the LRAM efforts, emphasized the biological diversity of Fort Irwin, and generated the interest and curiosity of the ten thousand or so visitors.

The constant flow of visitors who stopped by the booth left with a better understanding of the Army's stewardship goals and commitment to maintain the quality of its lands.



NATO ETWG ENVIRONMENTAL AWARENESS SYMBOLS

By Tom Macia, ODCSOPS, HQDA

In 1996 the National Allied Treaty Organization (NATO) Environmental Training Working Group (ETWG) was chartered to enhance training and environmental integration within NATO armies. Since its inception, representatives from the U.S. Army's ITAM Program have been members of the NATO ETWG.

The NATO ETWG developed a "menu" of standard environmental awareness (EA) symbols. The intent of the symbols is to enhance EA by conveying recognizable information to units from NATO nations, who use Allied training areas and ranges to conduct their training exercises.

Although use of the symbols is not mandatory, the symbols are a useful tool to support an installation's ITAM program. The symbols are easy-to-use on signs, as map icons, or on other appropriate EA products and are available via the ITAM webpage at:

www.army-itam.com

The symbols convey recognizable information to units from NATO nations, who use Allied training areas and ranges to conduct their training exercises.

Signs		Symbols	
 Information  Natural & Cultural Resources Signs	 Allowed  Not Allowed Restriction Status  Seibert Stake (off-limits Area)  Warning	 Range Fires  Vegetation Cutting  Maintenance  Potable Water  Digging  Unexploded Ordnances  Hazardous Materials  Personnel  Ammunition Compound  Dispensary  Trash  Vehicle Wash Rack  Noise  Fording & Bridging  Tanks  Tank Washrack  WC Toilet  Petroleum, Oils and Lubricants (POL)	 No fires  Fording & Bridging Site  Caution-Unexploded Ordnance  Dispensary  Restricted Area-Woodpecker Habitat  No Digging  Petroleum, Oils and Lubricants (POL) Use Area  Caution - Tanks Crossing  Vehicle Washrack  Restricted Area-Woodpecker Habitat

EUSA Hosts Natural & Cultural Resources Management Course

By Yi, Song Chu, EUSA ITAM Program

From 1- 3 June 1999, the 8th US Army (EUSA) Environmental Programs Office hosted a course on natural and cultural resources management that helped to bridge the 8th Army's military training and environmental programs. The course is the first developed for the 8th Army that addresses:

- Conservation Program policies

USAEC Announces TCA Planning & Design Document

By Kim D. Michaels, USAEC

It is no surprise that maneuver training is inherently damaging to the environment, and without training land management programs, Army training areas can degrade to a point where they lose their effectiveness and usefulness as training resources. Tactical Concealment Area (TCA) planning is a tool for combating site degradation and promoting environmental rehabilitation. TCA also enhances wildlife habitats, protects sensitive environmental and cultural resources, and provides for improved soldier and equipment safety.

To assist installations with TCA planning and design, the USAEC developed the *Tactical Concealment Area Planning and Design Guidance Document*. The document, which will be available for distribution in August 1999, is designed to provide installations with the knowledge to complete TCA plans and designs in-house, rather than through contractors.

(Continued on page 9)

- Responsibilities and practices for installation natural and cultural resource management
- Host nation requirements
- Management practices applicable to military activities occurring on U.S. installations in Korea.

Course attendees included a diverse multi-service group representing training, environment, planning, and management. The guest speaker was Dr. Sun-Yong Lee, Director of Public Information Affairs, Korean Ministry of Environment. The Mobile District, U.S. Army Corps of Engineers, coordinated and contracted support for the course from Pangaea Information Technologies, Ltd.

The Management Course included training on --

- Regulatory requirements
- Army activities for natural and cultural resources conservation
- Land, forest, and wildlife management issues
- Soil erosion
- GIS and Global Positioning System (GPS) technology issues
- Integrated Natural and Cultural Resource Management plans
- ITAM
- The Munitions and Range Rules.

Case studies for training land management, erosion control, and GIS modeling supplemented the training.

Handy Decision Tool Helps Installations Combat Dust

(Continued from page 2)

- Interactive web-based electronic version.
Land managers can carry the pocket-sized field guide to sites where dust is a problem and use it identify potential solutions, while assessing site conditions. Once back in the office, they can consult the handbook or the Web-based version for more detailed information and to answer questions that arose in the field.

The handbook version includes ways to identify areas that need dust control, explains site maintenance and construction methods, and describes the mechanical stabilization practices to consider before using dust control products. The handbook also includes a series of questions to help users collect site-specific factors, e.g., climate, underlying soil types, surface characteristics, vehicle types, traffic volume, and match them with appropriate cost-effective dust control strategies.

TCA Planning Guides

(Continued from page 8)

The planning guide takes an holistic approach to training land design and systematically integrates training needs with environmental requirements, while considering an installation's existing training resource conditions and implementation constraints. The document also combines guidance with lessons learned compiled from installation field experts.

To ensure accuracy and clarity of the guidance, four Army and National Guard installations field-tested the document. In all cases, the guidance was proven successful.

Be sure to visit the USAEC Conservation Technology Display at the August 1999 ITAM Workshop in St. Cloud, MN where copies of the TCA & Dust Control publications will be available.

