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Organization: American Fisheries Society

Sponsor code: AFS Location code: 001

Registrar: Gail Goldberg Telephone: 301-897-8616 x230 5410 Grosvenor Lane, Suite 110 Bethesda, MD 20814

Ace Course Number	Version	Dates	Title/Credit/Description
	1	Eff: 9/10/2006	LEADERSHIP REGARDLESS OF POSITION 0.6 CEU (6 hours) PARTICIPANTS WILL BE ABLE TO IDENTIFY THE MOST IMPORTANT ATTRIBUTES OF EFFECTIVE LEADERSHIP IN NATURAL RESOURCE ORGANIZATIONS. PARTICIPANTS WILL IDENTIFY THE CHARACTERISTICS OF THEIR PERSONALITIES AND APPROACHES TO WORK THAT ENHANCE OR INHIBIT THEIR ABILITY TO LEAD. PARTICIPANTS WILL DEVELOP STRATEGIES TO ENHANCE THEIR INFLUENCE IN ORGANIZATIONS THAT ARE APPROPRIATE TO ANY POSITION WITHIN THE ORGANIZATIONS.
0001	1	Eff: 7/1/1988	FISH MARKING TECHNIQUES WORKSHOP 3.2 CEU A SYNTHESIS OF CURRENT FISH MARKING TECHNOLOGIES, EXPERIMENTAL DESIGN, & ANALYSIS OF FISH POPULATIONS FOR FIELD APPLICATION.
0002	1	Eff: 9/11/1988 - 10/29/1989	FISH BIOENERGETICS: A COMPUTER MODELING APPROACH 1.5 CEU USE OF MICROCOMPUTER MODEL OF FISH BIOENERGETICS TO ADDRESS QUESTIONS OF FISH GROWTH, CONSUMPTION, & PRODUCTION. DISCUSSION OF DATA REQUIREMENTS, DATA FILES,
0002	2	Eff: 10/30/1989	MODEL RUNS, & ANALYSIS OF OUTPUT. FISH BIOENERGETICS: A COMPUTER MODELING APPROACH 1.5 CEU USE OF MICROCOMPUTER MODEL OF FISH BIOENERGETICS TO ADDRESS QUESTIONS OF FISH GROWTH, CONSUMPTION, AND PRODUCTION. DISCUSSION OF DATA REQUIREMENTS, DATA FILES, MODEL RUNS AND ANALYSIS OF OUTPUT.

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rerephone. 301-077-0010 A230			Email: ggoldberg@nshertes.org
Ace Course Number	Version	Dates	Title/Credit/Description
0003	1	Eff: 1/1/1988	COMMUNITY DYNAMICS WORKSHOP 2.0 CEU COURSE WILL UPDATE FISHERIES BIOLOGISTS IN THE GENERAL AREA OF COMMUNITY ECOLOGY AS IT RELATES TO FISHERIES
			ISSUES AND PROBLEMS. LECTURE, DISCUSSION, COMPUTER DEMO.
0004	1	Eff: 4/27/1989	ELECTRO-FISHING-STATE OF THE ART 2.0 CEU
			OVERVIEW OF THE THEORETICAL AND APPLIED BASIS OF ELECTROFISHING WITH EMPHASIS ON TECHNIQUE TO SAFELY USE ELECTROSHOCKING IN DIFFERENT SITUATIONS.
0005	1	Eff: 9/13/1989	INSTREAM FLOW METHODOLOGIES IN MEDWESTERN U.S. 1.3 CEU
			PRESENTATION OF INSTREAM FLOW METHODS FOLLOWED BY SMALL GROUP EXXERCISES AND CASE STUDIES TO ANALYZE SITUATIONS FORM PROBLEM TO SOLUTION.
0006	1	Eff: 9/14/1989	ANALYZING AND MANAGING USER-GROUP CONFLICTS 1.0 CEU
			WORKSHOP ADDRESSES MANAGEMENT SKILLS RELEVANT TO HANDLING USER-GROUP CONFLICTS, USER PARTICIPATION IN MANAGEMENT AND CONFLICT RESOLUTION.
0007	1	Eff: 9/3/1989	USING SOCIOECONOMICS IN THE FISHERIES POLICY PROCE
			1.5 CEU
			BASIC LEGAL, ADMIN, AND SCIENTIFIC ISSUES IN THE USE OF SOCIOECONOMIC DATA AND ANALYSIS IN THE FISHERY POLICY AND MANAGEMENT PROCESS.
8000	1	Eff: 12/3/1989	FISHERY ANALYSIS WITH MS-DOS MICROCOMPUTERS 1.6 CEU
			TEACHES FISHERY MANAGERS, ADMINISTRATORS, AND EDUCATORS TO USE MICROCOMPUTERS MORE EFFECTIVELY IN HANDLING AND ANALYSISOF DATA, DEVELOPMENT OF GRAPHICS AND PREPARATION OF REPORTS.

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Telephone. 301 077 0010 X230			Email: ggolderg@monerco.org
Ace Course Number	Version	Dates	Title/Credit/Description
0009	1	Eff: 1/12/1990	STATISTICS IN FISHERIES MANAGEMENT AND RESEARCH 3.3 CEU INTRODUCTION TO STATISTICAL METHODS FOR THOSE WHO HAVE NOT HAD A RECENT COURSE IN STATISTICAL METHODS AND AS A REFRESHER FOR THOSE FOR WHOM IT-HAS BEEN A LONG TIME.
0010	1	Eff: 3/31/1990	CREEL AND ANGLER SURVEYS IN FISHERIES MANAGEMENT 3.2 CEU DESIGNED TO FULFILL A NEED TO BRING TOGETHER AND DISTILL INFORMATION ON SURVEY TECHNIQUES FOR FISHERIES MANAGEMENT. SYMPOSIUM WILL INCREASE ABILITIES TO OBTAIN VIABLE SURVEY INFORMATION.
0011	1	Eff: 1/17/1991	STOCK AND CONDITION INDICES IN FISH RESEARCH 2.2 CEU AN OVERVIEW OF CURRENT IDEAS AND ALTERNATIVES IN THE USE OF STOCK AND CONDITION INDICES IN FISH- ERIES MANAGEMENT AND RESEARCH.
0012	1	Eff: 12/11/1991	GROWTH ASSESSMENT FOR FISHERIES RESEARCH 1.8 CEU AN EXAMINATION OF RECENT DEVELOPMENTS IN STATIS- TICAL MODELLING DESCRIBING FISH GROWTH.
0013	1	Eff: 5/4/1992	INTRODUCTORY WETLANDS SCIENCE .8 CEU INTRODUCTION TO THE PRINCIPLES OF WETLANDS MANAGE-MENT, ASSESSMENT, MITIGATION AND REGULATION.
0014	1	Eff: 1/24/1992	COMMUNITY ECOLOGY CONCEPTS IN FISH MGT/RESEARCH 2.0 CEU THE APPLICATION OF BIOENERGETICS MODELS TO FISHERIES; PRINCIPLES OF COMMUNITY AND TROPHIC ECOLOGY IN FISHERIES.

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Ace Course Number	Version	Dates	Title/Credit/Description
0018	1	Eff: 8/7/1995	FISH GENETICS
			3.6 CEU
			BASIC PRINCIPLES OF POPULATION GENETICS. SUCCESSFUL
			RESTORATION/CREATION OF FISHERY RESOURCES.
0023	1	Eff: 9/13/1993	HOW TO TESTIFY AS AN EXPERT WITNESS
			4.0 CEU
			OVERVIEW OF US COURT SYSTEM AND ROLE AND QUALI- FICATIONS OF EXPERT WITNESS.
0024	1	Eff: 1/6/1993	COMPUTER APPLICATIONS OF MULTI-VARIATE STATISTICS FOR FISH
			BIOLOGY
			2.0 CEU
			MULTIVARIATE ANALYSIS AND STATISTICS APPLICATION TO
			FISHERY DATA.
0025	1	Eff: 6/16/1993	LARVAL FISH WORKSHOP
			1.5 CEU
			TECHNIQUES AND GEAR FOR IDENTIFICATION OF LARVAL FISH.
0026	1	Eff: 4/1/1993	FISHERY STOCK ASSESSMENT
			2.0 CEU
			INTRODUCTION TO MODELS FOR FISHERY STOCK ASSESSMENTS.
0027	1	Eff: 4/18/1993	ANGLER SURVEY TECHNIQUES
			.7 CEU
			INTRODUCTION OF NEW CONCEPTS IN ANGLER SURVEY
			METHODOLOGIES.
0028	1	Eff: 8/13/1993	WRITING FOR SCIENTIFIC/ADMINISTRATIVE AUDIENCES
			.6 CEU
			ANALYZING WRITING PROBLEMS ORGANIZING WRITING SELF
			REVIEW DRAFT AND GROUP REVIEWS

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010 XZ30		Email: ggolddei g@nsheries.oig
Version	Dates	Title/Credit/Description
1	Eff: 8/28/1993	FISH HEALTH AND CONDITION ASSESSMENT WORKSHOP 1.0 CEU
		CONPECTS OF STRESS AND FISH HEALTH MONITORING FEATURES APPROACH TO AUTOPSY SYSTEM. LAB INSTRUCTIONS AND DEMONSTRATIONS COMPUTER DATA ANALYSIS INTERPRETATION.
1	Eff: 8/26/1993	WATERSHED & STREAM RESTORATION 1.2 CEU
		INTEGRATED WATERSHED & STREAM RESTORATON CONCEPTS OF INTEGRATED RESTORATION PLANNING CONDUCTING FULL WATERSHED ANALYSISGEORGRAPHIC INFORMATION SYSTEMS
1	Eff: 8/19/1993	BREEDING PLANS FOR MANAGED FISH POPULATIONS
		.8 CEU EFFECTIVE POPULATION SIZE GENETIC CONSEQUENCES/DIFFERENT MATING SYSTEMS BREEDING PLANS DEVELOPMENT STOCK, RECONSTRUCTION OF POP., MAINTENANCE
1	Eff: 3/15/1994	FLUVIAL PROCESS IN STREAM HABITAT MANAGEMENT 2.1 CEU INTRODUCTION TO HOLISTIC MANAGEMENT HYDROLOGY,
		GEOMORPHOLOGY AND WATERSHED FLUVIAL PROCESSES; CHANNEL MORPHOLOGY & STM MGT. MGT TECHNIQUES WITH INDICATIONS.
1	Eff: 5/1/1994	UNDERSTANDING & RESPONDING TO PUBLIC CONCERNS .7 CEU
		INTRO TO CONCEPTS OF HUMAN DIMENSIONS SCIENCE MARKETING TO FISHERIES AND WILDLIFE PROFESSIONALS TOOLS NEEDED TO ACCURATELY MEASURE OPIN. & ATT.
1	Eff: 6/21/1994	PRINCIPLES AND TECHNIQUES OF ELECTROFISHING
		2.0 CEU
		BASIC ELECTRICAL PRINCIPLES AS APPLIED TO ELECTROFISHING; ELECTROFISHING SYSTEMS; AND EMPHASIZES THE CAPABILITIES ANDLIMITATIONS OF ELECTROFISHING
	Version 1 1	Version Dates 1 Eff: 8/28/1993 1 Eff: 8/26/1993 1 Eff: 8/19/1993 1 Eff: 3/15/1994 1 Eff: 5/1/1994

