County of Santa Cruz 0329

PLANNING DEPARTMENT

701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060

(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123

ALVIN D. JAMES, DIRECTOR

June 15, 2000

Agenda: June 27, 2000

Eoard of Supervisors
County of Santa Cruz
701 Ocean Street
Santa Cruz, California 95060

APPROVE EXPENDITURE OF $14,768.74 FROM COUNTY FISH AND GAME COMMISSION BUDGET TO FUND VARIOUS PROJECTS

Members of the Board:

The Fish and Game Advisory Commission has recommended the following projects for funding. The grant requests were presented to the Commission at their April 6th meeting, grant selections and amount of funding was determined at the May 4, 2000 meeting. The minutes of these meetings are attached. The total amount recommended for grant funding is $14,768.74 for the following six projects:

1. Bay Net - The Monterey Bay Sanctuary Volunteer Network, $2000.

   This allocation will be used to provide recruitment and training materials for expansion of the Bay Net Volunteer Docent Program in the Santa Cruz area.

2. Department of Fish and Game, $4,368.74.

   This allocation will provide local wardens with equipment necessary for enforcement actions, similar expenditures have resulted in an increase in fine revenues to the Commission. Also a tranquilizer gun is requested to give the wardens more options when dealing with sick and injured animals, or animals which are negatively interacting with humans.

3. CalTIP, $800.

   This allocation will be used to help pay reward money to individuals who call in a poaching or pollution case to the toll free hotline staffed by the Department of Fish and Game.

4. Fishermen's Alliance of California. $5,000.

   This allocation is to be used for three related projects. The first is for census flights along the Central Coast to determine seasonal utilization and abundance of California sea lions and Pacific harbor seals in relation to periods of smolt and adult migration of salmonids and

salmon fisheries seasons. Second is to use an underwater camera and hydrophone to record pinniped takes of salmon to assess predation behavior. This information would be used to develop methods which could mask the cues used by sea lions to detect hooked fish. The third is to develop and test a new acoustic device for deterring pinnipeds from hooked fish.

5. Watsonville Wetlands Watch, $1000.

This allocation is to help with the costs of printing a booklet about the Watsonville slough systems.

6. Native Animal Rescue, $1600.

This allocation will be used to fund ongoing studies of wild animal diseases within the County.

Funds for these allocations have been included in the Fish and Game Fund's 1999-00 estimated/ actuals and will be re-budgeted to fiscal year 2000-01 as part of the last day actions taken by your Board during budget hearings.

Your Board, as a part of the deliberations regarding the Resolution concerning the interaction between salmonids and sea lions, directed staff to prepare a summary of the Fish and Game Advisory Commission's grant program. Staff has prepared this summary and it is presented in Attachment 3.

t is therefore RECOMMENDED that your Board approve the Fish and Game Advisory Commission's recommended allocations and authorize the Auditor-Controller to disburse the funds.

Sincerely,

ALVIN D. JAMES
Planning Director

RECOMMENDED:

SUSAN A. MAURIELLO

Attachments:

1. Project Funding Requests
2. Fish and Game Advisory Commission Minutes dated May 4, 2000

SANTA CRUZ COUNTY
FISH AND GAME ADVISORY COMMISSON FUNDING REQUEST

I. **Name of Group:** **BAY NET – The Monterey Bay National Marine Sanctuary Volunteer Network**

II. **Amount of Funding Requested:** **$2,400**

III. **Name, Address and Phone Number of Contact Person:**

Milos Radakovich / Bay Net
P.O. Box 51595, Pacific Grove, CA 93950

IV. **Description of Proposed Project:**

Provide recruitment and training materials for expansion of Bay Net Volunteer Docent Program in Santa Cruz area.

V. **Objective:**

Recruit and train 15 additional docents to provide educational expertise, wildlife and natural history interpretation, and enforcement presence at Lighthouse and Santa Cruz Wharf.

VI. **Background and history of organization:**

Bay Net was founded in 1995 in the Monterey Peninsula and now has over 100 active volunteer docents in the Monterey/Pacific Grove area. We are hoping to expand our fledgling Santa Cruz program.

VII. **How will project be accomplished?:**

One two-month, forty hour training session will be held in Santa Cruz in the summer of 2000. After completing the training, volunteer docents will each provide at least 100 hours of volunteer service per year in weekly d-hour shifts.

VIII. **Budget:**

Funds from the Fish and Game Advisory Commission will provide necessary course materials and advertisements crucial to attracting new recruits, freeing other funds for salaries and travel expenses.

Proposal to the Santa Cruz County Fish and Game Advisory Commission 0332
to support
BAY NET, **the Monterey Bay National Marine Sanctuary Volunteer Network**
- April 2000 -

Overview

BAY NET welcomes this opportunity to join with the Santa Cruz County Fish and Game Advisory Commission to educate the public about the Monterey Bay National Marine Sanctuary (MBNMS) and to further inspire their involvement in the stewardship of our precious coastal and marine resources.

The **BAY NET** program outlined below actively engages citizens from communities adjacent to the MBNMS, providing both a rewarding and enjoyable experience, as well as the opportunity to make a direct and positive contribution to the stewardship of the Sanctuary. Through the docent training experience offered by the **BAY NET** program, area citizens act as shoreline interpreters, educators and Sanctuary "ambassadors," providing residents and visitors with information on coastal wildlife, cultural history, and local ocean-related activities, as well as Sanctuary programs and policies. The' program provides a unique opportunity for area citizens to become directly involved in creating a more aware, enthusiastic and stewardship-minded public.

To support this effort, we respectfully request a grant from the Santa Cruz County Fish and Game -Advisory Commission for $2,400 to help sponsor the next Santa Cruz two-month **BAY NET** training session (summer 2000), thereby responding to the growing interest in the program and enabling the placement of volunteers at Lighthouse Point and possibly the Santa Cruz Wharf

About BAY NET

In December 1995 the **Center for Marine Conservation** (CMC) publicly launched **BAY NET,** a new, innovative field docent program specifically designed to enhance the public's awareness and understanding of the MBNMS and promote its long-term stewardship. **BAY NET - the Monterey Bay National Marine Sanctuary Volunteer Network -** is the first program of its kind to place trained docent educators in the field to talk with the public about our national marine sanctuaries.

BAY NET was created with the help of a dedicated grant for the development of a citizen-based volunteer program to serve the coastal communities within the MBNMS. Continued success and expansion of services now rely on contributions and grants from individuals, groups and agencies in the areas we serve.

The Program

BAY NET training consists of a 40-hour program, mixing lecture and field experience. The class is taught from a "habitat perspective" with a focus on protecting and enjoying our most outstanding coastal and marine habitats.

Course materials and guest lectures include information on natural and cultural history, field interpretation skills, and Sanctuary regulations, programs and policies. As a key aspect of the

program is a prominent, non-intrusive presence, a large component to the training consists of providing guidance on effective communication and interaction with people. Given their field presence, **BAY NET** volunteers provide additional eyes and ears to help monitor natural and human activities on the shoreline. In some cases, the mere presence of **BAY NET** docents helps deter inappropriate and illegal activity. Docents are also trained to identify and report both suspicious activities and public safety problems experienced by kayakers, divers, boaters, or beach goers. We believe that, in addition to monitoring and enforcement by regulatory agencies, the key to resource protection is voluntary compliance through public education.

Easily identified by their distinctive royal blue jackets with white **BAY NET** logos, each volunteer is equipped with a pair of high-power binoculars mounted on a tripod for the public's use. Volunteers also carry a backpack with information on the Sanctuary, brochures on area attractions, emergency phone numbers, area maps, tide charts, and bird and marine mammal identification guides. The backpacks also contain a field journal in which guides make brief notes of unusual sightings and special encounters, as well as noting the number of people contacted during a given shift.

From business professionals to homemakers to divers, parents, graduate students and teachers, **BAY NET** volunteers come from all walks of life. Stationed at prominent locations throughout the Sanctuary, these Sanctuary "ambassadors" agree to provide 100 hours of volunteer service per year in weekly 2-hour shifts.

Since **BAY NET** began in 1995, nearly 300 volunteers have been trained and have actively participated in the program. These docents have connected with over 120,000 shoreline visitors. Seven trainings have been held on the Monterey Peninsula, with trained docents now stationed at a number of locations along the shores of Monterey and Pacific Grove (7 days/week from 10am-4pm; see attached map).

In 1997, the County of San Luis Obispo asked the **BAY NET** program to help initiate a docent program to educate the public about the new elephant seal colony near Hearst Castle. Two trainings (35 volunteers each) were held there in the fall of '97 and spring of '98.

During 1998 and '99, 52 volunteer docents were trained in Santa Cruz, at the north end of Monterey Bay. They started their shoreline duty during the Labor Day weekend, and continue to conduct operations out of the Surfing Museum at Lighthouse Point, primarily Thursday through Monday.

Opportunities and Needs

During the last five years we have been able to pilot a successful, rewarding and effective educational outreach program that enhances the experience of those who visit the shores of the MBNMS. The contributions of the program and its volunteers have been acknowledged through awards and proclamations from numerous public officials, agencies, and local governments. With the Fish and Game Advisory Commission's donation we will be able expand our successful program in Santa Cruz area.

The grant we have requested would help sponsor the next **BAY NET** training session in Santa Cruz (summer 2000). Continued training is critical to maintaining momentum for the program

and providing proper coverage for each shoreline duty site. The funds would help to defer the costs of training, materials, graduation, and outreach efforts to recruit new volunteers. *0334*

Program Staff

BAY NET program manager & director of volunteer training is **Milos Radakovich.** Milos **is** a marine biologist, coastal naturalist, educator and guide. A Monterey area resident for almost thirty years, he is the owner and operator of ***Scientific Enterprises,*** a consulting business focused on natural history education. For his work on **BAY NET,** Mr. Radakovich received the "Sanctuary Educator of the Year" award for 1998. He was nominated for the award by the Sanctuary Education Panel, made up of representatives from the top marine education and research institutions adjoining the MBNMS.