For Your Copies of:

- THE TACTICAL CONCEALMENT AREA PLANNING AND DESIGN GUIDANCE DOCUMENT & THE TACTICAL CONCEALMENT AREA DESIGN AND CONSTRUCTION GUIDE (AEC REPORT #SFIM-AEC-EQ-CR-99031)
- THE DUST CONTROL GUIDANCE AND TECHNOLOGY SELECTION KEY & FIELD GUIDE KEY (AEC REPORT #SFIM-AEC-EQ-CR-99002, CERL REPORT #99/21),

Contact the U.S. Army Environmental Hotline

AT
1-800-USA-3845
DSN: 584-1699

Web-based versions are available at

[HTTP://AEC.ARMY.MIL/PROD/USAEC/ET/CONSERV/CONSERV.HTM](http://AEC.ARMY.MIL/PROD/USAEC/ET/CONSERV/CONSERV.HTM)

The Biodiversity of Live Fire Range Complexes

By Larry Rogers, Yi Song Chu, &
John Anderson, Chief, EUSA Environmental Programs Office

Although Live Fire Ranges are not typically considered a refuge for wildlife, in Korea they have pretty much become just that. With its tremendous urban and agricultural growth, Live Fire Ranges in Korea, with their boundary protection, tend to be at least one place where wildlife can and do thrive.

A study conducted at the Eighth U.S. Army, Rodriguez Live Fire Complex (LFC), revealed some interesting data on the wildlife found to exist within its boundaries and where it has adapted. Oddly enough, the recorded locations

of wildlife indicate that buffer zones, inaccessible mountainous terrain, and even down range areas at the LFC have become a haven of sorts for rare and endangered species, specified wild species, natural monument species, protected species, and Korean endemic species.

The survey was conducted by the Korean Association for Conservation of Nature (KACN) at the invitation of the EUSA ITAM Program through the EUSA Environmental Programs Office. Note that, even though this survey only looked for these specific

species required special protection, the population of common species of wildlife is quite abundant.

South Korea is approximately the same size as Kentucky, and, much like the Blue Grass State, its geography is generally mountainous (4 out of every 5 acres) and all mountains are heavily forested. Of note, forests in the northern half of the country simply did not exist after the Korean war. In fact, the northern areas of the country were much akin to the desert areas of southern California; brown, appearing

(Continued on page 11)

Species of the Rodriguez Live Fire Complex

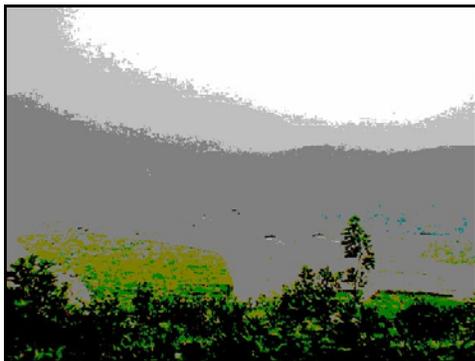
Class	Scientific Name	Common Name	Status
Mammals	<i>Hydropotes inermis argyropus</i> (Heude)	Korean water deer	Protected
Amphibians	<i>Bufo bufo gargarizans</i> Cantor	Asian toad	Specified
	<i>Kaloula borealis</i> (Barbour)	Small round frog	Specified
	<i>Rana dybowskii</i> Gunther	Mountain frog	Specified
Reptiles	<i>Eremias argus</i> Peters	Korean tiger lizard	Specified
	<i>Elaphe schrenckii</i> Strauch	Rat snake	Rare/Specified
	<i>Enhydris rufodorsata</i> (Cantor)	Water snake	Specified
	<i>Dinodon rufozonatus rufozonatus</i> (Cantor)	Asiatic king snake	Rare/Specified
	<i>Agkistrodon brevicaudus</i> Stejneger	Viper snake	Specified
Fish	<i>Odontobutis interrupta</i> Iwata et Jeon	Dark sleeper	Endemic
Birds	<i>Otus scops stictonotus</i> (Sharpe)	Scops Owl	Protected, Natl. Monument, Rare
	<i>Halcyon pileata</i> (Boddaert)	Black-capped kingfisher	Rare
Insects	<i>Sasakia charonda</i> (Hewitson)	Giant purple butterfly	Specified
	<i>Fabriciana nerippe</i> (C. et R. Felder)	Fritillary	Specified

The Biodiversity of Live Fire Range Complexes

(Continued from page 10)

dead, and offering little or no habitat for any type of wildlife. A national effort started by then President Park Chung Hee has since reforested the northern areas denuded by the Japanese and the Korean War (coniferous and deciduous mix).

What has been evolving over the rapid industrial growth years of this country is no different than any other industrialized nation except that it has been happening in a land space equivalent to a closet and over a very short space of time (1960-present). The northwest section of the country was generally spared the effects of growth due to military control in the area. However, this changed in 1996 and the land rush began. Isolated areas were occupied and sub-urban and agricultural growth commenced.



The problem is that no large scale National Parks exist in the northwest area to support wildlife populations. It is no wonder then that areas within the LFC have become home to such a diversity of wildlife. Either they migrate to these safe havens, learn domestication, or disappear.