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Telephone. 301-897-8	010 X230		Email: ggoldderg@nshertes.org
Ace Course Number	Version	Dates	Title/Credit/Description
0035	1	Eff: 7/27/1994	FISH HEALTH AND CONDITION ASSESSMENT WORKSHOP 7.5 CEU
			USING ANATOMICAL AND ORGANISMAL INDICATORS TO MONITOR THE HEALTH AND CONDITION OF FISH POPULATIONS.
036	1	Eff: 8/18/1994	WATER SAFEY - RESCUE FOR FISHERIES PERSONNEL
			4.0 CEU
			TRAINING AND IMPLEMENTATION OF SAFETY TECHNIQUES UNDER "REAL LIFE" IN-STREAM CONDITIONS.
0037	1	Eff: 10/1/1994	FISHERY SURVEY AND EXPERIMENTAL DESIGN
			.4 CEU
			SELECTION OF AN APPROPRIATE SAMPLING PLAN SPECIAL
			METHODS OF ANALYSIS FOR FIXED-STATION SAMPSAMPLE SIZE
			SELECTION WHEN AND HOW TO USE STRATIFIED SAMPLING
0038	1	Eff: 9/16/1994	EFFECTIVE COMMUNICATION SKILLS
			.4 CEU
			BASIC SKILLS OF SPEAKING TO THE PUBLIC DEVELOPING EFFECTIVE
			VISUAL AIDS HOW TO AVOID COMMON BARRIERS TO
			UNDERSTANDING
0039	1	Eff: 10/25/1994	INTRO TO BIOSTATISTICS FOR FISHERY WORKERS
			1.5 CEU
			KNOWLEDGE OF STATISTICAL CONCEPTS AND TESTS ABLE TO
			CONDUCT STATISTICAL TEST ON OWN DATA SETS; DEVELOP
			SOLUTIONS FOR OWN MANAGEMENT SITUATIONS.
0040	1	Eff: 4/7/1995	GENETIC PRINC & TECHNIQUES FOR FISHERIES RESOURCES
			1.6 CEU
			INTRO TO BASIC PRINCIPLES, STOCK IDENTIFICATION, GENETIC
			GUIDELINES FOR HATCHERIES/TRANSPLANTATIONSMOLECULAR
			GENETIC TOOLS AND APPLICATIONS AND EFFECTS OF
			GENETICALLY MODIFIED ORGANISMS.

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Ace Course Number	Version	Dates	Title/Credit/Description
0042	1	Eff: 8/10/1995	AGE, GROWTH, AND PRODUCTION OF FISHES
			1.0 CEU
			LEARN TO INTERPRET AGING STRUCTURES AND USE DATA IN FISH GROWTH SOFTWARE. COMPARE AND CONTRAST METHODS OF ESTIMATING PRODUCTION FROM AGING AND GROWTH DATA.
0043	1	Eff: 9/1/1995	GPS/GIS LEVEL I END USER TRAINING
			.7 CEU
			PLAN AND EXECUTE A GPS/GIS DATA COLLECTION SURVEY PROCESS AND QUALITY CONTROL THE RESULTS AND TRANS-FORM THE OUTPUT INTO FORMATS COMPATIBLE WITH A VARIETY OF GIS APPLICATION SOFTWARE DUTIES.
0044	1	Eff: 3/20/1996	AGE AND GROWTH WORKSHOP
			1.0 CEU
			ACCURATELY AGE A VARIETY OF FISH SPECIES USING A VARIETY OF HARD PARTS. UNDERSTAND THE USE AND LIMITATIONS OF AGE DATAIN FISHERIES MANAGEMENT.
0045	1	Eff: 8/1/1995	ORDERS TESTUDINES AND ANURA OF ILLINOIS
			1.5 CEU
			IDENTIFY ANIMALS IN ILLINOIS USING VOUCHER SPECIMENS AND LIVE INDIVIDUALS. GAIN KNOWLEDGE ON THEIR LIFE HISTORIES, POPULATION DYNAMICS INCLUDINGDENSITIES, REPRODUCTION, MORTALITY, AGE & GROWTH.
0046	1	Eff: 2/22/1996	INCORPORATING SOCIAL SCIENCE INTO FISHERIES MGMT
			.8 CEU MANAGE MORE EFFECTIVELY TO AVOID USER-GROUP CON-FLICTS. DEVELOP FISHERIES POLICY THROUGH DEFINING PUBLIC INTEREST. USESOCIAL SCIENCE DATA IN FISH MGMT. UNDERSTAND HUMAN DIMENSIONS RESEARCH METHODS

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			# 1 00 3 mm 6
Ace Course Number	Version	Dates	Title/Credit/Description
0047	1	Eff: 8/19/1996	THE CRAYFISH AND MUSSELS OF ILLINOIS
			1.5 CEU
			PARTICIPANTS WILL BE ABLE TO CORRECTLY IDENTIFY ALL OF THE
			CRAYFISH AND MUSSELS IN IL USING VOUCHER SPECIMENS & LIVE INDIVIDUALS CAPTURED BY THE PARTICIPANTS, GAIN KNOWLEDGE
			OF LIFE HISTORY.
0048	1	Eff: 11/20/1996	STREAM HABITAT AND DRAINAGE MAINTENANCE
		E11. 11/20/1990	1.0 CEU
			GAIN WORKING KNOWLEDGE OF FOLLOWING: EFFECTS OF
			CHANNELIZATION ON ENVIRON QUALITY. ECONOMIC COSTS AND
			BENEFITS OF DRAINAGE, & METHODS OF PROTECTING AND
			RESTORING STREAM HABITAT.
0049	1	Eff: 10/8/1996	STREAM HABITAT ASSESMENT: METHODS AND ANALYSIS
			.9 CEU
			PARTICIPANTS WILL BE ABLE TO RESEARCH THE ABUNDANCE OF
			DIFFERENT METHODOLGIES, SELECT THE APPROPRIATE PROTOCOL AND IMPLEMENT SUCH METHODS.
0050	1	ECC 0/10/100/	
0030	1	Eff: 9/18/1996	AQUATIC INSECT SAMPLING, IDENTIFICATION & MONITOR.
			1.4 CEU IDENTIFY MACROINVERTEBRATES, POSSES A WORKING
			KNOWLEDGE OF INVERTEBRATE KEYS, SELECT
			APPROPRIATESAMPLING TECHNIQUES ANDUNDERSTAND METHODS
			OF BIOMONITORING.
0051	1	Eff: 8/25/1996	DESIGN AND ANALYSIS OF ANGLER SURVEYS
			.8 CEU
			PICK APPROPRIATE SURVEY DESIGNS THAT CAN MEET SURVEY
			OBJECTIVES, COMPUTE TOTAL CATCH, EFFORT, SPUE, AND
			UNDERSTAND CALCULATIONS OF VARIANCES FORTHE MAJOR
			DESIGNS

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		Dates	Title/Credit/Description
0052	1	Eff: 2/25/1996	AQUATIC VEGETATIOIN MANAGEMENT 7.5 CEU
			STUDENTS WILL BE ABLE TO IDENTIFY COMMON SPECIES OF AQUATIC VEGETATION & DETERMINE ASSOCIATED FISHERIES VALUE. PARTICIPANTS WILL BE ABLE TO EVALUATE & IMPLEMENT APPROPRIATE CONTROL MEASURES OF NU
0053	1	Eff: 2/15/1997	SOUTHEASTERN INSTREAM FLOW WORKSHOP
			.5 CEU
			STUDENTS WILL LEARN PRACTICAL AND REGIONALLY APPLICABLE INSTREAM FLOW TECHNIQUES METHODOLOGY AND LEGALITIES
0054	1	Eff: 4/27/1997	HUMAN DIMENSIONS OF FISHERIES AND WILDLIFE
			.3 CEU
			STUDENTS WILL ACQUIRE AN UNDERSTANDING OF THE ROLEOF
			HUMAN DIMENSIONS IN FISHERIES AND WILDLIFE MANAGEMENT; INCLUDING AN OVERVIEW OF RELEVENT DEMOGRAPHICS.
0055	1	Eff: 8/24/1997	MICROCOMPUTER APPLICATIONS
			.8 CEU
			AN INTRO TO INTERNET AND GIS AS WELL AS VARIOUS OTHER SOFTWARE APPLICATIONS AVAILABLE TO FISH AND WILDLIFE PROFFESIONALS
0056	1	Eff: 2/4/1997	TECHNICAL WRITING
			.7 CEU
			UPON COMPLETION OF THE COURSE PARTICIPANTS WILL BEABLE TO WRITE SCIENTIFIC PAPERS, REPORTS AND PROPOSALS WITH MORE CONFIDENCE
0057	1	Eff: 8/20/1997	THE CYPRINADAE OF ILLINOIS
			1.5 CEU
			PARTICIPANTS WILL BE ABLE TO CORRECTLY IDENTIFY ALL OF THE MINNOWS IN ILLINOIS

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Version	Dates	Title/Credit/Description
1	Eff: 1/22/1998	WATERSHED RESTORATION 1.5 CEU'S (14.5 HOURS) COURSE PARTICIPANTS WILL LEARN HOW TO CONDUCT A BASIC
		STREAM ASSESSMENT; DEVELOP STRATEGIC PLAN FOR IMPROVING WATERSHEDQUALITY; UNDERSTAND HYDROLOGY RESTORATION CONCEPTS.
1	Eff: 12/1/1997	LEADERSHIP IN AN ERA OF NO EASY ANSWERS
		1.1 CEU'S (11 CONTACT HOURS)
		OBJECTIVE OF COURSE IS TO INTRODUCE PARTICIPANTS TO BASIC PHILOSOPHY & PROCESS OF ADAPTIVE ENVIRONMENT
		MANAGEMENT; PARTICIPANTS WILL LEARN HOW TO INCLUDE MULTIPLE STAKEHOLDERS IN A MODELING PROJECT.
2	Eff: 12/6/1997	LEADERSHIP IN AN ERA OF NO EASY ANSWERS
		.7 CEU'S (7 CONTACT HOURS)
		ONE DAY VERSION OF COURSE IS TO INTRODUCE PARTICIPANTS TO
		BASIC PHILOSOPHY & PROCESS OF ADAPTIVE ENVIRON
		MANAGEMENT; PARTICIPANTS WILL LEARN NOW TO INCLUDE MULTIPLE STAKEHOLDERS IN A MODELING PROJECT.
1	Eff: 3/27/1998	PUBLIC & PROFESSIONAL VALUES IN FISHERIES MANAGEMENT
		.3 CEU'S (3 CONTACT HOURS)
		DEVELOP AN UNDERSTANDING OF HUMAN DIMENSIONS INQUIRY; UNDERSTANDING OF PUBLIC & PROFESSIONAL VALUES IN
		MANAGEMENT DECISION MAKING, & AN ABILITY TO USE PUBLIC
		INVOLVEMENT TECHNIQUES.
1	Eff: 4/24/1998	NATURAL HISTORY & MANAGEMENT OF OREGON'S DESERT FISHERIES
		2.0 CEU'S (20.5 CONTACT HOURS)
		PROVIDE CURRENT RESEARCH & MANAGEMENT STATUS TO
		BIOLOGISTS & MANAGERS WITHIN OREGON'S GREAT BASIN HABITATS; PROVIDE UDERSTANDING OF GEOLOGY, HYDROLOGY,
		HADITATS, FRUVIDE UDERSTANDING OF GEOLOGI, HIDROLOGI.
	1	1 Eff: 1/22/1998 1 Eff: 12/1/1997 2 Eff: 12/6/1997 1 Eff: 3/27/1998