BAY NET's Santa Cruz coordinator is **Jen Jolly.** Ms. Jolly has a B.S in biology and a M.S. in marine science. Ms. Jolly also serves as the part-time Education and Outreach Specialist with the Monterey Bay National Marine Sanctuary and teaches biology and marine biology course at Cabrillo College.

Budget Requested

The following is a proposed budget for training a class of 25 to 35 volunteers to serve as on-site interpreters and monitors of natural and human activities along the shoreline of Santa Cruz.

Item	Detail	Estimated cost
Training staff	40 hrs. class & field – 2 instructors; 30 hrs. prep.	$3,100
Field equipment	4 binocular/tripod sets, packs, signs, field guides	***650***
Copy expenses	Training materials	***250***
Postage	Announcements. flvers. volunteer correspondence	150
Advertising	Media ads	***800***
Graduation	Food & materials	***350***
Miscellaneous	Film, processing, promotion items, etc.	***200***
		Total: $5.500

The non-labor costs are $2,400

Thank you for your consideration – working together, we have a chance.

ATTACHMENT 1

SANTA CRUZ COUNTY
FISH AND GAME ADVISORY COMMISSION FUNDING REQUEST

I. Name of Group/Individual: **Department of Fish and Game-Central Coast Region** *0335*

II. Amount of Funding Requested: **$194.38** ***(Vendor: Batteries Plus - Scotts Valley)***
439-6720

III. Name, Address and Phone Numbers of Contact Person: **Lt. Dennis Baldwin 479-9389**
P.O. Box 1506
Capitola, CA 95010-1506

IV. Description of Proposed Project:

Two (2) JAB TP-914 Lithium videocamera batteries

V. Objective:

About two years ago, the Commission purchased a Canon ES5000 videocamera for use by Department of Fish and Game wardens in Santa Cruz County. The camera has been used to document stream alteration violations and to document various fish and game violations. The original batteries are no longer reliable to hold a charge sufficient to last more than 30 minutes.

VI. Background and History of your organization, and/or of the problem:

The use of a video camera to document pollution incidents or stream alteration violations can settle a civil case very quickly when defendants or defense attorneys have an opportunity to view the actual conditions that existed when the warden was on the scene. These new batteries will assure that the videocamera will function throughout an investigation.

*VII. How will project be accomplished (design specs/plans, if applicable)
N/A

*VIII. Budget to include the precise use of Grant monies

The video camera batteries will remain the property of Santa Cruz County and be maintained on the Department of Fish and Game's Santa Cruz County equipment inventory Iist.

*Give a brief description under each section and use additional sheets to fully explain your proposed project.

DH/kh
FGFNREQ

SANTA CRUZ COUNTY
FISH AND GAME ADVISORY COMMISSION FUNDING REQUEST

I. Name of Group/Individual: **Department of Fish and Game-Central Coast Region**

0336

II. Amount of Funding Requested: $806.38 **(Includes shipping)**
(Vendor: Ben Meadows Company X-800-241-6401)

III. Name, Address and Phone Numbers of Contact Person: **Lt. Dennis Baldwin 479-9389**
P.O. Box 1506
Capitola, CA 95010-1506

IV. Description of Proposed Project:

Two (2) HANNA Portable Turbidity Meter Kits

V. Objective:

The Turbidity Meters will be issued to the two wardens assigned to Santa Cruz County. Most of the pollution and/or stream alteration violations that we investigate involved increased turbidity, sediment entering waters of the state. Immediately knowing the turbidity levels, allows wardens to know if there is a case sufficient to submit to the District Attorney for action. Knowing the turbidity level also allows the warden to make decisions on the need for biological input or if the District Attorney's Office should make an immediate field inspection.

VI. Background and History of your organization, and/or of the problem:

The Department of Fish and Game has assigned law enforcement personnel to Santa Cruz County since the early 1900's. Our job in Santa Cruz County has changed significantly from the early years of wardens checking hunters and fishermen to our activities today. One of our major responsibilities is to monitor stream alteration projects and to investigate pollution. These turbidity meters are an excellent tool to be effective in these investigations.

*VII. How will project be accomplished (design specs/plans, if applicable)
N/A

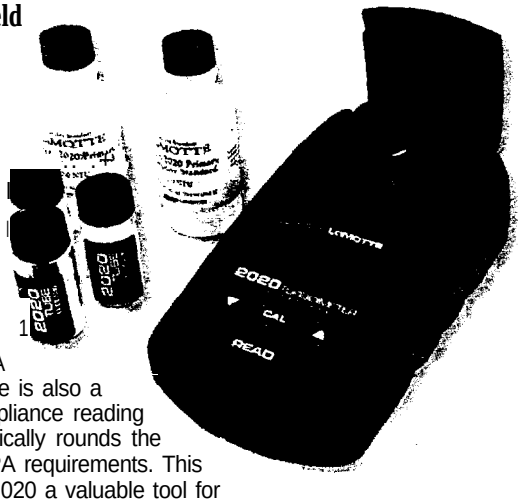
*VIII. Budget to include the precise use of Grant'monies

The Turbidity Meters will remain the property of Santa Cruz County and be maintained on the Department of Fish and Game's Santa Cruz County equipment inventory list.

*Give a brief description under each section and use additional sheets to fully explain your proposed project.

DH/kh
FGFNREQ

MOTTE Portable Turbidity Meter



New hand-i-held *design weighs less than one pound.*

3 Model 2020 phelometric bidity meter ets or exceeds A design ecifications for DWR and DES monitoring ograms as ecified by L SEPA ethod 180.1 There is also a parate EPA compliance reading ode that automatically rounds the ading to meet EPA requirements. This akes the Model 2020 a valuable tool for sting munic pal waters, processing waters and surface waters. ldditional features include a large LCD for easy reading and a mfortable ergonomic case design.

pecifications: Size: 3.5" x 6.5" x 2.5". Range: *0- 7 100* NTU. *esolution: 0 01 on 0-11 range, 0.1 on 11-110* range, 7 *on 110-1100 nge. Accuracy: ±2% of reading below 100 NTU, ±3% above 100 TU. Light Source: Tungsten filament. Requires one 9V battery, ot included.*

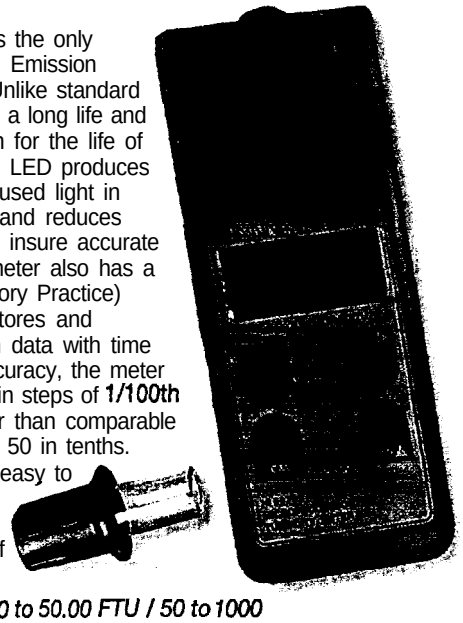
24805	**Portable Turbidity Meter**	*7.0* **lb.**	**$795.00**
00063	**9V Battery**	*0.3* **lb.**	*4.50*

HANNA Portable Turbidity Meter

ATTACHMENT 1

0337

➤ *Microprocessor based field meter with lab-grade accuracy.*



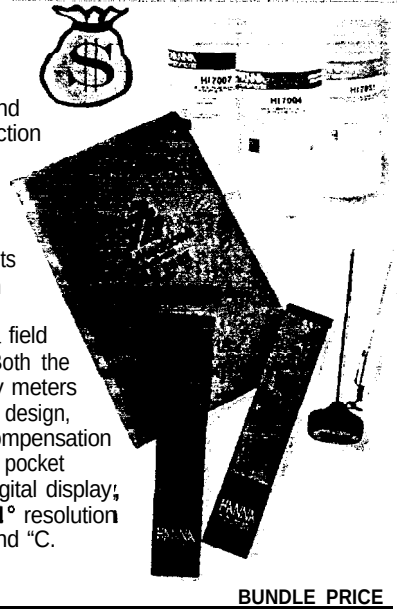
The Hanna turbidity meter is the only meter equipped with a High Emission Infrared LED light source. Unlike standard lamps, the infrared LED has a long life and maintains constant emission for the life of the instrument. The infrared LED produces the required intensity of diffused light in samples with low turbidity, and reduces interference from colors. To insure accurate calibration schedules, the meter also has a unique GLP (Good Laboratory Practice) feature that automatically stores and retrieves the last calibration data with time and date. For best field accuracy, the meter measures from 0 - 50 **FTU** in steps of **1/100th FTU** that is ten times better than comparable models that measure 10 to 50 in tenths. Added features include an easy to use four button keypad, automatic troubleshooting functions and auto shut-off after five minutes.

Specifications: *Range: 0.00 to 50.00 FTU / 50 to 1000 FTU, 1 FTU (Formazine* Turbidity *Unit) = 7 NTU (Nephelometric* Turbidity Unit). Resolution: 0.01 *FTU/1 FTU. Accuracy: ±0.5 FTU or ±5%.* Light Detector: Silicon Photocell. Dim.: 8.7" x 3.2" x 2.6". Weight: 78 oz.