The Rodriguez LFC, acquired and put into operation in the 1950s, encompasses an area of about 3,800 acres and contains 8 live fire ranges, one multiple integrated laser engagement system

Oddly enough, the recorded locations of wildlife indicate that buffer zones, inaccessible mountainous terrain, and even down range areas

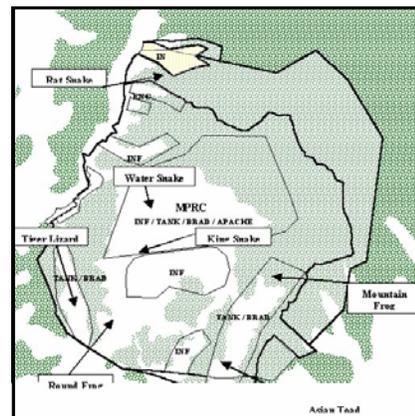
(MILES) range, a large staging area, and one small dedicated impact area for employment of dud producing munitions. Of the 3,800 acres, 1,222 acres are used for live fire or other types of training.

The main range on the complex is the Multi-Purpose Range Complex (MPRC), built in 1988, which takes up most of the land space within the center of the acquisition. Because of the safety issues involved, all ranges were built so that the effects of live fires or demolitions were contained by mountain backstops. The MPRC, with its capability to train tanks, Bradley's, and Apache's, uses the largest mountain on the range as its backstop.

This mountain, Bojang-San is 555M high and runs generally in a crescent shape around the down range area. Lower mountains and foothills serve as backstops or buffers for the other ranges. It is within these areas where most of the flora and fauna are located.

So, how does the wildlife react to the live fire range activities? For the most part, they appear to "tolerate" the presence of humans and the noise.

(Continued on page 12)



The Biodiversity of Live Fire Range Complexes

(Continued from page 11)

For example, everyone at the Rodriguez LFC knows who truly owns the downrange area of the MPRC; a young Pheasant and his hens. More often than not, range workers driving down the range roads may come upon this young male and his troop to find that he has barred their way and won't move. Honk if you like but it won't help. You have to get out and chase him off the road and even then, he goes grudgingly. Over the years, he has become quite a showpiece for the range.

Other wildlife, though not as aggressive, are much the same. They have come to know what areas we use, when we use them, and what it is that we do that is harmful. For years, two hours each morning and each evening during gunneries, we have shut down the MPRC to do target maintenance.

During both of these periods, you can see the wildlife come into the open and graze or move about. Just before we go hot again, they drift away to the safe areas. Our gunnery days also run in cycles of live fire and maintenance. Five days of live fire and one of maintenance. Our wildlife appears to have also learned this cycle and are observed easily on the maintenance days. One species, the Viper Snake, has made its home next to the Bravo Lane of our MPRC and up into the dismounted infantry belts of the Platoon Battle Course. Soldiers are not happy about this of course but the snake avoids them as much as they do it. Some of the different types of frogs live in the sediment catch basin near our administrative area.

Wildlife learns to adapt and has done so quite well in the northwestern areas of South Korea — thanks, in part, to the existence of land provided for EUSA training. EUSA live fire ranges in other locations are also proving to be sanctuaries for wildlife and the trend appears to be growing in pace with urban growth curves. Wildlife are constantly seeking areas protected from human growth and, short of a National Preserve, nothing is more protected than a live fire range. As long as proper management is applied towards the day to day preservation of existing flora and fauna and during

construction planning for new ranges or training facilities, co-habitation will continue and wildlife will thrive. However, this only holds true as long as EUSA continues to hold the acquisition. Sometime in the future when it is no longer needed for US military training, the land must and will be returned to the Republic of Korea. At that point, the continued existence of the wildlife in that area will become problematic as the tug-of-war between growth and habitat continues.

NTC ITAM GIS

Benefits Fort Irwin

*By Wayne Johnson & Ruth Sparks,
NTC ITAM PROGRAM*

After three years of collecting, compiling, validating, and converting data into a common format, the NTC ITAM GIS includes over fifty data layers and

- Is recognized by virtually all organizations on post as *the* source of common standardized information
- Is recognized by off-post entities as a valuable source for cartographic materials and data regarding ongoing work at the NTC
- Has a suitable user interface
- Supports ITAM, natural and cultural resources, and military applications.

At the NTC, ITAM personnel know that project design is critical for a successful land rehabilitation project and use the NTC ITAM GIS to help design LRAM projects. After identifying a project site, LRAM personnel use ArcView and the GIS database to develop an overview of the project site.

(Continued on page 13)

NTC ITAM GIS Benefits Fort Irwin

(Continued from page 12)

The overview includes Universal Transverse Mercator (UTM) grids and contours; digital aerial photographs (at 1m resolution) serve as the base coverage and show natural and man-made terrain features, such as washes, rocky slopes, trails, and engineer dig areas.

When visiting an LRAM project site, personnel use the overview of the project site and collect and/or correct information for use in the LRAM project design. For example, personnel record GPS coordinates of the project boundary, measure surface features within the site, take notes regarding necessary surface preparation, and list the plant species in adjacent undisturbed areas. They note corrected site condition data and terrain feature descriptions directly on the hard copy photos.