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0062	1	Eff: 8/28/1998	LEAVE NO TRACETRAIN THE TRAINER WORKSHOP
			2.0 CEU'S (20 CONTACT HOURS)
			EACH SUCCESSFUL PARTICIPANT WILL BE ABLE TO DESCRIBE THE
			SIX LEAVE NO TRACE PRINCIPLES; DEMONSTRATE APPROPRIATE
			SKILLS & WILL BE ABLE TO RELATE THE PRINCIPLES & TEACH THEM
0062	2	F.CC 0/20/1000	TO OTHERS.
0062	2	Eff: 8/29/1998	LEAVE NO TRACETRAIN THE TRAINER WORKSHOP
			.3 CEU (3 CONTACT HOURS)
			EACH SUCCESSFUL PARTICIPANT WILL BE ABLE TO DESCRIBE THE
			SIX LEAVE NO TRACE PRINCIPLES; DEMONSTRATE APPROPRIATE SKILLS & WILL BE ABLE TO RELATE THE PRINCIPLES & TEACH THEM
			TO OTHERS.
0063	1	Eff: 9/16/1998	INTRODUCED AQUATIC SPECIES
			.5 CEU (5 HOURS)
			PARTICIPANTS WILL HAVE A BETTER UNDERSTANDING &
			KNOWLEDGE OF THE IMPACTS ASSOCIATED WITH THE
			INTRODUCTION OF EXPTIC FISH & MOLLUSKS SPECIES IN VIRGINIA
			& THE CHESAPEAKE BAY WATERSHED.
0064	1	Eff: 7/1/1998 - 8/21/1998	MODELING DEMYSTIFIED I
			1.2 CEU (12 HOURS)
			THE OBJECTIVE OF THIS COURSE IS TO INTRODUCE PARTICIPANTS
004			TO THE BASIC PHILOSOPHY & PROCESS OF MODELING.
0064	2	Eff: 8/22/1998	MODELING DEMYSTIFIED I
			.6 CEU (6 HOURS)
			THE OBJECTIVE OF THIS COURSE IS TO INTRODUCE PARTICIPANTS
			TO THE BASIC PHILOSOPHY & PROCESS OF MODELING.

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Ace Course Number	Version	Dates	Title/Credit/Description
0065	1	Eff: 2/10/1999	PRACTICAL APPROACHES TO RESTORING WATERSHEDS 1.5 CEU (15 HOURS)
			GAIN A MORE COMPLETE UNDERSTANDING OF WATERSHED PROCESSES. FOSTER SKILLS & NEW APPROACHES FOR WORKING WITH DIVERSE GROUPS. KNOW WHERE TO ACCESS INFORMATION FOR ASSESSING WATERSHED CONDITION.
0066	1	Eff: 12/30/1998	INTRODUCTION TO GIS IN NATURAL RESOURCES
			1.1 CEUS (11 HOURS) PARTICIPANTS WILL UNDERSTAND THE BASICS OF GIS; HOW TO DO SIMPLE GIS TASKS; GAIN AN UNDERSTANDING OF HOW GIDS CAN IMPROVE MANAGEMENT OF NATURAL RESOURCES.
0067	1	Eff: 8/27/1998	THE AQUATIC INSECTS OF ILLINOIS
			1.5 CEU (15 HOURS) PARTICIPANTS WILL BE ABLE TO CORRECTLY IDENTIFY MANY NATIVE INSECTS OF ILLINOIS USING VOUCHER SPECIMENS & COLLECTIONS WHICH THEY WILL BE ASKED TO PROVIDE & GAIN KNOWLEDGE OF THE INSECTS LIFE HISTORIES
0068	1	Eff: 2/24/1999	INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS 1.0 CEU (10 HOURS) PARTICIPANTS WILL BE ABLE TO INDEPENDENTLY USE GIS SOFTWARE AND ANALYZE SPATIALLY-ORIENTED DATA AND CREATE MAPS AND ADDRESS LANDSCAPE-LEVEL QUESTIONS PERTAINING TO FISHERIES MANAGEMENT PROBLEMS.
0069	1	Eff: 3/5/1999	MANAGEMENT OF NON-GAME FISH AND AMPHIBIANS .75 CEU (7.5 HOURS) PARTICIPANTS WILL DEVLEOPE UNDERSTANDING OF STATUS OF NON-GAME FISH & AMPHIBIANS IN THEIR RESPECTIVE MGMT AREAS; AND INTHE EASTERN US IN GENERAL. THEY WILL E EXPOSED TO CURRENT US METHODS OF MGMT.

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- I			# 186 # 1 5 # 1
Ace Course Number 0070	Version	Dates Eff: 7/11/1999	Title/Credit/Description FISHERIES GENETICS WORKSHOP
0070	1	EII. //11/1999	
			.7 CEU (7 HOURS) PARTICIPANTS SHOULD BE ABLE TO UNDERSTAND THE GENETICTHEORY USED IN FISHERIES GENETICS AS WELL AS HAVE AN UNDERSTANDING OF DIFFERENT MOLECULAR GENETICS AND ALLOZYME TECHNIQUES.
0071	1	Eff: 10/15/1999	ESTIMATING ANIMAL ABUNDANCE
			.6 CEU (6 HOURS)
			STUDENTS WILL BE ABLE TO IDENTIFY WICH MARK/RE- CAPTURE TECHNIQUES ARE BEST SUITED FOR ESTIMATING ANIMAL ABUNDANCE IN AVARIETY OF CIRCUMSTANCES AND UNDERSTAND THE ASSUMPTIONS AND LIMITATIONS OF EACH
0072	1	Eff: 8/27/1999 - 8/30/1999	FISH POPULATION ASSESSMENT
			1.5 CEU (15 HOURS)
			STUDENTS LEARN HOW TO ESTIMATE FISH POPULATIONS; USE
			GROWTH DATA, MORTALITY & RECRUITMENT DATA FOR
			MANAGING THEM; USE ABEVERTON-HOLT EQUIL. MODEL,
0072	2	T-00 0 (4 (0 0 0 7	FISHPARM & MOCPOP TO ASSESS IMPACT OF FISHING REGS.
0072	2	Eff: 2/1/2005	FISH POPULATION ASSESSMENT
			1.4 CEU (14 hours)
			UPON COMPLETION OF THIS COURSE, STUDENT WILL BE ABLE TO
			APPLY APPROPRIATE STATISTICAL ESTIMATION METHODS, TAKING INTO ACCOUNT STUDY DESIGN: UNDERSTAND THE CONSEQUENCES
			OF VIOLATING ASSUMPTIONS, AND IDENTIFY APPROPRIATE FIELD
			METHODOLOGY ORSTATISTICAL APPROACHES TO MINIMIZE
			PROBLEMS VIOLATING ASSUMPTIONS WOULD ENTAIL; DESIGN
			MARK-RECAPTURE AND DEPLETION FIELD SAMPLING PROTOCOLS.

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			60 90
Ace Course Number	Version	Dates	Title/Credit/Description
0073	1	Eff: 3/1/2000	PHYSICAL PRINCIPLES IN ELECTROFISHING
			1 CEU (10 HOURS)
			PARTICIPANTS WILL BE ABLE TO DEFINE VOLTAGE, CURRENT, POWER, RESISTIVITY, & RESISTANCE. THEY WILL ALSO BE ABLE TO
			SOLVESIMPLE SERIES & PARALLEL CIRCUITS, DESCRIBE THE BASIC
			WAVE FORMS USED.
0074	1	Eff: 3/7/2000	YIELD PER RECRUIT MODELING FOR FISH MANAGEMENT
			6 HOURS = 0.6 CEU'S
			PARTICIPANTS WILL BE ABLE TO QUANTITATIVELY COMPARE THE
			EFFICACY OF DIFFERENT FISHING REGULATIONS FOR IMPROVING
			FISHERIES MGMT OBJTS. DEFINE UNDERLYING ASSUMPTIONS UPON WHICH STOCK ASSESSMENT METHODS.
0075	1	Eff: 9/17/1999	DESERT FISH CONSERVATION AND MANAGEMENT
1073	1	EII: 9/1//1999	20 HOURS = 2.0 CEU'S
			PARTICIPANTS WILL BE ABLE TO PROVIDE THE MOST CURRENT
			RESEARCH AND MGMT, STATUS TO RESPONSIBLE BIOLOGISTS AND
			MGRS, W/IN OR'S GREAT BASIN HABITATS AND LOOK AT REAL LIFE
			MGMT, SITUATIONS, FORM SOLUTION
0076	1	Eff: 8/20/2000	THE PRESENT AND FUTURE OF MINNOWS, SUCKERS AND OTHER FISHES
			7 HOURS = .7 CEU'S
			LEARN THE DISTRIBUTINAL STATUS OF MIDWEST US PLAINS FISH
			NOT CONSIDERED TO BE THE TARGET OF ANGLERS/LEARN FIELD
			COLLECTION TECHNIQUES TO FACILLITATE INTERSTATE DATA SHARING/LEARN COMMUNITY ANALYSIS.
0077	1	Eff: 8/20/2000	DECISION ANALYSIS FOR NATURAL RESOURCE MANAGEMENT
		211. 0/20/2000	7 HOURS = .7 CEU'S
			FAMILIARIZE NATURAL RESOURCE PROFESSIONALS WITH DECISION
			ANALYTIC APPROACHES. BE ABLE TO CREATE & PARAMATIZE A
			SIMPLE DECISION MODEL & UNDERSTAND THE BASICS TO TAKE
			PART IN EXPERT PANELS.