Meter sold in kit form ***with meter,*** cat-tying case, calibration solutions, ***cleaning solutions,*** cleaning towels and 2 measurements ***cuvets.*** Requires ***four AA batteries, included.***

224816	**Turbidity Meter** Kit	*5.0* **lb.**	**$399.00**
224818	**Measurement Cuvets (Pack of 4)**	*0.5* **lb.**	12.95
224819	**0 FTU AMCO-EPA-1 Standard** Solution **(30ml)**	*0.5* lb.	13.50
224820	**10 FTU AMCO-EPA-1 Standard Solution (30ml)**	**0.5 lb.**	19.50
224821	Cleaning Solution for Cuvets **(230ml)**	*0.5* lb.	15.00
224822	**Cleaning Towels (Four Towels)**	*0.3* **lb.**	*20.00*

Pocket Water **Testing** Bundle



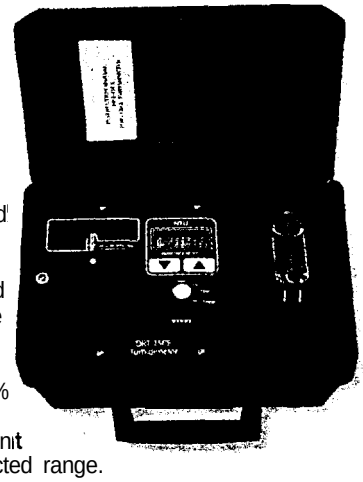
Test for temperature, **pH** and **conductivity** with this selection of pocket water testers. Each instrument is small enough to fit in your field vest or pouch for taking Hater **quality** measurements on the go. **Also** included in each bundle is a set of **calibration solutions** and a field book for recording data. Both the PH meter and conductivity meters feature a waterproof case design, automatic **temperature** compensation and easy calibration. The pocket **thermometer** features a digital display, **5"** stainless steel stem, **0.1°** resolution and will read in both °F and "C.

			BUNDLE PRICE
Bundle #221917	**Testing Bundle**	5.5 lb.	**$128.90**

Priced Separately **$148.90** **YOU SAVE! $20.00**

	BUNDLE INCLUDES	SEE PAGE	REG PRICE
221392			
222037	pH/Conductivity Pen	304	*$62.00 47.50*
221422	1,413 Calibration Solution	289	11.95
221409	pH 4.01 Buffer	289	9.00
221411	pH 7.01 Buffer	289	9.00
110291	**Taylor Digital Thermometer**	*205*	12.95
101595	**Ben Meadows Field Book**	*40*	**6.50**

Rugged Field Turbidimeter



➤ *Meets all EPA specifications.*

This outstanding portable turbidimeter requires only **16ml** of sample and is particularly designed for use in a wide range of field applications including lakes, streams, wells and more. Designed for a **variety** of field conditions, the turbidimeter is housed in a rugged NEMA 4 case and measures across three ranges: *O-I 0.00, **±1** % *O-100.0, **±2%** •0-1000, **±5%.** A common zero point allows one point standardization regardless of selected range.

Includes an ***AC charger, one cuvet with*** a light shield cap ***and a reference standard.*** The unit features a special ***20 hour continuous use 6V gel cell battery for field use plus an AC adapter for lab use. Dimensions: 5" x 7" x 11".***

224283	**Field Turbidimeter**	*8.0* **lb.**	**$995.00**
224284	**12V Automobile AC adapter**	**1.0 lb.**	**44.95**
224265	**Secondary Calibration Stds.†**	*0.5* lb.	*250.00*
224266	**Repl. Sample Cuvets, set 3**	*0.5* **lb.**	**37.95**

†Sealed latex, set of 4: 0.02, 10.00, 100.0, 1000

ATTACHMENT 1

SANTA CRUZ COUNTY
FISH AND GAME ADVISORY COMMISSION FUNDING REQUEST

I. Name of Group/Individual: **Department of Fish and Game-Central Coast Region** **0338**

II. Amount of Funding Requested: **$1,043.46 plus shipping** ***(Vendor: Pneu-Dart, Inc.)***
(570) 323-2710
(Vendor for safety stick/pole syringe: ACES, Inc. I-800-338-223 7)

III. Name, Address and Phone Numbers of Contact Person: **Lt. Dennis Baldwin 479-9389**
P.O. Box 1506
Capitola, CA 95010-1506

IV. Description of Proposed Project:

Pneu-Dart Model 193SS tranquilizer rifle. rifle clip, rifle case, cleaning rod & brush One box of medium charges, one box of heavy charges, two packs of 1cc darts, two packs of 2cc darts, two packs of 3cc darts. four packs of 1cc practice darts, four packs of 2cc practice darts, four packs of 3cc practice darts, one ACES safety stick and one ACES pole syringe w syringe guard.

V. Objective:

An increasing number of calls are being handled in Santa Cruz County involving injured wildlife or wildlife that needs to be removed from the area. Tranquilizer equipment is available from some Department biologists. however, there is no assurance that the biologist will be around when the tranquilizing equipment is needed. The requested equipment will allow the Santa Cruz wardens to be self sufficient in having ail of the equipment necessary to handle sensitive wildlife removal needs. without having to resort to the use of firearms.

VI. Background and History of your organization, and/or of the problem:

Historically, injured wildlife or wildlife needing to be removed from an area, have been removed by the use of Department issued firearms. Safety of the public has always been our major concern in dealing with these issues. An increasing number of these problems are occurring in residentiai areas where the use of firearms is impractical or impossible and hold public safety as our utmost concern. The requested equipment will allow our wardens to safely remove wildlife.

*VII. How will project be accomplished (design specs/plans, if applicable)
N/A

*VIII. Budget to include the precise use of Grant monies

This equipment will remain the property of Santa Cruz County and be maintained on the Department of Fish and Game's Santa Cruz County equipment inventory list.

*Give a brief description under each section and use additional sheets to fully explain your proposed project.

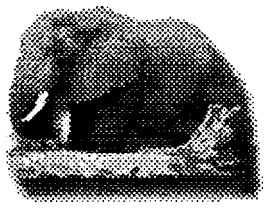
DH/kh
FGFNREQ

ATTACHMENT 1

0339

Home
Projectors
Darts
Accessories
FAQ's
Contact Us

Designed by



Pneu-Dart, Inc., located in the mountains of Pennsylvania, was incorporated Oct. 10. 1967. Is the manufacturer of animal darting equipment. We are a small company and take pride in our products and the service we offer. Our equipment has been used worldwide on most every size animals from elephants to small monkeys. The primary use is for animal control and capture of free ranging ranch raised exotics. Medicating by remote injection is fast becoming a method of treating some problems on feed lots. farms and ranches.

Our guns or projectors, as we prefer to call them. are available as CO2 and air powered as well as cartridge fired. We have eight models to choose from and should fill your every need as well as your budget. Each projector has a power control for regulating impact and distance making them the most versatile on the market.

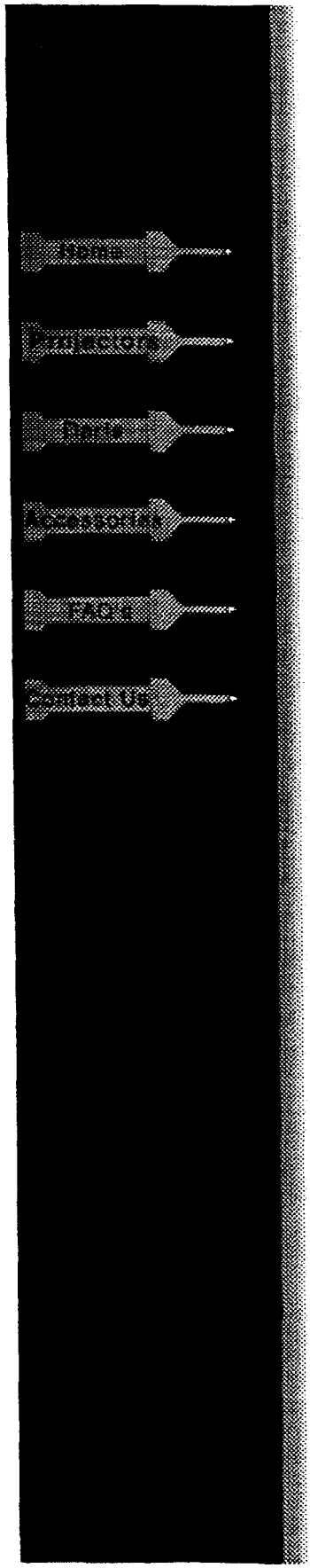
Pneu-Dart darts have capacities from 1/2cc to 6cc and 7cc and 10cc. The CO2 and air projectors use type P darts (Yellow). Type C darts (Orange) are used in cartridge fired projectors. We have a selection of needle length from 3/8" to 2". and as our darts are disposable. needle length must be specified when ordering.

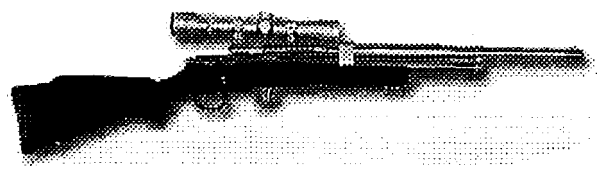
We appreciate your interest and look forward to serving you.

Pneu-Dart, Inc.
P.O. Box 1415
Williamsport. PA 17703
Phone: (570) 323-2710 Fax: (570) 323-2712
email: pneudart@uplink.net

ATTACHMENT 1

0340





PNEU-DART' MODEL 193 CARTRIDGE FIRED RIFLE

This rifle has a unique slide lever action and will accept darts from ½cc to 6cc. Darts can be removed from chamber without the use of tools. By adjusting the power control valve, close shots can be taken without injury to the animal.