After returning to the office, LRAM personnel use the project site information, along with other GIS data layers, to develop an overlay of all project design components. For example, digitally formatted soil map units and ecosites, from the recently completed Level 3 Natural Resources Conservation Service (NRCS) Fort Irwin soil survey, provide the soil type attributes associated with a project area. The attributes indicate soil compaction, infiltration rates, nutrient composition, texture, and other pertinent substrate characteristics. These characteristics help determine site preparation options and identify appropriate plant species for successful rehabilitation of a site. Contour lines derived from the Digital Elevation Model (DEM) help determine the proper spacing and orientation (in relation to a slope) of planting locations and erosion control structures. (e.g., check dams, retention basins, straw wattles, fencing) Personnel add the planting and structural locations to the aerial photo coverage, using field notes and measurements. The digitally formatted project site information enables the LRAM Coordinator to estimate manpower requirements, calculate the number of acres needing a particular type of treatment, and quantify the equipment and materials to complete a project. (e.g., catchments, basins, plants)

The LRAM project design provides information for a Scope of Work (SOW), including task and site descriptions. The SOW helps contractors develop realistic cost and task proposals and provides in-house personnel with information to help them execute the project successfully. In addition to supporting LRAM project designs, the robust ITAM GIS database is another example of how the ITAM Program bridges the gap between the environmental and training communities.

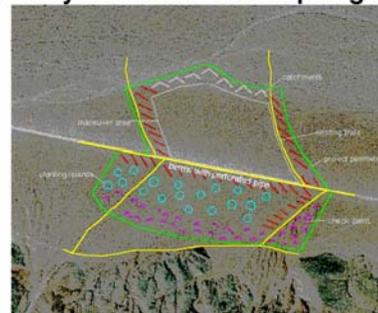
At the NTC, ITAM personnel are working with the Operations Group to explore ways to improve training management and the After Action Review (AAR) process. The Operations Group provides over 800 Observers/Controllers (OCs) to coach and mentor units that come to train at the NTC. Their goals are to ensure that the units follow doctrine, while providing constant feed back at every level. This entails a significant amount of verbal communication with over 600 AARs per rotation. Now, thanks to the NTC ITAM GIS, the Operations Group has a tool that provides visual feedback to the OC's and soldiers.

Examples of the visual feedback include:

- Accurately reproduced control graphics
- Visibility shots in both 2D and 3D
- Quick turn-around spatial products.

(Continued on page 14)

Valley of Death Site - Spring 99



Fort Hood ITAM GIS Supports Training Mission

by Jason Walters, GIS Coordinator & Jerry Paruzinski, ITAM Coordonator— Fort Hood

The Fort Hood ITAM office plays an important role in supporting military training and enhancing the numerous activities occurring at Fort Hood. As more military trainers learn about the capabilities of digital mapping and GIS, the supporting role that the ITAM GIS office plays in Fort Hood's training mission will continue to increase in its importance.

The more than 135 GIS-related work requests submitted to the Fort Hood GIS office during the past four months originated from the III Corps G3, 4th Infantry Division (4ID), 1st Cavalry Division (1CD), 13th Corps Support Command (COSCOM), Test and Experimentation Command (TEXCOM), West Point, 62nd Engineer Battalion, 49th AD, III Corps Deputy Chief of Staff, Fort Hood Anti-Terrorism Unit, and various installation agencies. The Fort Hood GIS office provided data for the United States Military Academy (USMA) West Point classrooms, and for planning the construction,

design, or implementation of new range facilities and digital technologies.

Most requests were for maps, overlays, or GIS data for individual field training exercises (FTX), installation activities, and miscellaneous events. Two FTX and one current project supported by the Fort Hood ITAM GIS projects are described subsequently.

River Reconnaissance FTX

In March, the 4ID 3-67AR Scouts conducted a River Reconnaissance FTX at Fort Hood. During the exercise, the unit surveyed crossings on major rivers and streams located within the Fort Hood western maneuver corridor and used for the force-on-force exercise. The basic training maps provided to the unit were developed using a 1:50,000 scale and lacked the necessary detail to conduct the exercise.

To support the training mission, the ITAM GIS office provided more detailed maps developed using a 1:10,000 scale. The new maps used 1997 digital aerial photography, hydrology, elevation, known crossing points, restrictions to training, and one-kilometer military grid layers. As a result of the more detailed and accurate ITAM GIS maps, the scout's had the upper hand during the Task Force battle. In the AAR the scout platoon leader was acknowledged for providing the detailed information that enabled the unit to win the battle.

After the FTX, the unit commander delivered updated, detailed information to the ITAM GIS office about each of the crossings used in the exercise. The updated stream crossing data included the depth of channel, bottom material, length of crossing, slope of entrance and exit, and the crossing's capacity for wheeled versus tracked traffic.

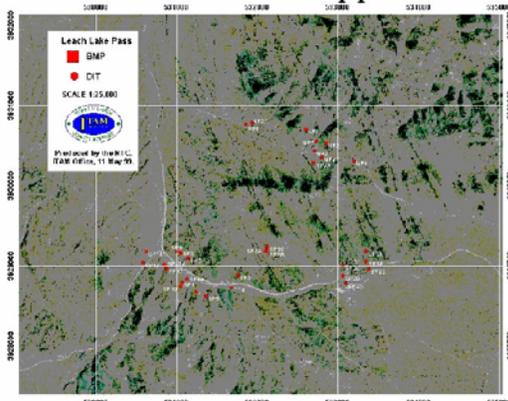
(Continued on page 15)

NTC ITAM GIS Benefits Fort Irwin

(Continued from page 13)

Although the visual feedback tool is not yet fully implemented for all of the teams, the utility and feasibility is recognized by the Commanders of and the teams in the Operations Groups.

Tactical Scenario Application



Fort Hood ITAM GIS Supports Training Mission

(Continued from page 14)

The ITAM office is using the updated information to make management decisions regarding the placement and repair of hardened stream crossings and this data will be incorporated into future training maps.