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Ace Course Number	Version	Dates	Title/Credit/Description
0078	1	Eff: 8/20/2000	APPLIED RIVER GEOMORPHOLOGY FOR FISHERIES BIOLOGISTS
			7 HOURS = .7 CEU'S
			LEARN HOW FUNDAMENTAL HYDRAULIC FORCES INTERACT WITH
			RIVER CHANNEL MORPHOLGY TO FORM AQUATIC HABITAT & MANAGE STREAMSIDE HABITAT TO IMPROVE BOTH TERRESTRIAL &
			AQUATIC HABITAT & DESIGN RIVER MGNT.
0079	1	Eff: 8/20/2000	COOPERATIVE LEARNING IN FISHERIES EDUCATION
			7.5 HOURS = .75 CEU'S
			UNDERSTAND WHY COOPERATIVE GROUPING IS IMPORTANT & THE
			RELEVANCE OF RESEARCH IN COOPERATIVE LEARNING & HOW TO
			IMPLEMENTCOOPERATIVE LEARNING IN THE CLASSROOM & HOW TO TEACH STUDENTS COOPERAIVE SKILLS.
0080	1	ECC 0/17/0000	
0080	1	Eff: 8/17/2000	STREAM RESTORATION AND PROTECTION IN NORTH CAROLINA
			1.2 CEUS (12 HOURS) PARTICIPANTS WILL HAVE A BASIC UNDERSTANDING OF STREAM
			RESTORATION PRINCIPALS, PRACTICES, AND APPLICATIONS
			PARTICULARY AS THEY RELATE TO PROJECTS IN NC.
0081	1	Eff: 8/31/2000	ID, MANAGEMENT, AND RESTORATION OF MACROPHYTES
			1.6 CEUS (16 HOURS)
			PARTICIPANTS WILL BE ABLE TO CORRECTLY IDENTIFY ALL OF THE
			AQUATIC MACROPHYTES IN ILLINOIS USING VOUCHER SPECIMENS
			AND COLLECTIONS PROVIDED BY AN INSTRUCTOR.
0082	1	Eff: 2/29/2000	IDENTIFICATION OF DARTERS AND MADTOMS IN ILLINOIS
			0.7 CEUS (7 HOURS)
			WILL PROVIDE AN OVERVIEW OF THE IDENTIFICATION OF DARTER
			AND MADTOM SPECIES IN IL TO ATTENDEES WHO HAVE LIMITED
			KNOWLEDGE OF THESE SPECIES, AND PROVIDE A REVIEW FOR BIOLOGISTS WHO ENCOUNTER.
			DIOLOGISTS WITO ENCOUNTER.

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1 cicpitotic. 301-077-0010 X230			Email: ggordoerg@nsnerres.org		
Ace Course Number 0083	Version 1	Dates Eff: 7/18/2000	Title/Credit/Description STATISTICS SMORGASBORD OF SELECTED TOPICS 0.8 CEUS (8 HOURS) THE PARTICIPANTS WILL GAIN AN UNDERSTANDING OF RESOURCE SELECTION METHODOLGIES, OF METHODS FOR THE LONITUDINAL ANALYSISOF FISHERIES STOCKS, OF POWER AND SAMPLE SIZE CONSIDERATIONS, AND LOGISTIC.		
0084	1	Eff: 8/20/2000	FISHERIES ECONOMICS FOR NON-ECONOMISTS 6 HOURS = .6 CEU(S) PARTICIPANT WILL LEARN BASIC CONCEPTS OF MICRO/WELFARE ECONOMICS; LEARN SPECIFIC APPLICATIONS OF THESE CONCEPTS TO FISHERIES MANAGEMENT ISSUES; IDENTIFY CRITICAL FACTORS		
0085	1	Eff: 9/27/2000	IN BENIFIT-COST/IMPACT ANALYSIS. SAMPLING DESIGN AND STATISTICS 0.7 HOURS (7 HOURS) UPON COMPLETION, PARTICIPANTS WILL BE ABLE TO DESIGN AND SOUND SAMPLING STATEGIES ON LENTIC SYSTEMS. PARTICIPANTS WILL ALSO BE ABLE TO APPLY VARIOUS STATISTICAL TECHNIQUES TO DATA.		
0086	1	Eff: 2/23/2001	URBAN FISHING PROGRAM TECHNIQUES 0.3 CEUS (3 HOURS) WILL PROVIDE PARTICIPANTS WITH A BETTER UNDERSTANDING OF URBAN FISHING PROGRM DEVELOPMENT AND GIVE THEM A GOOD SENSE OFTHE HUMAN DIMENSIONS AND MARKETING RESEARCH THAT WILL BE NECESSARY FOR THEM.		
0087	1	Eff: 2/13/2001	CONSERVATION OF RIPARIAN AREAS & WATERWAYS: CONSIDERATION FOR FISH & WILDLIFE HABITAT 9.75 HRS= .975 CEU(S) DEMONSTRATE AN UNDERSTANDING OF FISHERIES& WILDLIFE ISSUES IN RIPERAN AREAS, ACQUIRE KNOWLEDGE OF CURR RESEA & INTERDISMANAG APPROACHES; DEVEL AN APPREC OF DIFF SOC CONTEXTS FOR RIP MANAGEMENT		

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Ace Course Number	Version	Dates	Title/Credit/Description
0088	1	Eff: 8/19/2001	INTRODUCTION TO DESIGN AND EVALUATION OF FISHWAYS
			8.0 HRS= .08 CEU(S)
			TO GIVE PARTICIPANTS THE NECESSARY BACKGROUND TO
			UNDERSTAND WHAT IS NEEDED TO DESIGN AND EVALUATE A
			SIMPLE FISHWAY. THEY WILL BE GIVEN A LIST OF REFER THAT
0089	1	Eff: 8/19/2001	THEY CAN OBTA AND USE FOR FURTH DETAIL INFO.
0089	1	E11. 8/19/2001	ADAPTIVE CLUSTER SAMPLING OF AQUATIC POPULATIONS
			6.5 HRS= .065CEU(S) PARTICIPANTS WILL GAIN A WORKING KNOWLEDGE OF ADAPTIVE
			SAMPLING AND WILL BE ABLE TO JUDGE WHEN AND HOW TO APPLY
			ADAPTIVE SAMPLING IN THEIR OWN STUDIES.
0090	1	Eff: 8/19/2001	RIVER MORPHOLOGY AND RESTORATION OVERVIEW
			10 HRS=1.0 CEU(S)
			UPON COMPLETION, THE PARTICIPANT WILL BE ABLE TO IDENTIFY
			BANKFULL STAGE, ESTIMATE BANKFULL DISCHARGE, CLASSIFY
			STREAMSAND RIVERS BY THEIR MORPH PROPER & EVALU NEED &
0001	1	T-00 0 14 0 1 6 0 0 4	POTENTIAL FOR RESTORATION
0091	1	Eff: 8/19/2001	PRINCIPLES OF ELECTROFISHING
			6 HRS= .06CEU(S)
			PARTICIPANTS WILL LEARN FUNDAMENTALS OF ELECTRICITY AS THEY RELATE TO ELECTROFISHING EQUIPMENT AND SAMPLING;
			AND TECH TO MINIMIZE THREAT OF INJURY TO THE EQUI
			OPER,CREW MEMBERS,BYSTAND,& FISH, & WILDL
0093	1	Eff: 8/19/2001	USING TELEMETRY TO STUDY AQUATIC SYSTEMS
			0.45 CEUS (4.5 Hours)
			TO PROVIDE PARTICIPANTS WITH A BASIC UNDERSTANDING OF
			TELEMETRY AND ITS CAPABILITIES FOR STUDYING AQUATIC
			ANIMALS.

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SKILLS USED TO RESOLVE DISPUTES IN THIRD-PARTY MEDIATIONS.

1 elepnone: 301-897-8	010 X230		Email: ggoldberg@fisheries.org	
Ace Course Number	Version 1	Dates Eff: 3/22/2001	Title/Credit/Description AQUATIC INSECTS OF THE ROCKY MOUNTAINS	
			8 HOURS = 0.8 CEU(S) PARTICIPANTS WILL DEMONSTRATE A BASIC KNOWLEDGE OF TAXONOMY, WILL BE ABLE TO ID AQUATIC INSECT ORDERS ON SITE AND COMMON FAMILIES AND GENERA WITH AIDS PROVIDED.	
0095	1	Eff: 6/2/2001	ANALYSIS, INTERPRETATION, AND APP OF FISH OTOLITHS, AND OTHER HARD PARTS: THE STATE-OF-THE ART. 1.6 CEU'S GAIN KNOWLEDGE ABOUT OTOLITH/OTHER HARD PARTS STRUCTURE AND FUNCTION, TECHNIQUES OF EXTRACTION, PREPARTION, TECHNIQUES OF INCREMENTAL ANALYSIS, METHODS	
0097	1	ESS 7/24/2001 7/25/2001	OF DATA ANALYSIS, METHODS IN MICROCHEMSITRY.	
109 /	1	Eff: 7/24/2001 - 7/25/2001	IDENTIFICATION AND RELOCATION OF MUSSELS 1.1 CEU (11 Hours) PARTICIPANTS WILL BE ABLE TO CORRECTLY IDENTIFY MUSSELS IN ILLINOIS USING VOUCHER SPECIMENS AND COLLECTIONS PROVIDED BYTHE INSTRUCTOR. THEY WILL GAIN KNOWLEDGE OF FUNDAMENTAL AND INNOVATIVE TECHNIQUES TO MANAGE AS WELL AS NECESSARY REQUIREMENTS OF ESTABLISHING OR ENHANCING EXISTING NATIVE MUSSEL POPULATIONS.	
0098	1	Eff: 8/18/2002 - 8/22/2002	HOW TO WORK WITH A COMMISSION .3 CEU's (3 Hours) PARTICIPANTS WILL BE ABLE TO UNDERSTAND A COMMISIONER'S JOB DESCRIPTION; A DEFINITION OF FISH AND WILDLIFE POLICY; UNDERSTAND HOW STAFF ARE UNIQUELY PLACED TO POSITIVELY AFFECT THE POLICY MAKING PROCESS.	
0099	1	Eff: 8/18/2002 - 8/22/2002	CONFLICT RESOLUTION SKILLS FOR NATURAL RESORUCE PROFESSIONALS .4 CEU's (4 hours) THIS INTRODUCTION IS DESIGNED TO ACQUAINT LEARNERS WITH THE PHILOASOPHY, CONCEPTS, PROCESSES, AND BEHAVIORAL	

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Location code: 001 **Registrar:** Gail Goldber

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CONTINUING EDUCATION WORKSHOP