PNEU-DART® MODEL 193SS (shown)

Same as Model 193 except all stainless steel and electroless nickel plate with composite stock.

SPECIFICATIONS

193 Stock and Action - Marlin Model 25 .22 cal. 5 Shot Clip
193SS Stock and Action - Marlin Model 880SS .22 cal 5 Shot Clip
Dart Barrel - .50 cal. Rifled Barrel 16"
Dart Action - Toggle-Side Lever - Single Shot
Cartridges - .22 cal. Power Loads
Sights - Open Rear - Blade Front - also 4 Power Scope
Weight - 8 ¼ lbs.
Pressure Control - 5 Position
Range - 0 to 100 yards with 1cc Type 'C' Disposable darts

ATTACHMENT 1

0341

PNEU-DART® INC.

Accessories

Home

Protection

Shirts

Accessories

Receivers

Transmitter Dart

Sights

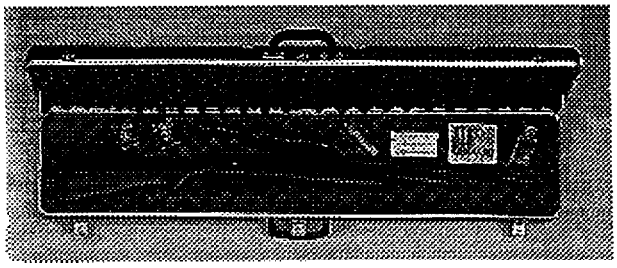
Rangefinder

How to book

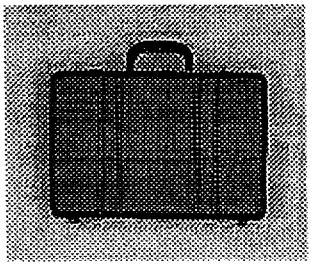
FAQ

Contact Us

GUN CASES

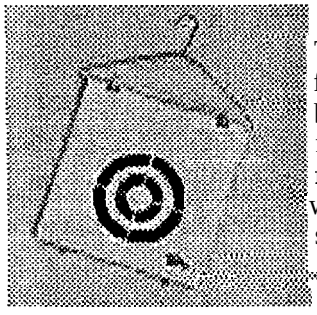


Our gun cases are made of a high impact plastic reinforced with aluminum edges with three locking latches on the rifle cases and two on the pistol cases. They are lined with heavy foam and there is enough extra room to carry a supply of darts, cartridges. etc. A real bargain at our price.



PNEU-DART® TARGET

Our dart target is the best thing we have come up with to stop a practice dart without damage to it. It is a heavy canvas bag with four target faces printed on it. Four clips are included.

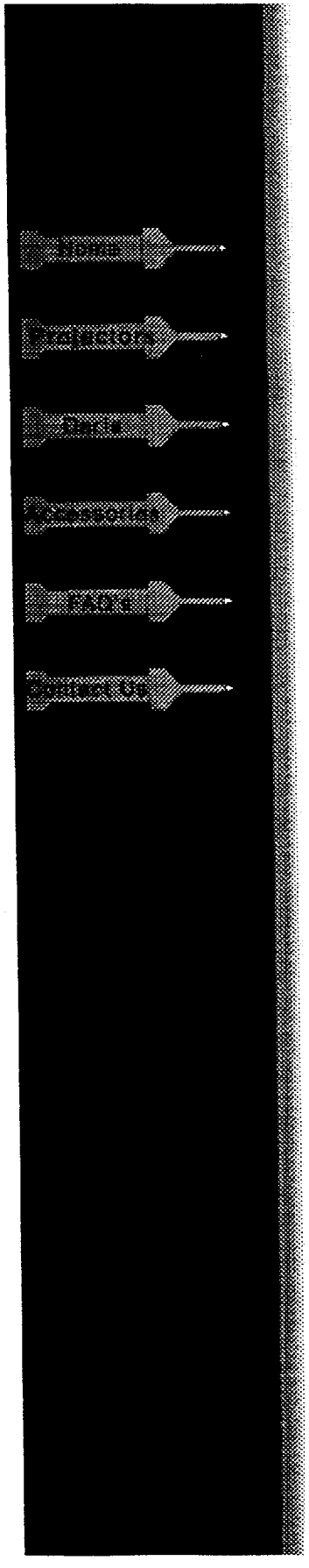


To use the target, put about ½" of newspaper folded double in the bottom half of the target bag. Fold the bag over a wire coat hanger and fasten with clips. Now put another ½" of folded newspapers in the open end and clip the end shut with the two remaining clips. This can be suspended over a nail, wire, limb or anything with a safe area behind it in case of a miss.

Projectors should be sighted in by starting from a very close distance. Shoot from 20 ft. with your power setting at a low level. Fire one dart. Check your point of impact and the damage caused by impact. If you are breaking the canvas. you are shooting too hard. After a few shots, move to 40 ft. and read-just your power. Repeat the exercise and try to keep your darts on the

ATTACHMENT 1

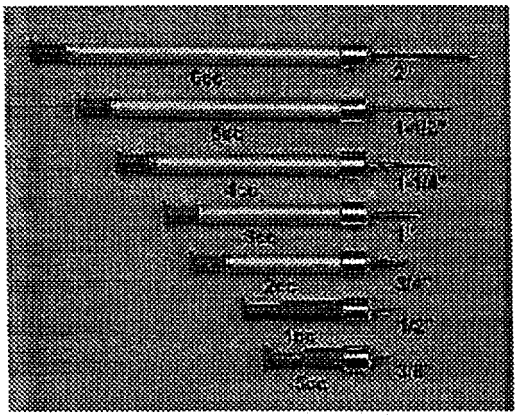
0342 .



PNEU-DART INC.

Disposable darts

PNEU-DART® TYPE 'C' and **'P'** disposable darts are. 50 caliber and were designed to provide a convenient accurate. inexpensive long-range missile for use on small as well as large animals. The ½cc and 1cc **'C'** and **'P'** appear to be identical, but the 'C' dart has a slightly larger diameter tail to engage in the rifling of our cartridge fired rifles. The type **'P'** is for our smooth bore CO, Air Guns and Blo-Jectors. 2cc through 6cc **'P'** darts have a small projection molded on the tail to hold them in other brands of projectors. (click on Dhoto for close-up)



Darts are available with 14 gauge needles in lengths of 3 /8", ½", ¾", 1", 1 ¼", 1½" and 2". Darts 2cc through 6cc have a gelatin collar, but are available with a wire barb. We do not recommend wire barbs or collars on 1/2cc or 1cc darts. but they are available at additional costs.

Gelatin collars are used for medication as well as capture. They will hold the dart in place until the injection is made and after several minutes will soften and the dart will fall from the animal.

As a guide. when ordering darts refer to this chart. This may not apply in all cases is only suggested for your convenience.

10 to 75 Lbs. - ½" needle length
75 to 150 lbs. - ¾" needle length
150 to 600 lbs. - 1" needle length
600 to 1000 lbs. - 1%" needle length
over 1000 lbs. - 1%" needle length

When ordering, be sure to specify type of dart and needle length.

ATTACHMENT 1

0343

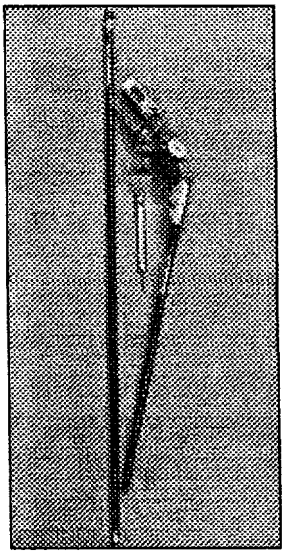
Contents

ACES

Animal Care Equipment & Services, Inc.

Bulletin Board | Newsletter | Web Specials

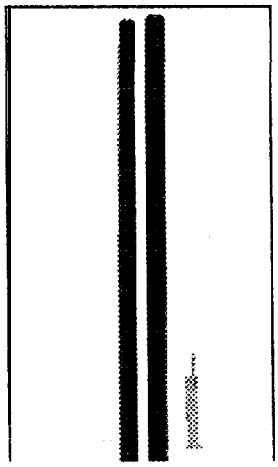
Chemical Capture



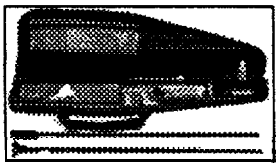
DAN-INJECT PROJECTORS
Basic Kit:
(DI-KIT) . ..$ 569.00
Deluxe Kit:
(DI-KITD)... $ 959.00
FAQ & INFO | ORDER

DANINJECT DARTS
Dart Only:
1.5 ML/l 1MM Diameter
(DI-S150)... $15.00
3.0 ML/11MM Diameter
(DI-S300)...$15.00
5.0 ML/13MM Diameter
(DI-S500)...$29.00
10.0 ML/13MM

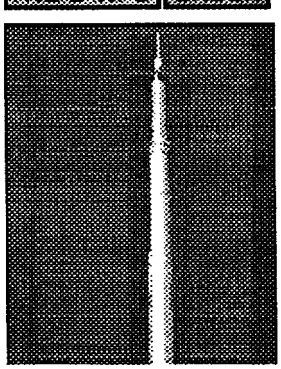
PNEU-DART PROJECTORS
CO2 Rifle Kit:
(PD-176B)... $399.00
Pump Air Rifle Kit:
(PD-178B)...$399.00
CO2 Pistol Kit:
(PD-179B)... $309.00
Pump Air Pistol Kit:
(PD-190B)...$309.00
FAQ & INFO | ORDER