21st Combat Support Hospital 296 Bed Setup FTX

From 14 April to 19 May of

As more military trainers learn about the capabilities of digital mapping and GIS, the supporting role

Company, Directorate of Public Works (DPW) Cultural Resources, DPW Environmental, and DPW Natural Resources Offices and designed to aid military planning and training.

The purpose of the Fort Hood ITAM Excavation Planning map is to provide information to plan accurately all the digging

this year, 13th COSCOM conducted the first 21st Combat Support Hospital 296 Bed Setup FTX held at Fort Hood. The ITAM GIS office supported this mission from its conception.

In December 1998, the 13th COSCOM S2 S3 OIC requested e-size planning maps of two training areas on Fort Hood. COSCOM wanted maps developed using 1997 digital photography, five-meter contours, training restrictions, and a one-kilometer military grid to identify the training area most suited for the event.

After selecting the training area, COSCOM asked the Fort Hood ITAM GIS office to provide a master-planning map for the specific area. The training area totaled over 80 acres with 28 acres dedicated solely to the hospital.

On 13 April, the GIS office delivered to COSCOM a set of maps detailing the exact area required for the event. COSCOM used the maps to coordinate the setup of the hospital and its supporting facilities and to coordinate additional missions associated with the FTX. Because of proper planning, guidance, and ITAM support the FTX mission went as planned and was a great success.

Excavation Planning Map

At present, the Fort Hood ITAM GIS is creating a Fort Hood ITAM Excavation Planning Map. The effort to create the map is a joint project developed through the Fort Hood ITAM, 555th Topographic

requirements related to Fort Hood's training missions and to facilitate the dig permit process for selected training sites.

The dig permit process at Fort Hood requires a unit to identify the sites for unit digging operations and to get approval signatures from numerous agencies' prior to the actual digging event. Typically, the preparation and approval process can take several days.

Without the benefit of a tool such as the Fort Hood ITAM Excavation Planning Map, units have little or no information about the sites that are likely to be approved for unit digging operations. Due to the lack of information, many units' dig requests are modified when submitted for approval. As a result, the approved dig sites are sometimes inadequate for the units training mission, so the units have to repeat the process to find a suitable location.

With the Excavation Planning Map, units will be able to see the areas at Fort Hood that are restricted from digging operations and the areas where digging activities are likely to be allowed. Units will be able to submit dig permits for sites that can support the planned training mission and corresponding digging exercises. The map will also facilitate the turn-around time for processing unit digging permits.

Land Condition Mapping at Fort Lewis

By Angel Lombardi, Fort Lewis, LCTA Coordinator & Mari Remsberg, LCTA Field Crew

Before widespread development, noxious weed introduction, and encroachment of Douglas fir forests, Puget Sound lowland prairies covered large portions of Western Washington. Today, only about 10% of the lowland prairies remain, making it one of the most endangered in the state. Fort Lewis supports some of the largest remaining examples of Puget Sound lowland prairies.

At the Fort Lewis Military Reservation, the 13th Division lowland prairies are located in the eastern portion of Fort Lewis. Each year the 13th Division prairies receive high-use and support high-intensity tracked vehicle training. In 1998, the LCTA team at Fort Lewis used Land Condition Mapping (LCM) to collect data from and assess the conditions of the lowland prairies.

The standard LCTA method is a process for examining individual plots within an ecosystem. The Land Condition Mapping (LCM) method provides an efficient and repeatable way to get a “snap shot” of a high-use open habitats quickly and for an entire prairie system. The LCM method allows collection of any number of (data) attributes, which are used to develop maps that measure the percent (%) cover of that attribute. As a rule, LCM data collection occurs during the “off” times of the season. (i.e., either when plants are emerging and it is still too early for the more traditional LCTA-types of data collection or when a majority of the plant species are dehiscing and the monitoring season is at an end)

To assess the conditions of the 13th Division lowland prairies, the LCTA team needed to collect data, and generate the maps to answer specific questions.

13TH DIVISION PRAIRIE LCM QUESTIONS

- What is the condition of prairie lands on 13th Division prairie? Where exactly is the good quality prairie? (% cover of native species)
- What is the expanse of Scotch broom invasion on 13th Division prairies? (% cover of Scotch broom)
- How common is white-topped aster, a state sensitive species, across the prairie? (presence/absence)
- What is the extent of tracked vehicle training on 13th Division prairie? (% cover of tracks)
- Where do oak woodlands and other types of woodlands occur on 13th Division prairie? (presence/absence)
- Which areas were exposed to fire in 1998? (presence/absence)

First, the LCTA team developed a list of questions. Next, the team used UTM coordinates to divide the 13th Division prairies into 25-meter square polygons. Then, based on the questions that needed answers, the team collected data attributes from each polygon and transposed the data onto a map. The resulting LCM maps provide a **visual trend** of the 13th Division prairies, using color-coded 25-meter quadrats.