5410 Grosvenor Lane, Suite 110

Registrar: Gail Goldberg Telephone: 301-897-8616 x230

				50 00
Ace Course Number	Version	Dates		Title/Credit/Description
0100	1	Eff: 2/1/2002		RESTORATION ECOLOGY, CONSERVATION AND MANAGEMENT OF BROOK TROUT IN NORTHERN LAKES 0.8 CEUs (8 hours) CONTINUING EDUCATION WORKSHOP
0101	1	Eff: 2/1/2002		BASIC GIS TECHNIQUES FOR FISH BIOLOGISTS
				0.7 CEUs (7 hours) THIS COURSE WILL PROVIDE AN OVERVIEW AND REVIEW OF BASIC SKILLS WITH A FOCUS ON GIS TECHNIQUES DESIGNED FOR FISHERIES BIOLOGISTS USING ARCVIEW AND ARCMAP SOFTWARE.
0102	1	Eff: 2/1/2002	- 2/8/2001	ADVANCED GIS TECHNIQUES FOR FISH BIOLOGISTS
				0.7 CEUs (7 hours)
0102	2	Eff: 9/1/2005		CONTINUING EDUCATION WORKSHOP ADVANCED GIS TECHNIQUES FOR FISH BIOLOGISTS
0102	2	EII. 9/1/2003		0.8 CEU (8 hours)
				COURSE IS PANNED TO PROVIDE ADVANCED SKILLS IN USING GIS FOR ANALYZING FISH COMMUNITIES. MANIPULATE THEMES USING INTERSECT, UNION, MERGE CONVERT VECTOR & RASTER FORMATS. CREATE SPATIAL ANALYSES. IMPORT AERIAL/SATELLITE PHOTO, OVERLAY DEMS.
0105	1	Eff: 2/1/2002		TWO DIMENSIONAL MODELING WORKSHOP
				2.75 CEUs (27.5 hours) CONTINUING EDUCATION WORKSHOP
0106	1	Eff: 2/1/2002		DATA TO INFORMATION - IS MONITORING DRIVING THE QUESTIONS, OR IS THE QUESTION DRIVING THE MONITORING? 0.8 CEUs (8 hours) CONTINUING EDUCATION WORKSHOP
0107	1	Eff: 2/1/2002		PRINCIPLES OF LEADERSHIP - PART I
				1.5 CEUs (10.5 hours)

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010 A230		Email: ggolderg@nsieries.org	
Version	Dates Eff: 3/1/2002	Title/Credit/Description SCIENTIFIC AND TECHNICAL WRITING FOR BIOLOGISTS	
•	Lii. 3/1/2002	3.6 CEUs (36 hours) CONTINUING EDUCATION WORKSHOP	
1	Eff: 4/1/2002	CAPTURING FISH WITH ELECTRICITY - AN INTRODUCTION TO ELECTROFISHING .45 CEUs (4.5 hours) CONTINUING EDUCATION WORKSHOP	
1	Eff: 5/1/2002 - 5/9/2002	FLUVIAL GEMORPHOLOGY AND STREAM CLASSIFICATION WORKSHOP 3.0 CEU (30 hours) CONTINUING EDUCATION WORKSHOP	
2	Eff: 6/1/2006	FLUVIAL GEMORPHOLOGY AND STREAM CLASSIFICATION WORKSHOP 3.0 CEU (30 hours) CONTINUING EDUCATION WORKSHOP	
1	Eff: 1/12/2003 - 1/14/2003	BIOLOGICAL STATISTICS FOR FISHERIES MANAGEMENT 1.6 CEU's (6 Hours) TOPICS TO BE COVERED IN THE COURSE INCLUDE CONCEPTS AND METHODS OF ANALYSIS FOR FISHERY DATA. INCLUDING ANALYSIS OF FISH POPULATION SIZE STRUCTURE, CONDITION, GROWTH, MORTALITY, ABUNDANCE, AND YIELD.	
2	Eff: 1/5/2006	BIOLOGICAL STATISTICS FOR FISHERIES MANAGEMENT 1.6 CEU (16 hours) INDIVIDUALS WILL ACQUIRE KNOWLEDGE AND SKILL IN THE ANALYSIS OF FISHERY DATA, INCLUDING ANALYSES OF FISH POPULATION SIZE STRUCTURE, CONDITION, GROWTH, MORTALITY, ABUNDANCE AND YIELD. THE COURSE WILL INTRODUCE KEY CONCEPTS RELATED TO FISH POPULATION ANALYSIS AND THEN EXTEND THOSE CONCEPTS TO PRACTICAL SKILLS OF FISHERY DATA ANALYSIS USING COMMONLY AVAILABLECOMPUTER SOFTWARE.	
	Version 1 1 1 1	Version Dates 1 Eff: 3/1/2002 1 Eff: 4/1/2002 1 Eff: 5/1/2002 - 5/9/2002 2 Eff: 6/1/2006 1 Eff: 1/12/2003 - 1/14/2003	

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AND MANAGEMENT OF RESERVOIR ECOSYSTEMS.

Ace Course Number	Version	Dates	Title/Credit/Description
0112	1	Eff: 2/24/2003	IMPROVE YOUR FISHERIES PHOTOGRAPHY
			.8 CEU's (8 Hours)
			THIS WORSHOP PROVIDES BASIC AND ADVANCED TRAINING FOR
0440			IMPROVING THE USEFULNES OF IMAGES IN FISHERY WORK.
0113	I	Eff: 3/5/2003	ANIMAL POPULATION ASSESSMENT
			10 CEU's (10 Hours)
			THE PARTICIPANT WILL LEARN ABOUT QUANTITATIVE POPULATION ASSESSMENT TECHNIQUES COMMONLY USED TO ASSESS
			ABUNDANCE AND MONITOR ANIMAL POPULATIONS.
0114	1	Eff: 8/10/2003	EFFECTIVE EDUCATIONAL WEB DESIGN
			.75 CEU's (7.5 Hours)
			THIS WORKSHOP WILL PROVIDE INSTRUCTION ON HOW TO
			EFFECTIVELY CONSTRUCT A WEB SITE FOR EDUCATIONAL
0115			PURPOSES.
0115	1	Eff: 3/5/2003	AQUATIC NUISANCE SPECIES
			.8 CEU's (8 Hours)
			THIS WORKSHOP PROGRAM HAS BEN DESIGNED TO ASSIST FISHERY PRE-PROFESSIONALS & PROFESSIONALS BETTER UNDERSTANT THE
			ECOLOGY OF AQUATIC NUISANCE SPECIES & LEARN HOW TO
			IDENTIFY & COLLECT THESE CRITTERS.
0116	1	Eff: 3/6/2003	NEW APPROACHES FOR FISHERY EVALUATIONS & MANAGEMENT IN
			LAKES & RESERVOIRS
			.75 CEU's (7.5 Hours)
			THIS CONTINUING EDUCATION WORKSHOP IS DEVOTED TO LEARNING ABOUT NEW TOOLS AND PERSPECTIVES FOR RESEARCH
			LLAMING ADOUT NEW TOOLS AND TERSTECTIVES FOR RESEARCH

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Ace Course Number	Version	Dates	Title/Credit/Description
0117	1	Eff: 10/18/2002	PRINCIPLES OF ELECTROFISHING
			1.3 CEU (13 hours)
			PARTICIPANTS LEARN FUNDAMENTALS OF ELECTRICITY AS THEY
			RELATE TO ELECTROFISHING EQUIPMENT AND SAMPLING,
			TECHNIQUES TO MINIMIZE THREAT OF INJURY, AND HOW TO USE KNOWLEDGE OF ELECTRICITY AND EQUIPMENT TO MAXIMIZE
			SAMPLING EFFICIENCY AND STANDARDIZE OPERATIONS.
0118	1	Eff: 10/18/2002	RIVER MORPHOLOGY AND RESTORATION OVERVIEW
			1.2 CEU (12 hours)
			CONTENT INCLUDES GENERAL PRINCIPLES OF RIVER MORPHOLOGY
			AND CLASSIFICATION SYSTEMS, OF HYDROLOGY AND HYDRAULICS,
			AND STREAM STABILITY; NATURAL CHANNEL RESTORATION APPROACHES AND DESCRIPTION OF STABILIZATION DEVICES &
			HABITAT IMPROVEMENT DEVICES, ETC.
0119	1	Eff: 8/29/2003 - 8/29/2006	BASIC/INTERMEDIATE GIS FOR FISHERIES BIOLOGISTS & MANAGERS
			0.8 CEU (8 hours)
			THIS COURSE WILL PROVIDE AN OVERVIEW AND REVIEW OF BASIC
			SKILLS WITH A FOCUS ON GIS TECHNIQUES DESIGNED FOR
0110	2		FISHERIES BIOLOGISTS USING ARCVIEW AND ARCMAP SOFTWARE.
0119	2	Eff: 9/9/2006	BASIC/INTERMEDIATE GIS FOR FISHERIES BIOLOGISTS & MANAGERS
			0.8 CEU (8 hours)
			THIS COURSE WILL PROVIDE AN OVERVIEW AND REVIEW OF BASIC SKILLS WITH A FOCUS IN GIS TECHNIQUES DESIGNED FOR FISHERIES
			BIOLOGISTS USING ARCVIEW AND ARCMAP SOFTWARE.
0120	1	Eff: 9/29/2003	FISH POPULATION MODELING WORKSHOP
			1.0 CEU's (10 Hours)
			THIS WORKSHOP DEMONSTRATES USE OF TWO FISH POPULATION
			MODELS (FAST AND IFREGS) FOR ASSESSING LENGTH LIMITS IN
			RECREATIONAL FISHERIES.

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Telephone. 301-897-80	010 X230		Email: ggoldderg@nsheries.org
Ace Course Number 0121	Version 1	Dates Eff: 9/28/2003	Title/Credit/Description STATISTICAL ASPECTS OF SAMPLING FRESHWATER FISH POPULATIONS AND HABITATS 1.5 CEU's (15 Hours) THIS COURSE PROVIDES AN OVERVIEW OF THE STATISTICS OF
0122	1	Eff: 1/15/2004	SAMPLING THEORY. INTRODUCTION TO GEOSTATISTICS FOR FISHERIES .6 CEUS (6 hours THIS COURSE WILL INTRODUCE BASIC GEOSTATISTICAL CONCEPTS AND APPLICATIONS RELEVANT TO FISHERIES AND DEMONSTRATE THE USEOF AVAILABLE GEOSTATISTICAL SOFTWARE.
0123	1	Eff: 2/20/2004	BASIC ASSESSMENT AND RESTORATION OF DEGRADED STREAMS .9 CEU's (9 Hours) THE CURRICULUM OF THIS WORKSHOP INTEGRATES THE KNOWLEDGE OF NATURAL FUNCTIONING STREAM CONDITION WITH APPLIED MANAGEMENT.
0124	1	Eff: 2/20/2004 - 2/21/2004	HOW TO WORK WITH A COMMISSION .6 CEU's (6 Hours) THIS WORKSHOP COVERS THE WORKING RELATIONSHIPS BETWEEN STAFF, COMMISSIONERS AND AGENCY EXECUTIVES.
0125	1	Eff: 8/20/2004	INVESTIGATION AND VALUATION OF FISH AND MUSSEL KILLS 0.8 CEU (8 hours) THIS COURSE WILL PROVIDE PRACTICAL INFORMATION AND KNOWLEDGE REGARDING THE INVESTIGATION OF FISH/MUSSEL KILLS IN BOTH THE FRESHWATER AND MARINE ENVIRONMENTS.
0126	1	Eff: 8/20/2004	RADIO TELEMETRY FOR FRESHWATER FISHERIES STUDIES 0.95 CEU (9.5 hours) THE PURPOSE OF THIS COURSE IS TO ENABLE PARTICIPANTS TO DETERMINE THE SUITABILITY OF RADIO TELEMETRY AS A RESEARCH METHOD, TO PLAN A RADIO TELEMETRY STUDY TO ADDRESS MANAGEMENT OR RESEARCH QUESTIONS, AND TO USE TELEMETRY CORRECTLY AND EFFICIENTLY.