ACES ProJECT SYSTEM
Call For Pricing
1-800-338-ACES
FAQ & INFO



ADDISON BLOWPIPES
Smaller Animals:
(ABK-2) 2 ML...$ 239.00
Med. & Large Dogs:
(ABK-3) 3 ML...$ 239.00
Larger Animals:
(ABK-5) 5 ML... $ 239.00
FAQ & INFO | ORDER

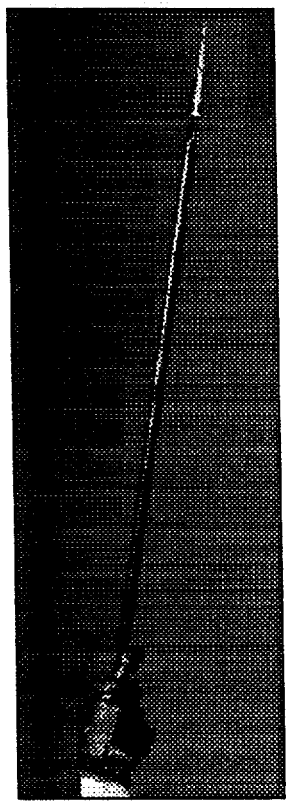


ATTACHMENT 1

0344

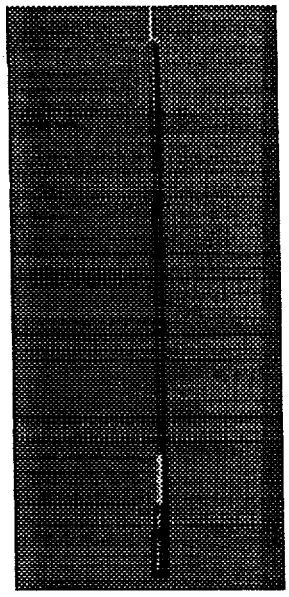
(ZH-06) 6 ML . . . $ 69.00
(ZH-12) 12 ML ... $ 79.00

FAQ & INFO | ORDER



ACES SAFETY STICK
(JPS-03) 3' Pole... $ 109.00
(JPS-04) 4' Pole... $ 114.00
(JPS-06) 6' Pole ...$ 119.00

FAQ & INFO | ORDER



ACES POLE SYRINGE
Pole Syringes:
(KPS-03) 3 ML 40"... $ 44.00
(KPS-12) 12 ML 40"... $44.00
Syringe Guards:
(ZSG-03) 3 CC...$ 31.00
(ZSG-12) 12 CC... $39.00

FAQ & INFO | ORDER

ATTACHMENT 1

SANTA CRUZ COUNTY
FISH AND GAME ADVISORY COMMISSION FUNDING REQUEST

0345

I. Name of Group/Individual: **Department of Fish and Game-Central Coast Region**

II. Amount of Funding Requested: $321.64 **(Includes shipping)** ***(Vendor: Ben Meadows Company) 1-800-241-6401***

III. Name, Address and Phone Numbers of Contact Person: **Lt. Dennis Baldwin 479-9389**
P.O. Box 1506
Capitola, CA 95010-1506

IV. Description of Proposed Project:

CHEMets Water Test Kits for chlorine (1), dissolved oxygen(2), ammonia-nitrogen(2), and nitrate-nitrogen(2).

V. Objective:

These single use field test kits will allow the wardens assigned to Santa Cruz County to immediately test for major sources of pollutants. The tests will allow wardens to focus on possible sources or to exclude sources of offending pollutants. The Chlorine Water Test Kits will be used in conjunction with the Chlorine Ion Specific Meter (also requested in another packet), by wardens so that one meter can be shared. As in the justification for the Chlorine meter, if warden immediately know they are dealing with a specific type of pollutant, then they can focus on the investigation rather than be transporting samples for analysis.

VI. Background and History of your organization, and/or of the problem:

*VII. How will project be accomplished (design specs/plans, if applicable)

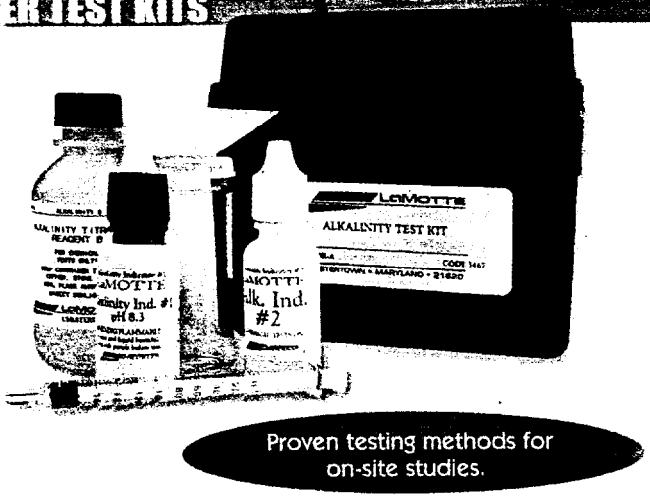
N/A

*VIII. Budget to include the precise use of Grant monies

The Test Kits will remain the property of Santa Cruz County and unused kits will be maintained on the Department of Fish and Game's Santa Cruz County equipment inventory list.

*Give a brief description under each section and use additional sheets to fully explain your proposed project.

DH/kh
FGFNREQ



Proven testing methods for on-site studies.

LaMOTTE Individual Water Test Kits

FAX ON DEMAND
Request Document #22178
Call 1.800.765.9698 anytime!

LaMOTTE test kiis are designed using proven testing methods that are fast, practical and accurate. Each kit is a portable lab that includes all required labware and reagents with simple step-by-step instructions. All the kits listed are part of an ongoing effort to provide new test methods that are faster and easier to use plus reduce or eliminate hazardous materials.

Each kii uses either a visual or titrimetric test method for interpreting results. Visual methods use reagents to react with a substance in the sample, causing a change in color. Using the included color comparators or color sheets, the concentration of the substance can be determined. Titrimetric methods use a titrant solution that is added to the sample in precise quantities until a color change indicates a completed reaction. The amount of titrant added is used to determine concentration.

	TEST FACTOR	METHOD	RANGE	RESOLUTION	# OF TEST		
221780†	Alkalinity	Direct Read Titrator	0-200 ppm as $CaCO_3$	4 ppm	50	2.0 lb.	$29.95
221781	Refill					1.0 lb.	12.50
221782	Ammonia-Nitrogen	Salicylate w/ColoRuler	0-4.0 ppm	0.5-2 ppm	50	1.0 lb.	34.95
221783	Refill					1.0 lb.	11.95
221784	Chloride (Salinity)	Argentometric Titrator	0-50 ppm Cl	1.0 ppm	50	1.0 lb.	28.95
221785	Refill					1.0 lb.	16.95
221786†	Chlorine	DPD-FAS Titrator	0-10 ppm Cl_2	0.2 ppm	50	3.0 lb.	49.25
221787	Refill					1.0 lb.	22.95
221788†	Dissolved Oxygen	WinklerTitration—all liquid system	0-10 ppm	0.2 ppm	50	2.0 lb.	36.95
221789	Refill					1.0 lb.	21.25
221790	Nitrate-Nitrogen	Zinc Reduction	0-15 ppm	1-5 ppm	50	2.0 lb.	39.50
221791	Refill					1.0 lb.	12.50
221792	pH, cresol red (salt water)	Colorimetric Comparator	7.2-8.6 pH	0.2 pH	50	1.0 lb.	29.95
221793	Refill					1.0 lb.	4.25
221794	pH, phenol red (fresh water)	Colorimetric Comparator	6.8-8.2 pH	0.2 pH	50	1.0 lb.	29.95
221795	Refill					1.0 lb.	4.25
221796	pH, wide range	Colorimetric Comparator	3.0-10.5 pH	0.5 pH	100	1.0 lb.	44.95
221797	Refill					1.0 lb.	9.25
221798	Phosphate (low, ortho)	Ascorbic Acid Reduction	0-2.0 ppm PO_4	0.2-0.5 ppm	50	2.0 lb.	72.50
221799	Refill					1.0 lb.	11.95
221800	Turbidity	Visual Comparison Method	5-100 JTU or 10-200 JTU	5 or 10 JTU	50	2.0 lb.	39.00
221801	Refill					1.0 lb.	6.25

†EPA Accepted Method

CHEMets® Water Test Kits

- *Features a unique vacuum sealed, self-filling ampoule complete with reagents.*

FAX ON DEMAND
Request Document #22548
Call 1.800.765.9698 anytime!

CHEMets test kits are the fastest, easiest method for routine field determinations of dissolved oxygen, chlorine, nitrate, phosphate, iron and ammonia. Vacuum sealed ampoules contain all of the necessary reagents. Fill the special snap cup to the desired fill line, insert the pre-scored ampoule and snap the tip in the cup. Water is drawn into the ampoule, causing a color change that is compared to the included color charts to determine concentration.