For more information on LCM at Fort Lewis, please contact the Fort Lewis LCTA Coordinator at: lombardi@lewis.army.mil

ITAM Program Integration at WSMR

By Jeanne L. Dye, Senior Stewardship Ecologist

WSMR ITAM Program Coordinator, The Nature Conservancy of New Mexico

White Sands at a Glance

White Sands Missile Range (WSMR) is a multi-service test range whose main function is to support missile development and test programs for the Army, Navy, Air Force, National Aeronautics and Space Administration (NASA), other government agencies and private industry. The White Sands range is the largest military installation in the country under operational control of the U.S. Army Test and

White Sands National Monument and the San Andres National Wildlife Refuge. The range encompasses dry lakebeds at the 4,000-foot level and steep, rocky mountain peaks at the 9,000-foot level. In between are rolling grasslands, sand dunes, lava flows, foothills, and rugged canyons.

White Sands provides a home for a vast array of wildlife, including the African oryx,

Evaluation Command (TECOM), Aberdeen Proving Ground, Maryland.

White Sands is about the size of Rhode Island and Delaware combined, plus it has agreements with the ranchers and residents in areas adjacent to the Range. These agreements allow the Range to evacuate the call-up area residents several times each year. This arrangement increases the size of the Range by about two-thirds, allowing testing of some of today's long-range

TECOM is the Army's test laboratory for planning and conducting engineering and service tests of all materials from missiles to rifles, tanks to trucks, clothing to radios, and aviation to fire control equipment.

desert bighorn sheep, pronghorn, cougars, golden eagles, and a variety of rattlesnakes. There is controlled hunting for some animals. Nevertheless, since White Sands is a restricted-entry installation, wildlife enjoys a life that is relatively free from the influences of modern man.

The White Sands ITAM Program

The ITAM team, managed through a partnership agreement between White Sands and The Nature Conservancy of New

missiles. In addition to firing rockets and missiles on White Sands, long-range missiles are fired from remote locations to impact on the Range.

White Sands also provides an alternate landing site for NASA's space shuttle program. Currently, the Northrup landing strip is the primary training site for shuttle pilots to practice approaches and mock landings in the shuttle trainer aircraft.

In addition to a fascinating history, White Sands is rich in natural assets. The Range is primarily located in the Tularosa Basin of southcentral New Mexico and occupies almost 3,200 square miles of varied terrain, including two mountain ranges, plus

Mexico, has an ambitious plan for fiscal years 1999 and 2000. In general, the team is in the process of integrating and implementing ITAM processes across the installation and redirecting ITAM efforts to optimize program benefits.

Specific actions planned are to modify and/or develop new ITAM methodologies; coordinate and assist in establishing policies and procedures by which ITAM is integrated with Directorate of National Range Environment and Safety (NR-ES) Staff actions; coordinate with all divisions during project prioritizing and planning; organize and determine appropriate data for modeling and analysis; and develop reimbursable avenues to replace current ITAM funding.

ITAM Program Integration at WSMR

(Continued from page 17)

The team identified these potential applications.

LCTA

- Resource inventories and assessments (actual and potential)
- Trend detection in land and vegetation conditions and wildlife populations
- Data sharing to support the Integrated Natural and Cultural Resource Management Plans (i.e., the INRMP and ICRMP)
- Habitat condition analyses for Threatened and Endangered Species (TES) and other species of concern

TRI

- Test/project site-selection modeling
- Land carrying capacity/successional dynamics simulation
- Project specific report and map production
- Recommendations for development/usage rates for each site

LRAM

- Site-specific land rehabilitation recommendations/actions
- Decision support system to target land/habitat rehabilitation
- Terrain modeling and soil erosion simulations

EA

Development of:

- Brochures illustrating habitats, species, and resources of concern
- Wildlife and plant checklists
- Videos depicting safety and conservation principles
- Participation in environmental awareness/safety training.

By coordinating with all divisions the ITAM team can zero in on what is important, plan accordingly, and leverage limited resources. By redirecting the ITAM Program efforts and integrating ITAM with other programs, the ITAM team will be in a position to better support, interact with, and benefit from the NR-ES actions and resources. Additionally, the team will be positioned to integrate with Range Operations and Scheduling and disseminate critical information, as well as announcements through the Public Affairs Office.

The installation-wide benefits resulting from ITAM integration and implementation are as follows:

- Improved land stewardship
- Integrated environmental and safety planning for all range operations
- Operations that comply with environmental and safety regulations and/or standards
- Compliance monitoring and noncompliance reporting to appropriate enforcement organizations
- Improved ability to ensure that customers bear the full cost of testing (i.e., monitoring, mitigation, and restoration costs)
 - Pollution prevention, primarily at the source.

For suggestions or more information regarding the WSMR ITAM Program, please contact Ms. Jeanne Dye at (505) 678-0794.

Fort Huachuca GPS/GIS

(Part-II, continued from Winter 1999 Issue)

By Steve Kroeker, Fort Huachuca ITAM Coordinator (former)

GPS and GIS technologies help ITAM personnel manage training lands and the environment at Fort Huachuca. Many soldiers are familiar with GPS systems used by the Army to determine location and to navigate from one point to another. Typically, a GPS antenna is mounted on the roof of a vehicle, but in the case of ITAM, it can also be attached to a short pole that mounts on a waist pack for mapping on foot.

For example, ITAM personnel can use the GPS to record descriptive information called attributes, and then download it to create a map of an area and its features. The collected attribute information is user-defined, which allows the ITAM Program to set up menus listing commonly encountered features for which accurate locations are needed. This attribute information is stored in a data dictionary that contains a wide variety of attribute types, including tank hulks and unexploded ordnance in the impact area, erosion control structures, roads, firing points, landing zones, buildings, and burn areas, to name a few.