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Ace Course Number	Version	Dates	Title/Credit/Description
0127	1	Eff: 8/20/2004	HYDROACOUSTIC TOOLS FOR FISH AND HABITAT ASSESSMENT
			0.8 CEU (8 hours)
			THIS COURSE WILL PROVIDE BACKGROUND IN HYDROACOUSTIC THEORY (AS IT APPLIES TO FISHERIES AND AQUATIC HABITAT APPLICATIONS), AN INTRODUTION TO CURRENT STATE-OF-THE-ART APPLICATIONS FOR DISTRIBUTION AND ABUNDANCE OF FISH AND AQUATIC PLANTS, SEDIMENT CLASSIFICATION, AND FISH BEHAVIOR MONITORING.
0128	1	Eff: 8/20/2004	CONFLICT RESOLUTION SKILLS FOR NATURAL RESOURCE PROFESSIONALS 0.4 CEU (4 hours)
			THIS WORKSHOP USES SELF-ASSESSMENT TOOL, DISCUSSION, LECTURE AND ROLE-PLAYS TO TEACH PROFESSIONALS HOW TO EASILY APPLY MEDIATION PRINCIPLES AND TECHNIQUES IN THEIR EVERY-DAY JOBS.
0129	1	Eff: 8/20/2004	HOW TO WORK WITH A COMMISSION
			0.4 CEU (4 hours)
			THIS WORKSHOP COVERS THE WORKING RELATIONSHIPS BETWEEN STAFF, COMMISSIONERS AND AGENCY EXECUTIVES.
0130	1	Eff: 9/20/2004	MEETING MANAGEMENT FOR TECHNICAL AND SCIENTIFIC COMMITTEES
			THIS WORKSHOP IS TAILORED TO THE AUDIENCE. TRADITIONAL MEETING MANAGEMENT TOPICS INCLUDE: WHEN TO (AND NOT TO) HAVE A MEETING; PLANNING, AGENDAS, HOMEWORK AND OTHER MEETING PRE-WORK, ETC.
0131	1	Eff: 9/20/2004	STREAM ASSESSMENT AND MONITORING
			2.4 CEU (24 hours)
			PARTICIPANTS WILL UNDERSTAND THE THEORY OF CHANNEL EVOLUTION: WILL BE CAPABLE OF SITE SURVEYING; AND WILL BE ABLE TO CONDUCT STREAM ASSESSMENT TECHNIQUES.

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Ace Course Number	Version	Dates	Title/Credit/Description
0132	1	Eff: 5/20/2004	FITTING GROWTH CURVES USING BACK-CALCULATED LENGTH-AT-AGE DATA 0.65 CEU (6.5 hours) THIS WORKSHOP IS DESIGNED TO PROVIDE BASIC TRAINING IN AGE BACK CALCULATION USING OTOLITH AGE DATA AND STASTISTICAL ANALYSIS OF RESULTS USING SAS.
0133	1	Eff: 1/9/2005	MARK-RECAPTURE AND POPULATION DYNAMICS
			2.25 CEU (22.5 hours) PARTICIPANTS GAIN A BETTER UNDERSTANDING OF MARK-RECAPTURE TECHNIQUES AND CONCEPTS, AS WELL AS THE APPLICATION OF POPULATION DYNAMICS TO FISHERIES DATA SETS.
0134	1	Eff: 10/21/2005	DESIGNING FOR AQUATIC ORGANISM PASSAGE AT ROAD-STREAM CROSSING 2.3 CEU's (23 hours) PARTICIPANTS IN THIS INTENSIVE INTERDISCIPLINARY WORKSHOP WILL LEARN THE NECESSARY SKILLS TO DESIGN STREAM-CROSSING STRUCTURES THAT WILL ACCOMMODATE AQUATIC ORGANISM PASSAGE, PROVIDE MORE NATURAL STREAM PROCESSES AND CHANNEL FUNCTION, AND MAXIMIZE THE LONG-TERM DURABILITY AND STABILITY OF THE STRUCTURE.
0135	1	Eff: 9/10/2005	THRIVE NOT JUST SURVIVE A HOT PUBLIC MEETING .4 CEU's (4 hours) IN THIS HIGHLY INTERACTIVE WORKSHOP PARTICIPANTS WILL LEARN HOW TO GET THE RESULTS YOU WANT IN LESS TIME. PARTICIPANTSWILL ALSO LEARN PUBLIC MEETING SUCCESS PRINCIPLES AND EASY-TO-USE TOOLS TO: CREATE A MORE COLLABORATIVE ENVIRONMENT; ADVANCE IDEA AND REACH BETTER DECISIONS IN LESS TIME; ENSURE THAT MEETINGS ACTUALLY RESULT IN ACTION; AND HELP YOU HELP YOUR ORGANIZATION DELIVER THE BEST RESULTS.

Course Description Catalog Ace Transcript Service

Organization: American Fisheries Society

Sponsor code: AFS Location code: 001

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Ace Course Number	Version	Dates	Title/Credit/Description
0136	1	Eff: 9/11/2005	WRITING FOR PUBLICATIONS
			.8 CEU's (8 hours) THIS WORKSHOP IS AIMED AT ENHANCING TECHNICAL WRITING SKILLS IN RESEARCH AND MANAGEMENT PERSONNEL. THIS WORKSHOP STRESSES SKILLS SUCH AS IDENTIFYING PUBLISHABLE DATA SETS, ORGANIZING MANUSCRIPTS, AND CORRESPONDING AND NEGOTIATING WITH EDITORS
0137	1	Eff: 9/11/2005	INTRODUCTION TO ECOLOGICAL MODELING AND PROGRAMMING USING AD MODEL BUILDER 1.2 CEU's (12 hours)
			THIS COURSE TARGETS PRACTICING FISHERIES STOCK ASSESSMENT SCIENTISTS, QUANTITATIVE ECOLOGIST, AND STUDENTS WHO NEED A TOOL FOR ESTIMATIONS THE PARAMETERS OF COMPLEX NONLINEAR STATISTICAL MODELS IN EITHER A FREQUENT OR BAYESIAN FRAMEWORK.
0138	1	Eff: 9/10/2006	LEADERSHIP REGARDLESS OF POSITION 0.6 CEU (6 hours) PARTICIPANTS WILL BE ABLE TO IDENTIFY THE MOST IMPORTANT ATTRIBUTES OF EFFECTIVE LEADERSHIP IN NATURAL RESOURCE

PARTICIPANTS WILL BE ABLE TO IDENTIFY THE MOST IMPORTANT ATTRIBUTES OF EFFECTIVE LEADERSHIP IN NATURAL RESOURCE ORGANIZATIONS. PARTICIPANTS WILL IDENTIFY THE CHARACTERISTICS OF THEIR PERSONALITIES AND APPROACHES TO WORK THAT ENHANCE OR INGIBIT THEIR ABILITY TO LEAD. PARTICIPANTS WILL DEVELOP STRATEGIES TO ENHANCE THEIR INFLUENCE IN ORGANIZATIONS THAT ARE APPROPRIATE TO ANY POSITION WITHIN THE ORGANIZATIONS.

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Ace Course Number	Version	Dates	Title/Credit/Description
0139	1	Eff: 3/17/2006	INTRODUCTION TO ELECTROFISHING
			1 CEU's (10 Hours)
			NEW FISHERIES PROFESSIONALS WOULD RECEIVE AN
			INTRODUCTION TO HOW ELECTROFISHING WORKS, THE NATURE
			AND PROPER USE OF EQUIPMENT, HOW ELECTROFISHING
			CAN/SHOULD BE USED IN FISHERIES SURVEYS, AS WELL AS PERSONNEL SAFETY AND PROPER HANDLING OF FISH. MORE
			EXPERIENCED PROFESSIONALS WOULD LEARN OF THE LATEST
			FINDINGS REGARDING THE USE OF ELECTRICITY FOR THE VARIABLE
			CONDITIONS ENCOUNTERED AND STUDIES OF EFFECTS ON FISHES,
			IN CONCERT WITH THE MOST RECENT ADVANCES IN TECHNOLOGY
			TO SAFELY AND APPROPRIATELY SAMPLE FISH POPULATIONS.
0140	1	Eff: 1/1/2006	FISH/AQUATIC ECOSYSTEM ECOLOGY
			1.2 CEU (12 hours)
			OBJECTIVE 1: INSTRUCTION ON BASIC CONCEPTS OF QUATIC
			ECOSYSTEM AND FISH COMMUNITY ECOLOGY. OBJECTIVE 2:
			DISCUSS HOW LECTURED CONCEPTS APPLY TO FISHERIES
0141	1		MANAGEMENT AND POLICY IN MINNESOTA.
0141	1	Eff: 10/13/2005	WATER QUALITY FOR FISHERIES PROFESSIONALS
			1.15 CEU (11.5 hours)
			THIS WORKSHOP SHOULD PROVIDE ATTENDEES WITH A STRONG
			UNDERSTANDING OF BASIC WATER QUALITY AND SAMPLING DESIGNS FOR BOTHAQUACULTURE AND NATURAL SYSTEM
			SITUATIONS. ATTENDEES WILL FOCUS ON WATER QUALITY
			STANDARDS AND REGULATIONS, EFFLUENTS, AND DISCUSS
			IMPAIRED WATER BODIES OF THE STATE.
			IVII AIRED WATER DODIES OF THE STATE.