Each kit *contains 30 ampoules, color comparators, accessory solutions (when required), snap* cup *and instructions.* Refill ampoules *are also* available. *Kits with two ranges include two comparators.*

TESTS:	RANGE:	COMPARATOR INCREMENTS: (in ppm) (some kits have two ranges, in ppm)
Dissolved Oxygen	1-12	1, 2, 3, 4, 5, 6, 8, 10, 12
Chlorine (free & total)	0-1	0.1, 0.2, 0.3, 0.4, 0.6, 0.8, 1.0
	1-5	1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0
Nitrate (nitrogen)	0-25	0, 2.5, 5.0, 7.5, 10.0, 15.0, 20.0, 25.0*
	25-125	25, 27.5, 50, 62.5, 75, 87.5, 100, 112.5, 125
Phosphate, Iron, Ammonia	0-1	0, 0.1, 0.2, 0.3, 0.4, 0.6, 0.8, 1.0
	1-10	1, 2, 3, 4, 5, 6, 7, 8, 9, 10

225480	Dissolved Oxygen	1.2 lb.	$38.00
225481	Dissolved Oxygen Refill	0.4 lb.	19.00
225482	Chlorine	1.2 lb.	44.50
225483	Chlorine Refill	0.4 lb.	25.50
			51.00
225484 225485	Nitrate Nitrate (nitrogen) (nitrogen) Refill	0.4 1.2 lb. lb.	25.00
225486	Phosphate	1.2 lb.	44.50
225487	Phosphate Refill	0.4 lb.	19.00
225488	Iron (total and soluble)	1.2 lb.	44.50
225489	Iron (total and soluble) Refill	0.4 lb.	19.00
225490	Ammonia (nitrogen)	1.2 lb.	44.60
225491.	Ammonia (nitrogen) Refill	0.4 lb.	19.00

ATTACHMENT 1

SANTA CRUZ COUNTY
FISH AND GAME ADVISORY COMMISSION FUNDING REQUEST

0347

I. Name of Group/Individual: **Department of Fish and Game-Central Coast Region**

II. Amount of Funding Requested: **$200.82 (Includes shipping)** ***(Vendor: Ben Meadows Company) l-800-241-6401***

III. Name, Address and Phone Numbers of Contact Person: **Lt. Dennis Baldwin 479-9389**
P.O. Box 1506
Capitola, CA 95010-1506

IV. Description of Proposed Project:

HANNA Ion Specific Meter for Chlorine and 100 test refills for Free Chlorine and 100 test refills for Total chlorine

V. Objective:

The Ion Specific Meter for Chlorine will he used in Santa Cruz County to test for the presence of chlorine when investigating fish hills. The test for chlorine must be completed within a few hours of collection of the water sample, or false readings occur. We have had at least two fish kills in the county where a chlorine testing meter would have been invaluable to immediately know that chlorine was the responsible pollutant. Provided with the knowledge that chlorine is present in a sample, wardens can focus their investigation on possible chlorine contamination sources instead of rushing a sample to a lab to be tested.

VI. Background and History of your organization, and/or of the problem:

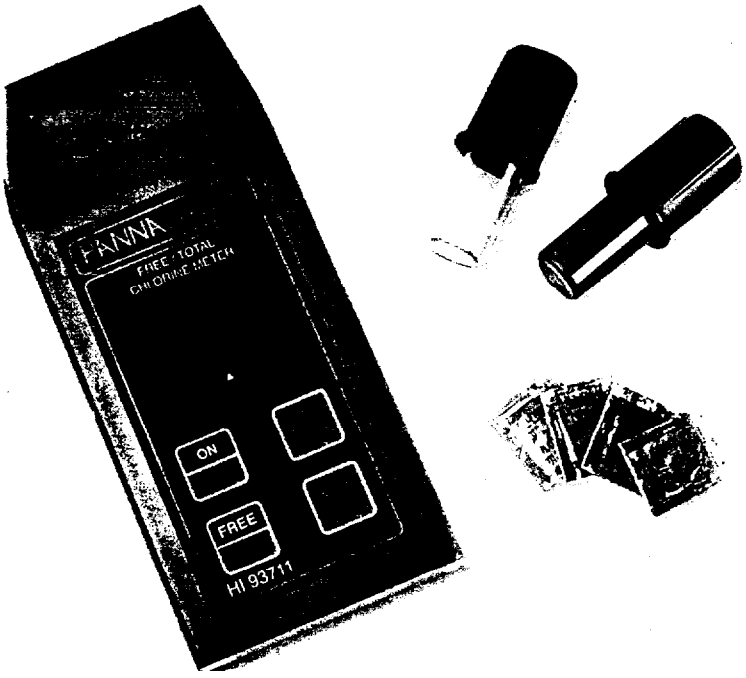
*VII. How will project be accomplished (design specs/plans, if applicable)
N/A

*VIII. Budget to include the precise use of Grant monies

The Ion Specific Chlorine Meter will remain the property of Santa Cruz County and be maintained on the Department of Fish and Game's Santa Cruz County equipment inventory list.

*Give a brief description under each section and use additional sheets to fully explain your proposed project.

DH/kh
FGFNREQ



The meter reads a colored sample to determine the concentration of a measured parameter.

HANNA Ion **Specific** Meters

- *Portable field meters with laboratory accuracy.*

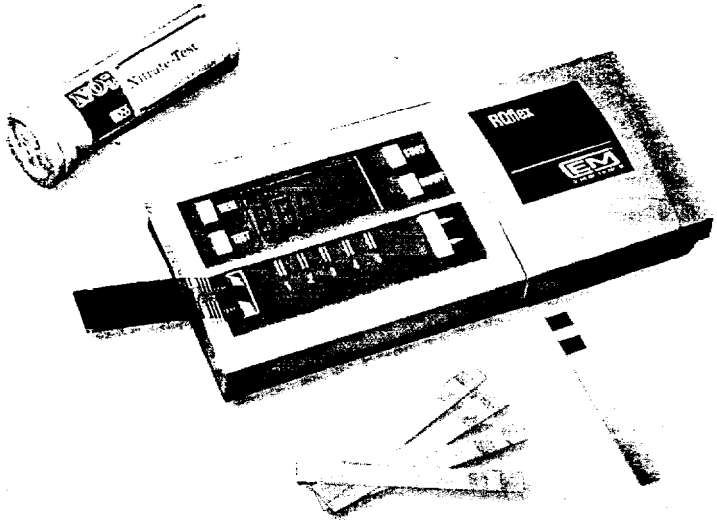
The world's leading manufacturer of electro-analytical instruments has the right solution to solve the problem of measuring water parameters in an easy, inexpensive and accurate way. Ion specific meters are a simpler alternative to Ion Selective Electrodes and time consuming chemical test kits.

Simple reagents **are** added to each sample to produce a color change that represents the concentration of the measured parameter, Each meter reads this change in color with a silicon photocell and shows the value of the parameter on the large LCD with lab grade accuracy from the powerful microprocessor.

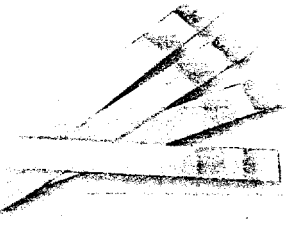
Comes with instructions, 2 cuvets, transport and measurement caps. Test refills (with 100 tests) must ***be ordered separately. Uses one 9V battery, included. Sh. Wt. 2.0 lb.***

METERS	PARAMETER	RANGE	RESOLUTION	
221852	Ammonia	0.00-I .00mg/l	0.01 mg/l	$141.95
221854	Chlorine/pH	Free: 0.0-2.5mg/l	0.01 mg/l	
		Total: 0.0-3.5mg/l	0.01 mg/l	
		5.9-8.0 pH	0.1 pH	164.95
221856	**Dissolved Oxygen**	O-I 4 ppm	0.1 ppm	146.95
221860	**Nitrate**	0.0-30.0mg/l	0.1mg/l	141.95
221862	**Nitrite**	0-30mg/l	0.1mg/l	141.95
221864	**Phosphate**	0.0-2.5mg/l	0.01 mg/l	**141.95**

TEST REFILLS			
221853	**Ammonia Tests**	1.0 lb.	**$29.95**
221855	**Free Chlorine Tests**	1.0 lb.	13.95
221856	**Total Chlorine Tests**	1.0 lb.	13.95
221657	**pH Tests**	1.0 lb.	11.95
221666	**D.O.**	1.0 lb.	**39.00**
221861	**Nitrate Tests**	1.0 lb.	21.50
221663	**Nitrite Tests**	1.0 lb.	21.50
221865	**Phosphate Tests**	1.0 lb.	16.95
224818	**Replacement Cuvets—Pk. 4**	0.5 lb.	12.95



Combine the convenience of test strips with the accuracy of test kits!



FAX ON DEMAND
Request Document #22311
Call 1.800.765.9698 anytime!

EM Science **Reflectoquant**™ Analysis System

- *Combine the convenience of test strips with the accuracy of a colorimeter.*

One **RQflex** meter can be programmed to provide accurate results in seconds for a wide variety of tests. No more complicated test kits and messy reagents for each desired test. The complete process involves only three steps: dip the test **strip** in the sample, insert the strip into the meter, read the results directly on the digital display. It's like having a lab in the palm of your hands. The **RQflex** stores the programs for up to five different tests, puts the results in memory and downloads the data to your PC.

Software and cable sold separately.

223101	**RQflex Meter**	**0.6 lb.**	**5525.00**
223111	**Software and Cable**	**2.0 lb.**	**235.00**

	TEST STRIPS	RANGE		
223102	**Chromate**	1-45mg/l	0.3 lb.	**$52.50**
223104	**Nitrate**	5-225mg/l	0.3 lb.	47.25
223105	**Nitrate**	3-90mg/l	0.3 lb.	47.25
223106	**Nitrite**	0.5-25mg/l	0.3 lb.	47.25
223107	**Peroxide**	0.2-20mg/l	0.3 lb.	47.25
223108	**pH**	4-9	0.3 lb.	47.25
223125	**Chlorine**	0.5-10mg/l	0.3 lb.	44.95
223126	**Iron**	0.5-20mg/l	0.3 lb.	44.95
223127	**Sulfite**	10-200mg/l	0.3 lb.	47.25
223128	**Ammonium**	0.2-7.0mg/l	0.3 lb.	59.95

ATTACHMENT 1

SANTA CRUZ COUNTY
FISH AND GAME ADVISORY COMMISSION FUNDING REQUEST

0349

I. Name of Group/Individual: **Department of Fish and Game-Central Coast Region**

II. Amount of Funding Requested: **$1,802.06 (Includes shipping)**

III. Name, Address and Phone Numbers of Contact Person: **Lt. Dennis Baldwin 479-9389**
P.O. Box 1506
Capitola, CA 95010-1506

IV. Description of Proposed Project:

ITT Night Quest Night Vision Scope Model 160 ***(Vendor: Ben Meadows Company) l-800-241-6401***

V. Objective:

The Commission purchased the same night scope for use by the Department Fish and Game about two years ago. It has been invaluable in working deer poaching cases at night, checking for illegal net use off La Selva Beach, working illegal netting activity on Santa Cruz County steelhead/coho salmon streams and enforcement of night closure regulations at Bonny Doon Ecological Reserve. The purchase of a second night scope will allow each of the wardens assigned to land patrol to have the scope with them at all times instead of having to coordinate with the person who has the scope.