The data dictionary allows rapid collection of detailed information about features by using the various menus and sub-menus, instead of typing in the information one feature at a time.

Trimble Navigation Systems, who also make military GPS systems, produces the Pro XRS GPS system used in the ITAM Program. The Pro XRS is a mapping-quality GPS system that will

A GPS system is composed of a receiver that acquires radio signals from a constellation of 24 satellites circling the globe. Each satellite has a precise atomic clock that sends out a signal to the receiver indicating the satellite's identity, location and the exact time of signal transmission.



consistently provide sub-meter accuracy. (This means it can distinguish between two points on the ground that are less than three feet apart.) This may not seem significant until considering that it allows location of and navigation to an object the size of a basketball in the dark, in the middle of the ocean, from anywhere on the planet!

While many people believe that any GPS unit can deliver one-meter accuracy, many variables can affect this. Some variables include signal distortion as it travels through the atmosphere and intentional accuracy degradation by the DOD of up to 100 meters, called selective availability. By comparing the travel time of the radio signals and the satellites' locations, the receiver determines its position by triangulation. Some survey-quality GPS systems are accurate to less than one centimeter.

Currently, the Fort Huachuca ITAM Program is in the process of "GPS'ing" and mapping all of the roads and trails on the nearly 29,000 acre East Range training area. Numerous roads and trails criss-cross the area, increasing the

potential for erosion due to the lack of vegetation. As part of the land rehabilitation and maintenance component of the ITAM Program, a number of roads will be closed and reseeded to reduce the amount of bare soil in those areas.

After collecting data with the GPS and the video mapping system, ITAM personnel will use a

(Continued on page 20)

Fort Huachuca GPS/GIS

(Continued from page 19)

GIS to effectively manage and analyze the data.

ESRI's ArcView and Spatial Analyst software are used for the Fort Huachuca ITAM GIS system. ArcView is user friendly and allows people with very little experience and training to create accurate maps. The recent addition of Spatial Analyst enhances the ability to analyze data collected in the field instead of just making "pretty maps." The biggest advantage is that the GIS integrates the various data layers into one seamless map that can quickly and easily be viewed in different combinations.

A GIS can be thought of as a map made up of a series of different data layers, which can be individually selected and combined to generate a new map display. Each data layer, or theme, also has its own unique database associated with it. This allows queries to be conducted on the theme layers.

and size of available areas are now used to create maps of potential sites.

Once this is done, proximity of these areas is compared to restricted or environmentally sensitive areas, such as drop zones, artillery impact areas, archeological sites, wetlands (yes, we do have some in this desert environment), critical wildlife habitats, and hazardous material storage areas.

With Spatial Analyst, buffer zones can be created around the various sensitive and restricted areas, varying the size of the buffer according to the sensitivity and nature of the site. Applying the same technique to the road, slope,

Currently, there are over 50 data layers in the ITAM Program database. Data layers are continuously added as information is gathered with the GPS and video mapping system. The long-term goal is to expand the database and make it available to other users on the installation using passwords and an access control system. This would make the data layers available to other users on the Fort Huachuca installation, but would restrict sensitive information to personnel and agencies based on "need-to-know" criteria. This aids in getting the information to the users where it can do the most good, but keeps the data from unauthorized use.

The GIS system provides several significant capabilities. Now it is possible to run a detailed analysis of the training areas, by combining and querying different data layers. This capability is used to create new bivouac sites and equipment emplacement sites for units to use. This allows designation of a large number of suitable locations for units to bivouac instead of using the same areas repeatedly, causing damage from over-use and potential erosion. Soil composition analysis, slope, line-of-sight, vehicle accessibility, vegetation type,

and line-of-sight data layers, a map is produced that shows not only where the ideal training sites are located, but also areas that meet most of the criteria required for training. The map also displays how the compatibility changes from site to site, using changing color schemes.

Fort Huachuca's ITAM Program has made tremendous gains in the ability to locate, catalog, analyze, and manage environmental and training issues by utilizing the commercially available GPS, GIS, and video mapping technologies. This benefits not only soldiers training at Fort Huachuca, but also civilians using the post for recreation, and the environment as a whole. Soldiers have more areas available for training exercises, with better accessibility and improved lands for training. The civilian community gains more recreation opportunities because training areas do not have to be put off-limits due to erosion or over-use. The environment as a whole, and specifically the wildlife on Fort Huachuca, benefits through better habitat and a sound management plan. Together, it creates a win-win situation for the Army, the local community, and the environment.

Vegetation Mapping at Fort Stewart

By William Rutlin, Fort Stewart LCTA Coordinator

Fort Stewart initiated vegetation mapping efforts in 1995. During 1995, personnel delineated vegetation communities on 1:20,000 scale infrared National Aerial Photography Program (NAPP) photographs and established LCTA Braun Blanquet/relevé plots to represent various community types across the installation.

The Braun Blanquet methodology adopted by Fort Stewart provides detailed information on vegetation community, structure, and composition and is ideal for vegetation mapping. The relevé plot

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Stewart.

During 1999, the Fort Stewart LCTA team will continue with efforts to complete the vegetation maps. Using data from the relevé plots and/or the converted aerial photos, the LCTA team will visually inspect, edit, and label the vegetation communities originally delineated between 1995 and 1997.