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Ace Course Number	Version	Dates	Title/Credit/Description	
0142	1	Eff: 12/11/2005	HOW THE MEDIA WORKS AND HOW TO W ORK WITH THE MEDIA	
			0.4 CEU (4 hours)	
			THE WORKSHOP WILL FEATURE ON-CAMERA MOCK INTERVIEWS	
			CONDUCTED BY A MEDIA EXPERT. AFTER LEARNING INTERVIEW	
			TECHNIQUES, PARTICIPANTS WILL HAVE AN OPPORTUNITY TO FEEL	
			THE HOT LIGHTS AND FACE TOUGH QUESTIONS ABOUT NATURAL	
			RESOURCE MANAGEMENT ISSUES. THE WORKSHOP LEADER IS	
			EXPERIENCED AT TEACHING PEOPLE HOW TO DEAL WITH	
			CONFRONTATIONAL MEDIA SCENARIOS IN A NON-INTIMIDATING	
			ENVIRONMENT WITH THE ULTIMATE GOAL OF PRODUCING	
			NATURAL RESOURCE PROFESSIONALS WHO ARE CAPABLE,	
			COMFORTABLE AND CONFIDENT WHEN WORKING WITH NEWS	
			MEDIA.	
0143	1	Eff: 9/10/2006	TEACHING SCIENCE USING A MULTIDISCIPLINARY, NEPA-BASED	

TEACHING SCIENCE USING A MULTIDISCIPLINARY, NEPA-BASED APPROACH

1.0 CEU (10 hours)

PARTICIPANTS WILL BE ABLE TO TEACH STUDENTS TO USE MATHEMATICAL MODELS OF THE GREAT LAKES TO ILLUSTRATE AQUATIC ECOSYSTEM FUNCTIONS AND HOW IMPORTANT SYSTEM COMPONENTS INTERACT. PARTICIPANTS WILL BE ABLE TO ADAPT LEARNING EXERCISES PROVIDED IN THE WORKSHOP TO THEIR OWN TEACHING SITUATIONS IN ORDER TO IMPROVE STUDENT LEARNING ABOUT ENVIRONMENTAL SCIENCE. PARTICIPANTS WILL BE ABLE TO USE ENRIVONMENTAL IMPACT ANALYSIS AS A MEANS OF CONVEYING SCIENCE CONCEPTS TO THEIR STUDENTS. PARTICIPANTS WILL BE ABLE TO WRITE COMPETITIVE GRANT PROPOSALS TO FIND FUNDING TO HELP WITH THEIR TEACHING ACTIVITIES(E.G. FOR EQUIPMENT, TIME, ETC.)

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Ace Course Number	Version	Dates	Title/Credit/Description
0144	1	Eff: 9/10/2006	LARVAL FISH SAMPLING AND IDENTIFICATION WORKSHOP
			1.5 CEU (15 hours) THIS WORKSHOP WILL EXPOSE PARTICIPANTS TO LARVAL FISH COLLECTION GEAR TYPES, THE ADVANTAGES AND LIMITATIONS OF USING EACH GEAR TYPE, AT LEAST 15 SPECIES OF FRESHWATER FISH LARVAE WILL BE AVAILABLE FOR IDENTIFICATION, EXAMPLES OF RELEVANT LITERATURE, AND SOURCES TO OBTAIN COPIES OF LITERATURE TO ASSIST IN IDENTIFICATION WILL BE AVAILABLE. PARTICIPANTS WILL DEVELOP TECHNIQUES FOR IDENTIFICATION OF LARVAL FISH APPLICABLE TO OTHER SPECIES THEY MAY ENCOUNTER IN FUTURE WORK.
0145	1	Eff: 9/10/2006	AN INTRODUCTION TO THE GREAT LAKES GIS PROJECT
			OBJECTIVES OF THE WORKSHOP INCLUDE INCREASING FAMILIARITY WITH SPATIAL DATA ON FISHERIES AND HABITAT, INCREASING FAMILIARITY WITH THE GREAT LAKES GIS PROJECT, AND GAINING PROFICIENTY IN USING GIS SOFTWARE. AFTER THE WORKSHOP, PARTICIPANTSWILL BE ABLE TO USE ARCGIS SOFTWARE TO IMPORT AND EXPLORE THEIR OWN DATA, INTEGRATE THE DATA IN THE GREAT LAKE GIS DATABASE, PERFORM BASIC GIS OPERATIONS COMMON TO GREAT LAKES RESOURCE MANAGERS, AND CREATE SIMPLE MAPS THAT WOULD BE SUITABLE FOR PRESENTATIONS OR PUBLICATIONS.
0146	1	Eff: 9/10/2006	HYDROACOUSTIC TOOLS FOR FISH & HABITAT ASSESSMENT WITH FIELD DEMONSTRATION 1.2 CEU (12 hours) THE PARTICIPANT WILL GAIN AN UNDERSTANDING AND APPRECIATION FOR THE APPLICATION, POTENTIAL AND LIMITATIONS OF HYDROACOUSTIC ASSESSMENT TECHNIQUES AND EQUIPMENT. THIS WILL ENABLE THE PARTICIPANTS TO EVALUATE THEIR FISHERIES/ACQUATIC PROBLEMS AND THE POTENTIAL BENEFITS OF USING HYDROACOUSTICS VS. OTHER MODHODS.

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0147	1	Eff: 9/11/2005	CHOOSING THE APPROPR AQUATIC RESEARCH 8 hours (0.8 CEU's).
			8 HOURS (0.8 CEU'S)
			AND THEIR MANAG
			CURRENTLY AVAIL
			DEVELOPMENT WH
			RESEARCH. THIS CO
			AVAILABLE DATA N
0148	1	Eff: 2/2/2007	CURRENT AND EMERGING

CHOOSING THE APPROPRIATE BIOTELEMETRY TECHNOLOGY FOR

8 HOURS (0.8 CEU'S). THIS COURSE WILL PRESENT RESEARCHERS AND THEIR MANAGERS WITH AN OVERVIEW OF THE TECHNOLOGIES CURRENTLY AVAILABLE, AS WELL AS TECHNOLOGIES UNDER DEVELOPMENT WHICH SHOW PROMISE IN THE FIELD OF AQUATIC RESEARCH. THIS COURSE WILL ALSO EXPLORE CURRENTLY AVAILABLE DATA MANAGEMENT TOOLS.

CURRENT AND EMERGING PATHOGENS OF FISHES IN THE PACIFIC NORTHWEST

8 hours (0.8 CEU's).

Title/Credit/Description

8 HOURS (0.8 CEU'S). COMPLETION OF THE COURSE WILL PROVIDE PARTICIPANTS WITH: BASIC UNDERSTANDING OF THE PATHOGEN/HOST/ENVIRONMENT INTERRELATIONSHIP AND THE ROLE OF FISH; AN OVERVIEW OF COMMON AND EMERGING DISEASES (PARASITIC, BACTERIAL, VIRAL, FUNGAL) OF FISHES IN THE PACIFIC NORTHWEST, WITH EMPHASIS ON FRESHWATER SPECIES IN IDAHO; AND AN OVERVIEW OF FISHNECROPSY AND FISH HEALTH SAMPLING TECHNIQUES FOR WILD & CULTURED STOCKS.

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Ace Course Number	Version	Dates
0149	1	Eff: 9/2/2007

Title/Credit/Description

HOW TO GET THE RIGHT THINGS DONE AS WELL AS GET THINGS DONE RIGHT

6 hours (0.6 CEU's).

6 HOURS (0.6 CEU'S). THIS PRACTICAL WORKSHOP TEACHES IMMEDIATELY APPLICABLE TOOLS, TEMPLATES, AND PROVEN PRACTICES TOPLAN REAL-LIFE WORK PROJECTS. IN TODAY'S WORK ENVIRONMENT, PROJECT TEAMS ARE EXPECTED TO DELIVER SOLID OUTCOMES WITH TIGHT BUDGETS, HEAVY WORKLOADS, AND HIGH EXPECTATIONS FOR COOPERATIVE INVOLVEMENT OF MULTIPLE PLAYERS. THIS BOOT CAMP ISAN INTERACTIVE, RESULTS-ORRIENTED WORKSHOP THAT TEACHES SKILLS FOR INCREASING EFFECTIVENESS (DOING THE RIGHT THINGS.), INCREASING EFFICIENCY (DOING THINGS RIGHT), AND, ALONG THE WAY, EXERTING LEADERSHIP FOR THE DIVERSE PLAYERS INVOLVED IN A PROJECT.

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Ace Course Number Version Dates
0150 1 Eff: 9/2/2007

Title/Credit/Description

INTEGRATING GREEN AND GRAY INFRASTRUCTURE: USING HIGHWAY AGENCY PROCESSES TO CONSERVE AQUATIC ECOSYSTEMS. 14 hours (CEU's).

14 HOURS (CEU'S). THERE ARE THREE CORE ELEMENTS TO THE WORKSHOP: (1) INTRODUCTION TO THE ECO-LOGICAL FRAMEWORK (WHICH IS A GUIDE TO DEVELOPING GREEN INFRASTRUCTURE THROUGH A PLAN-DO-CHECK APPROACH, TO ELIMINATE OR REDUCE THE ENVIRONMENTALDEGRADATION OF GRAY, OR HARD INFRASTRUCTURE SUCH AS ROADS); (2) INTRODUCTION TO THE (TENTATIVE TITLED) DRAFT HEC 26 (FISH PASSAGE AT CULVERTS), WHICH DEMANDS INTEGRATION AND EXPLAINS THE ROLES OF FISHERIES SCIENCE, GEOMORPHOLOGY, AND HYDRAULIC AND GEOTECHNICAL ENGINEERING WHEN DESIGNING SUCH FACILITIES; AND (3) INTRODUCTION TO INDIRECT AND CUMULATIVE EFFECTS ANALYSIS BOTH FOR REVIEWING HIGHWAY AGENCY DOCUMENTS AND FOR SUPPORTING AQUATIC ECOSYSTEM PROTECTION, RESTORATION, ANDMAINTENANCE. THE LAST ELEMENT EMPHASIZES THE ANALYTIC SKILLS NEEDED TO USE THE NATIONAL ENVIRONMENTAL POLICY ACT AND ENDANGERED SPECIES ACT TO INFLUENCE DECISIONS.

0151 1 Eff: 9/2/2007

USING LIMITING FACTORS ASSESSMENTS AS THE BASIS FOR MANAGING AND RESTORING FISH POPULATIONS

10 hours (1.0 CEU's).

10 HOURS (1.0 CEU'S). PARTICIPANTS WILL BE ABLE TO RECOGNIZE SITUATIONS WHERE A LIMITING FACTORS ASSESSMENT WOULD BE USEFUL, AND BE ABLE TO EVALUATE THE MERITS OF ASSESSMENTS THAT HAVE BEEN CONDUCTED. PARTICIPANTS WILL GAIN FAMILIARITY WITH CONCEPTUAL AND QUANTITATIVE MODELS, AND WILL BE CAPABLE OF SELECTING APPROPRIATE MODELING APPROACHES FOR NEW SITUATIONS. ALL PARTICIPANTS SHOULD BE ABLE TO APPLY THE CONCEPTS OF A LIMITING ANALYSIS TO GUIDE RESTORATION STRATEGIES FOR FISH.