VI. Background and History of your organization, and/or of the problem:

Working details at night are made significantly safer and easier when the warden has a night vision scope. Darkness is the poachers ally and a night vision scope levels the playing field for enforcement.

*VII. How will project be accomplished (design specs/plans, if applicable)

N/A

*VIII. Budget to include the precise use of Grant monies

The Night Vision Scope will remain the property of Santa Cruz County and be maintained on the Department of Fish and Game's Santa Cruz County equipment inventory list.

*Give a brief description under each section and use additional sheets to fully explain your proposed project.

DH/kh
FGFNREQ

e oculars

from
id professional
s to these binoculars. The **Optical** Image
s a **Vari-Angle** Prism that instantly makes
ain a steady image. The non-shake performance
tail without a tripod (or even from a moving
eye strain.

noculars reduce spherical distortion and deliver images from a wide field-of-view. These **high-agnification** binoculars are also compact and

operate with two AA *batteries (not* included)
nt for use in light rain. The exterior finish is
sy non-slip grip and durability in the field.

culars, 15 x 45 IS	2.0 lb.	$1,4	.00
culars, 12 x 36 IS	2.0 lb.		9.00
culars, 10 x 30 IS	2.0 lb.		579.00
	0.3 lb.		3.50

5 x 45 IS	12 x 36 IS	10 x 30 IS
15x	12x	10x
7 ~ Infinity	12.1 ~ Infinity	13.8 ~ Infinity
234	293	314

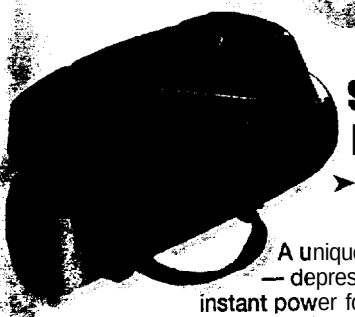
go into the
erna line -- the
the lens s a
ced multi-coating
both UV rays and infrared
clarity by reducing the amount of reflected light.
e a large f eld of view, BAK-4 glass prisms for
re relief fo· comfortable viewing, and a large
brightness.

nt and rea r protect lenses from dirt and
overs also act as blinders to help block out the
ed in rubber armour for extra durability. Nitrogen
, the bino culars may be used in bad weather

e, *neoprene adjustable strap,* and *lens brush.*

V 7 x 42	3.5 lb.	$369.00
V 10 x 42	3.5 lb.	379.00

4006W	4008W
7	10
42mm	42mm
6mm	4.2mm
416	338 ft.



SAFARI™ Might Vision **Scope**

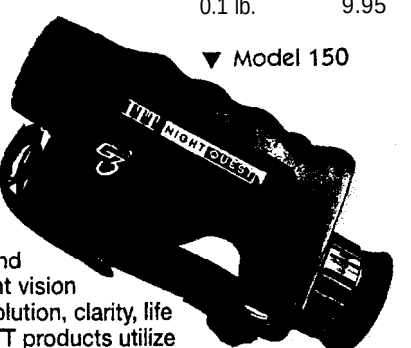
➤ *Self-powered and compact, with infrared illuminator.*

A unique feature sets this scope apart — depress the top switch and you have instant power for up to 3 minutes of operation without batteries. Very small and lightweight, this night vision scope provides 2.4X magnification, a long-range viewing of 4 - 300 ft., and an angle of view of 15". Comes with an infrared illuminator for better performance in extremely low-light conditions. Battery not included.

Dim.: 5.9" x 2" x 3". Illuminator requires 3V battery, *lithium.(not included)*

240899	Safari Night Vision Scope	1.5 lb.	$295.00
100064	3V Lithium Battery	0.1 lb.	9.95

ITT Hlght Quest" **Night** Vision



▼ Model 150

➤ *Highest performing night vision products available.*

ITT, the sole night vision supplier to the U.S. military and NATO, offers high quality night vision products with unequaled resolution, clarity, life expectancy and design. All ITT products utilize true Generation 2 (G2) or Generation 3 (G3) technology, water resistant case designs, automatic brightness control, superior optics and a one year warranty. All ITT units also employ a high light shutdown feature to prevent temporary blindness to the user and a possible overload the light collection tube.

Model 150 and 160

➤ *Comfortable monocular design.*

1@Night Quest™ Model 150 and Model 160 provide improved resolution/clarity in extremely low light conditions. The popular r&ocular style offers easy handling, with contoured finger grips molded into the rugged housing. Lightweight unit weighs only 16 ounces, is adaptable to a tripod and gives a 40" field of view. Case is waterproof and floats. Add the Classic **DX** illuminator kit for improved vision and increased magnification options.

Comes complete with hand strap, carrying *pouch, tripod adapter and 2 AAA batteries. Model 150* offers G2 *technology,* Model 160 *offers G3 technology.*

240906	Night Quest Model 150	2.0 lb.	$1,495.00
240907	Night Quest Model 160	2.0 lb.	1,795.00

GENERATION 2:

ides a useful image with less brightness, contrast and clarity of ration 3 units. Amplifies light 30,000 times. 5,000 hour tube life.

GENERATION 3:

ers the highest Image quality available. Amplifies light up to 0 times. 10,000 hour tube life. (Can not be exported.)

HOW FAR CAN I SEE A 6 FT. MAN?

	Full Moon (.1 lux)	Half Moon (.001 lux)	Quarter Moon (.0005 lux)	Starlight (.0001 lux)	Overcast (.00001 lux)
ion 2	675 yds	590 yds	530 yds	330 yds	100 yds
ion 3	800 yds	750 yds	700 yds	500 yds	200 yds
t Vision	250 yds	150 yds	50 yds	**	**

easurable

ATTACHMENT 1

NEW

MOONLIGHT NV-300" **Compact** Sco

Small and lightweight, this handhe brilliant **2.6x** image magnification a with the built-in infrared illuminato in total darkness.

Operates 10-12 hours on *two AAA* Comes with *nylon* carrying case. L

240905 NV-300 Compact Scope

SPECIFICATIONS:	N
Field of View at 1.000 yds.	16
Maximum Viewing Distance	30
Eyepiece Adjustment	±4
Minimum Resolution	25
Focus Range	1:
Objective Lens Focal length	44
Objective lens Aperture	f2

DX Classic Uluminato

• *For use with models 150*

Make your night vision more versa accessories. Kit includes a 2.2X m magnification lens for 3X, 2X or 0. beam for no-light situations and n

240914 **DX** Classic Kii

MPN **40Ki™ BINOCULAI**

Captures light and magnifies it u images in the darkest situations. long range viewing with illuminat with fully coated optics.

Operates *10-12 hours on two AA*
Dimensions: MPN 40Ki - 8.5" x 6

240901 MPN 40Ki—4x

ATTACHMENT 1

0351

2000 CalTIP GRANT APPLICATION

DATE: 2/28/00

TO: Santa Cruz County Fish & Game Advisory Commission

FROM: Santa Cruz County CalTIP Coordinator, John Robinson

The following information has been enclosed:

1.1999 CalTIP promotions and activities in Santa Cruz County by John Robinson

2. State wide CalTIP program 1999 year end report.

3. 2000 grant, request application

PROJECTS COMPLETED 1999 1ST OT. JOHN ROBINSON SANTA CRUZ CALTIP.

2/4/99---- Gave 1999 CalTip grant application / presentation to Santa Cruz Co F&G Commission.
Review of CalTip fiscal year 7/1/97 - 6/30/98.
Review of completed projects for 1998 .
Review of CalTip calls in Santa Cruz Co in a 5 month period.

2/6/99-----Gave CalTip presentation " Hunter Education ", sold one logo.
Met with Santa Cruz Harbor master to arrange posting CalTip sings at locations in the harbor.

3/12/99----Delivered CalTip posters to Santa Cruz Harbor.

PROJECTS COMPLETED 1999 2ND QT. JOHN ROBINSON SANTA CRUZ CALTIP.

4/10/99----------Gave CalTip presentation " Hunter Education" with LT Baldwin. Sold 3 hats 1 logo.

5/25/99---------Contacted Jenny Carless of the Monterey Bay National Marine Sanctuary to advise of the need for a CalTip promotion in there news letter. Jenny agreed and we are looking forward to it.

8/18/99---------CalTip promotion was published in the Monterey Bay National Marine Sanctuary summer 1999 news letter.

PROJECTS COMPLETED 1999 4TH QT, JOHN ROBINSON SANTA CRUZ **CALTIP.**

9/18/99------CalTip table & **display** at the 5th annual Monterey Bay Sanctuary celebration . Assistance **from** Warden Jess Mitchell, contacted many more of the youth than previous years. Sold 6 hats **&** distributed **CalTip** promotions ect.

12/13/99----CalTip presentation **"** Hunter Education **"** , sold 9 hats.