Once communities are accurately delineated and named, Ft. Stewart will be able to produce maps. The maps will have a universally understood

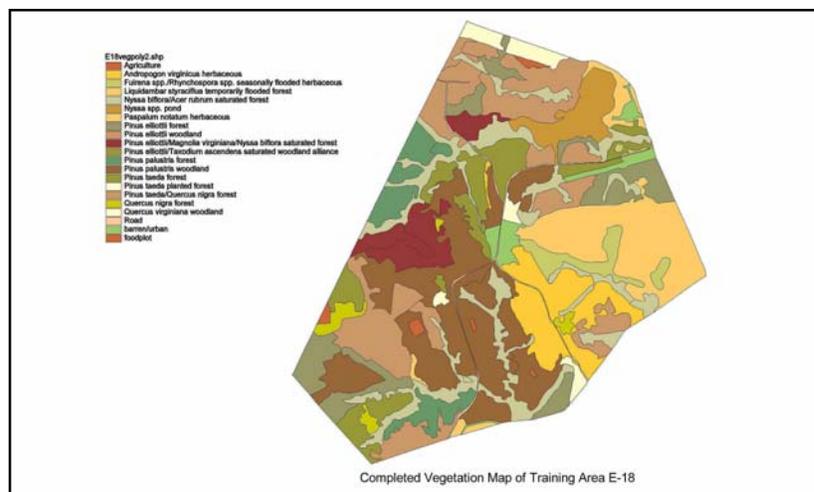
(i.e., stand sample plot) allows the LCTA field crews to develop a complete description of a vegetation community, by including a record of all plant species associated with different vertical layers. (i.e., the tree, shrub, and herbaceous layers)

During 1996 and 1997, the LCTA team continued to delineate vegetation communities using the NAPP photos and digitized the delineated communities using GRASS GIS software. In the field, LCTA crews worked to establish about 1000 relevé plots across the installation.

During 1998, LCTA field crews were busy monitoring the LCTA plots. Initially, the field crew visited 200 plots. The plot data supplemented other data collected at Fort Stewart (e.g., data regarding disturbances, land use, maintenance activities, erosion, ground cover, basal area, total canopy cover) and was used to assess changes in land condition. The teams also were able to orthorectify and convert to a digital format infrared and true color aerial photographs of Fort

classification scheme that benefits mission-related natural resources and training activities and that provides the ITAM Program and the Fish, Wildlife, and Forestry departments with valuable information to:

- Locate potential wetlands and endangered species habitats
- Estimate erosion and degradation impacts associated with military training
- Plan range expansion and construction projects.



New Process & Look for The Bridge

By Lisa Booher, USAEC

Thanks to renewed support from MACOM ITAM representatives, The Bridge has a revised process for developing the newsletter. The process change was initiated in Mar 99, based on decisions at the ITAM Program Management Review (PMR 99-1)

- **The new process** — A team of MACOMs is now responsible for contributing articles from their commands to be included in the Newsletter. The MACOM teams are responsible for one publication per year and must identify articles and ensure they are submitted to USAEC by the submission date. This does not preclude other articles from being included in the Newsletter. This simply emphasizes articles from the MACOM team for that publication. News is only valuable if provided in a timely manner so continue to submit time-sensitive requirements and articles for the Newsletter through your MACOM to USAEC.

The teams and publication responsibilities are as follows:

<u>MACOM TEAM</u>	<u>Issue</u>	<u>Submission Date</u>
FORSCOM, USAREUR, EUSA, & USARC	Summer	30 May*
TRADOC, USMA, & MEDCOM	Fall	30 Sep
NGB, USARPAC, MDW, & AMC/ATEC	Winter	30 Jan

* *Current Issue*

- **The number of issues** — The number of issues has changed from 4 to 3-per year. The publication dates are: Summer Issue – July; Fall Issue – November; and Winter Issue – March.
- **Editorial support** — Support is available from our contractor, who can assist with the writing, editing, and formatting of articles. Contact your MACOM or USAEC to request this support.
- **Feedback** — Feedback is still a part of the process. Send your comments to USAEC at:

aaboher@aec.apgea.army.mil

Besides our “updated look”, we are confident these changes represent positive steps forward for The Bridge.

Fall Issue

TRADOC, USMA, and MEDCOM are responsible for the Fall issue. Articles should be provided to the MACOMs by 30 Sep. The target publication date is the 1st week of Nov.

Other MACOM-approved articles will also be accepted and should be submitted to USAEC by 30 Sep.

ITAM Website Updates

By Lisa Booher, USAEC

Just a brief note about the new and planned ITAM Website updates —

www.army-itam.com

- **FULL SEARCH FUNCTION - AVAILABLE NOW.**
- **ITAM WORKSHOP PAGE – AVAILABLE NOW.**
- **Online Submission of Papers for the 00 ITAM Workshop - Coming in the fall.**
- **New Format for the Chat Room, including a GIS Forum – Coming in July.**

- **Management Workshop** – (Web-based Training Modules) LCTA and Army Organizations, and Conservation – *Coming in August.*
- **LRAM Photo Gallery - Coming in the Fall.**
 - ◇ Submit your before and after LRAM photos to USAEC in electronic format.
 - ◇ Include a brief summary that states where, when (date), and what was done to improve the area. Also, include a POC & telephone number.

There are many more planned enhancements. Send USAEC your requirements and ideas, and they will be considered for future changes.

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The Bridge

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*In This Issue of
The Bridge . . .*

Remember to visit the ITAM website! <http://www.army-itam.com>

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