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Ace Course Number	Version	Dates	Title/Credit/Description
0152	1	Eff: 9/2/2007	META-ANALYSIS IN FISHERIES SCIENCE
			12 hours (1.2 CEU's).
			12 HOURS (1.2 CEU'S). META-ANALYSIS IS A QUANTITATIVE METHOD
			FOR RESOLUTION OF CONFLICTING RESULTS ON A TOPIC IN THE
			SCIENTIFIC LITERATURE. THIS COURSE PROVIDES PARTICIPANTS
			WITH KNOWLEDGE AND SKILL NEEDED TO COPE WITH
			CONFLICTING INFORMATION WHEN REQUIRED TO MAKE A
			MANAGEMENT DECISION OR SCIENCE-BASED RECOMMENDATION. JORNEY-LEVEL MANAGERS AND RESEARCHERS ARE TARGETED FOR
			THIS COURSE.
0153	1	Eff: 9/2/2007	RIVER 2-D MODELING SHORT COURSE
0133	1	E11. 9/2/2007	16 hours (1.6 CEU's).
			16 HOURS (1.6 CEU'S). TWO-DIMENSIONAL HYDRAULIC AND
			HABITAT MODELING IS A RECENT ADVANCEMENT IN TECHNOLOGY
			FOR CONDUCTING INSTREAM FLOW STUDIES. THIS CLASS SATISFIES
			NEEDS FOR JOURNEY LEVEL PROFESSIONALS TO GAIN SKILLS IN
			CONDUCTING TWO-DIMENSIONAL HYDRAULIC AND HABITAT
			MODELING.
0154	1	Eff: 2/14/2007	FREASHWATER MUSSEL ECOLOGY AND IDENTIFICATION
			8 hours (0.8 CEU's).
			8 HOURS (0.8 CEU'S). PARTICIPANTS WILL GAIN A BASIC
			UNDERSTANDING OF FRESHWATER MUSSEL LIFE HISTORY, HABITAT
			REQUIREMENTS, ECOLOGICAL ROLE AND VALUE, AND
			CONSERVATION. PARTICIPANTS WILL ALSO LEARN FRESHWATER
			MUSSEL IDENTIFICATION CHARACTERISTICS AND TECHNIQUES.

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EMERGING DISEASES (PARASITIC, BACTERIAL, VIRAL, FUNGAL OF

FISHES IN THE PACIFIC NORTHWEST, WITH EMPHASIS ON FRESHWATER SPECIES IN IDAHO. OVERVIEW OF FISH NECROPSY AND FISH HEALTH SAMPLING TECHNIQUES FOR WILD & CULTURED

			77 79 7
Ace Course Number 0155	Version 1	Dates Eff: 5/25/2007	Title/Credit/Description PLANNING & EXECUTING SAFE & EFFECTIVE ROTENONE & ANTIMYCIN PROJECTS 36 hours (3.6 CEU'S). 36 HOURS (3.6 CEU'S). THIS COURSE TARGETS FISHERIES PERSONNEL THAT MANAGE THE PLANNING AND EXECUTION OF FISH SAMPLING/CONTROL/ERADICATION PROJECTS USING ROTENONE AND ANTIMYCIN AND STRESSES THE PLANNING, PUBLIC INVOLVEMENT, SAFETY, AND APPLICATION TECHNIQUES FROM THE POPULAR AFS ROTENONE USE MANUAL.
0156	1	Eff: 9/11/2005	CHOOSING THE APPROPRIATE BIOTELEMETRY TECHNOLOGY FOR AQUATIC RESEARCH 0.8 CEU's (8 Hours) THIS COURSE WILL PRESENT RESEARCHERS AND THEIR MANAGERS WITH AN OVERVIEW OF THE TECHNOLOGIES CURRENTLY AVAILABLE, AS WELL AS TECHNOLOGIES UNDER DEVELOPMENT WHICH SHOW PROMISE IN THE FIELD OF AQUATIC RESEARCH. THIS COURSE WILL ALSO EXPLORECURRENTLY AVAILABLE DATA MANAGEMENT TOOLS.
0157	1	Eff: 2/2/2007	CURRENT AND EMERGING PATHOGENS OF FISHES IN THE PACIFIC NORTHWEST 0.8 CEU'S (8 Hours) COMPLETION OF THE COURSE WILL PROVIDE PARTICIPANTS WITH BASIC UNDERSTANDING OF THE PATHOGEN, HOST, ENVIRONMENT INTERRELATIONSHIP AND THE ROLE OF FISH HUSBANDRY AND MANAGEMENT IN THIS PROCESS. AN OVERVIEW OF COMMON AND

STOCKS.

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Ace Course Number	Version	Dates
0158	1	Eff: 9/2/2007

Title/Credit/Description

HOW TO GET THE RIGHT THINGS DONE RIGHT

0.6 hours (6 Hours)

THIS PRACTICAL WORKSHOP TEACHES IMMEDIATELY APPLICABLE TOOLS, TEMPLATES, AND PROVEN PRACTICES TO PLAN REAL-LIFE WORK PROJECTS. IN TODAY'S WORK ENVIRONMENT, PROJECT TEAMS ARE EXPECTED TO DELIVER SOLID OUTCOMES WITH TIGHT BUDGETS, HEAVY WORKLOADS, AND HIGH EXPECTATIONS FOR COOPERATIVE INVOLVEMENT OF MULTIPLE PLAYERS. THIS BOOT CAMP IS AN INTERACTIVE, RESULTS-ORIENTED WORKSHOP THAT TEACHES SKILLS FOR INCREASING EFFECTIVENESS (DOING THE RIGHT THINGS), INCREASING EFFICIENCY (DOING THINGS RIGHT), AND ALONG THE WAY, EXERTING LEADERSHIP FOR THE DIVERSE PLAYERS INVOLVED IN A PROJECT.

0159 1 Eff: 9/2/2007

INTEGRATING GREEN AND GRAY INFRASTRUCTURE: USING HIGHWAY AGENCY PROCESSES TO CONSERVE AQUATIC ESCOSYSTEMS

1.4 CEU's (14 Hours)

THERE ARE THREE CORE ELEMENTS TO THE WORKSHOP: (1) INTRODUCTION TOT HE ECOLOGICAL FRAMEWORK (WHICH IS A GUIDE TO DEVELOPING GREEN INFRASTRUCTURE THROUGH A PLAN DO CHECK APPROACH, TO ELIMINATE OR REDUCE THE ENVIRONMENTAL DEGRADATION OF GRAY, OR HARD INFRASTRUCTURE SUCH AS ROADS); (2) INTRODUCTION TO THE (TENTATIVE TITLED) DRAFT HEC 26 (FISH PASSAGE AT CULVERST), WHICH DEMANDS INTEGRATION AND EXPLAINS THE ROLES OF FISHERIES SCIENCE, GEOMORPHOLOGY, AND HYDRAULIC AND GEOTECHNICAL ENGINEERING WHEN DESIGNING SUCH FACILITIES; AND (3) INTRODUCTION TO INDIRECT AND CUMULATIVE EFFECTS ANALYSIS BOTH FORREVIEWING HIGHWAY AGENCY DOCUMENTS AND FOR SUPPORTING AQUATIC ECOSYSTEM PROTECTION, RESTORATION, AND MAINTENANCE. THE LAST ELEMENT EMPHASIZES THE ANALYTIC SKILLS NEEDED TO USE THE NATIONAL ENVIRONMENTAL POLICY ACT AND ENDANGERED SPECIES ACT TO INFLUENCE DECISIONS.

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- F			
Ace Course Number	Version	Dates	Title/Credit/Description
0161	1	Eff: 9/9/2007	META ANALYSIS IN FISHERIES SCIENCE
			1.2 CEU's (12 Hours)
			META-ANALYSIS IS A QUANTITATIVE METHOD FOR RESOLUTION OF
			CONFLICTING RESULTS ON A TOPIC IN THE SCIENTIFIC LITERATURE. THIS COURSE PROVIDES PARTICIPANTS WITH KNOWLEDGE AND
			SKILL NEDDED TO COPE WITH CONFILICITING INOFRMATION WHEN
			REQUIRED TO MAKE A MANAGEMENT DECISION OR SCIENCE-BASED
			RECOMMENDATION. JOURNEY -LEVEL MANGERS AND
			RESEARCHERS ARE TARGETED FOR THIS COURSE.
0162	1	Eff: 9/2/2007	RIVER 2-D MODELING SHORT COURSE
			1.6 CEU's (16 Hours)
			TWO-DIMENSIONAL HYDRAULIC AND HABITAT MODELING IS A RECENT ADVANCEMENT IN TECHNOLOGY FOR CONDUCTING
			INSTREAM FLOW STUDIES. THIS CLASS SATISFIES NEEDS FOR
			JOURNEY LEVEL PROFESSIONALS TO GAIN SKILLS IN CONDUCTING
			TWO-DIMENSIONAL HYDRAULIC AND HABITAT MODELING.
0163	1	Eff: 2/14/2007	FRESHWATER MUSSEL ECOLOGY AND IDENTIFICATION
			0.8 CEU's (8 Hours)
			PARTICIPANTS WILL GAIN A BASIC UNDERSTANDING OF
			FRESHWATER MUSSEL LIFE HISTORY, HABITAT REQUIREMENTS, ECOLOGICAL ROLE AND VALUE, AND CONSERVATION.
			PARTICIPANTS WILL ALSO LEARN FRESHWATER MUSSEL
			IDENTIFICATION CHARACTERISTICS AND TECHNIQUES.
0164	1	Eff: 5/25/2007	PLANNING & EXECUTING SAFE & EFFECTIVE ROTENONE & ANTIMYCIN
			PROJECTS 2.6 CEUIa (26 Hayra)
			3.6 CEU's (36 Hours) THIS COURSE TARGETS FISHERIES PERSONNEL THAT MANAGE THE
			PLANNING AND EXECUTION OF FISH
			SAMPLING/CONTROL/ERADICATION PROJECTS USING ROTENONE
			AND ANTIMYCIN AND STRESSES THE PLANNING, PUBLIC
			INVOLVEMENT, SAFETY, AND APPLICATION TECHNIQUES FROM THE POPULAR AFS ROTENONE USE MANUAL.
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Ace Course Number 0165	Version	Dates	Title/Credit/Description
0103	1	Eff: 8/24/2007	STREAM RESTORATION 2.4 CEU's
2000	1	Eff: 9/27/2000	SAMPLING DESIGN AND STATIST

SAMPLING DESIGN AND STATISTICS (VERSION 1)

1.4 CEUS (14 HOURS)

UPON COMPLETION, PARTICIPANTS WILL BE ABLE TO DESIGN AND SOUND SAMPLING STRATEGIES ON LENTIC SYSTEMS. PARTICIPANTS WILLALSO BE ABLE TO APPLY VARIOUS STATISTICAL TECHNIQUES TO DATA.