SANTA CRUZ COUNTY

FISH AND GAME ADVISORY COMMISSION FUNDING REQUEST

I. ***Name of Group***: California Department of Fish and Game CalTIP Program

II. ***Amount of Funding Requested: $800.00***

III. ***Name, Address and Phone Number of Contact Person:***

John R. Robinson, 182 Compass Ct. Boulder Creek, CA. 95006
(831) 338-2313

IV. Description of Proposed Project

CalTIP or "Californians Turn In Poachers" encourages citizens to turn in environmental and fish and game violators by calling a 24 hour a day, 7 day a week telephone hotline. Calls are immediately referred to local enforcement agencies and/or local wardens. The program offers anonymous rewards of up to $1,000.00 for tips which lead to a citation or arrest.

CalTIP is a nonprofit organization, sponsored but not funded by the California Department of Fish and Game. It is supported by outside funding and private donations. CalTIP has a six member volunteer citizens review board .

V. ***Objective:***

The objective of CalTIP is to substantially reduce poaching and polluting in California.

VI. Background and History of Your Organization:

The CalTIP program was developed in 1981 in response to growing concern by the Department of Fish and Game and the general public about the problem of poaching, polluting and wildlife crime in California. The Department recognized the fact that fewer than 350 game wardens can not adequately patrol 145,000 square miles of terrain, 1100 miles of coastline, 30,000 miles of rivers and 4,800 lakes. They needed the public's help. They needed the public to be their eyes and ears. The program was set up along the same lines as most other state wildlife agency hotlines.

Since the program's inception in 1981, CalTIP has rewarded more than $141,000 for 603 cases.

VII. How will project be accomplished ?

1. A citizen witnesses a Fish and Game violation or act of polluting.

2. He/She calls 1-888-DFG-CALTIP. (24 hour a day, 7 days a week)

3. A report is taken by a dispatcher.

4. The report is relayed to the local warden in the area of the state where the alleged violation took place.

5. A warden investigates the report and depending on the circumstances, may either issue a warning write a citation or make an arrest.

6. If the citizen caller's information leads to a citation or arrest, the caller is eligible for a reward.

7. The B-member Citizen's Review Board determines if a reward will be paid and for how much.

8. The CalTIP Citizen's Review Board administers the reward not the DFG.

VIII. *Budget to include the precise use of Grunt monks:*

All $800.00 will go for reward payments and the Boards public education and outreach program. The money will be given to the CalTIP Citizen's Review Board to administer the money as a reward for citizens who report Fish and Game violations and/or polluting activities which lead to a citation or arrest.

Final report of Grant fund use for the year 1999 were used as follows:

In 1999 , the CalTIP Citizen's Review Board received a total of $11,310 in contributions from various county fish & game commissions and other organizations.
The CalTIP Board reviewed 13 poaching cases in 1999 and paid out a total of $4,150 in rewards to citizen witnesses.
Additionally, the CalTIP Program has engaged the services of a company to do statewide CalTIP billboard campaign for a total of 3 years (begun in 1999). The annual cost for the billboard projects are shared between the CalTIP Board and the DFG.
CalTIP's big project for the year 2000 is the production of a new CalTIP educational video. Again, the CalTIP board and the DFG will be sharing the costs for this project.

ASSESSING HOW SEA LIONS DETECT HOOKED FISH

James T. Harvey and Michael J. Weise
Moss Landing Marine Laboratories

1. INTRODUCTION : California sea lion (*Zalophus californianus*) interact with almost all commercial and recreational fisheries along the California coast causing entanglement and damage to fishing gear and loss of catch. Since the passage of the Marine Mammal Protection Act in 1972, populations of California sea lion and Pacific harbor seal (*Phoca vitulina*) have increased steadily along the West Coast. This increase in pinniped populations has resulted in an increase in the number of reports of pinnipeds interacting with fishing boats and depredating the catch in salmonid fisheries along the West Coast in recent years. Harvey and Weise (1997) found the pinniped depredation rate of the legal commercial salmon catch in Monterey Bay was 11.5 %. Adult California sea lions were responsible for 98.5% of the takes. Depredation rates by pinnipeds in the recreational salmon fishery have approximately doubled since 1983, and experienced a minimal increase since 1995. To develop new methods of deterring sea lions from hooked salmon or methods that might mask the presence of a hooked fish we need to know what cues sea lions use to determine that a fish has been caught and the behavior of the sea lions as they take hooked fish. Sea lions may use visual, audio, or chemical sensors to detect hooked fish. We need to understand what senses sea lions use so we can develop methods that mask or hide the presence of hooked fish so these fish can be landed on the vessel and not consumed by sea lions. The objectives are to use an underwater camera and hydrophone to record the behavior of sea lions after a salmon has been caught. These recordings will be analyzed to determine how sea lions are sensing caught fish, and what methods can be used to isolate the presence of caught fish from sea lions.

II. WORK TO BE ACCOMPLISHED: A videocamera and hydrophone will be placed in an underwater housing such that it could attached to troll gear. The camera will be trolled in front of the leader so that the camera records the capture of a fish and possible take by a sea lion. Hopefully during the salmon season, a number of takes or near takes will be recorded so that we can assess predation behavior of sea lions. We will record and assess the acoustical nature of a caught salmon, and use playback experiments to assess whether sea lions are attracted to the sounds of a caught salmon. We will conduct a series of other experiments to assess whether vision or chemical senses are used by the sea lions. With these data, it may be possible to mask the cues used by sea lions. For instance, if the sea lionsare using the sound of a fish on the line to detect a caught fish, we may be able to create sounds around a vessel that masks these sounds, such that a sea lions would not "hear" that a fish has been caught.

HI. PREVIOUS RESEARCH

Harvey, J.T., and M.J. Weise. 1997. Impacts of California sea lions and Pacific harbor seals on salmonids in Monterey Bay, California. Moss Landing Marine Laboratories Tech. Report 97-03. 31 p.

Weise, M.J., and J.T. Harvey. 1999. Food habits of California sea lion (*Zalophus californianus*) and their-impact on salmonid fisheries in Monterey Bay, California. Moss Landing Marine Laboratories Tech. Report 99-O 1. 32 p.

FINANCIAL SHEET

Salaries

Graduate student ($15/hr X 30 days X 8 hrs)	$3,600
Benefits (0.02 X salaries)	$ 72

Supplies

Digital low light videocamera	$3,500
Underwater housing	$1,000
Hydrophone and connections	$1,000
Digital tapes	$ 500
Digital video playback deck	$2,000
Direct Costs:	$ 11,672

Overhead

Indirect costs (0.26 X direct costs)	$ 3,035
Total Expenses	**$ 14,707**

DETERRING MARINE MAMMALS AWAY FROM IN-RIVER SALMON

James T. Harvey and Michael J. Weise
Moss Landing Marine Laboratories

1. **INTRODUCTION** : California sea lion (*Zalophus californianus*) interact with almost all commercial and recreational fisheries along the California coast causing entanglement and damage to fishing gear and loss of catch. Since the passage of the Marine Mammal Protection Act in 1972, populations of California sea lion and Pacific harbor seal *(Phoca vitulina)* have increased steadily along the West Coast. This increase in pinniped populations has resulted in an increase in the number of reports of pinnipeds interacting with fishing boats and depredating the catch in salmonid fisheries along the West Coast in recent years. Harvey and Weise (1997) found the pinniped depredation rate of the legal commercial salmon catch in Monterey Bay was 11.5 %. Adult California sea lions were responsible for 98.5% of the takes. Depredation rates by pinnipeds in the recreational salmon fishery have approximately doubled since 1983, and experienced a minimal increase since 1995. Although acoustic deterrents have been developed and used in salmon fisheries, they have proven unreliable, expensive, and often failures. We propose to develop a smaller, cheaper, more effective acoustic deterrent that may be used to reduce the number of pinnipeds feeding on salmon as they migrate upriver.

II. WORK TO BE ACCOMPLISHED: Using the present configuration and previous knowledge regarding frequencies used and hearing of pinnipeds we will develop a new acoustic device for deterring pinnipeds. The new device will be smaller, less costly, and hopefully more successful than previous models. Working with a local engineer and machinist who is developing an acoustic pinger for the gillnet fishery, we will use new electronic capabilities to modify and enhance former acoustic devices. These devices will be tested in the San Lorenzo River and possibly in the salmon troll fishery.

III. PREVIOUS RESEARCH

Harvey, J.T., and M.J. Weise. 1997. Impacts of California sea lions and Pacific harbor seals on salmonids in Monterey Bay, California. Moss Landing Marine Laboratories Tech. Report 97-03 31 p.

Weise, M.J., and J.T. Harvey. 1999. Food habits of California sea lion (*Zalophus californianus*) and their impact on salmonid fisheries in Monterey Bay, California. Moss Landing Marine Laboratories Tech. Report 99-01. 32 p.

ATTACHMENT 1

0360

FINANCIAL SHEET

Salaries

Graduate student ($15/hr X 10 days X 8 hrs)	**$3,600**
Engineer and mechanist ($30/hr X 300 hrs)	**$9,000**
Benefits (0.02 X salaries)	**$ 252**

Supplies

Housing for acoustic device	**$3,000**
Electronics	**$4,000**
Direct Costs:	$ 19,852

Overhead

Indirect costs (0.26 X direct costs)	**$** 5,162
Total Expenses	**$ 25,014**

Distribution and Abundance of California Sea Lions In Monterey Bay, California

Michael J. Weise & Jim Harvey
Moss Landing Marine Laboratories

I. INTRODUCTION: California sea lion (*Zalophus californianus*) interact with almost all commercial and recreational fisheries along the California coast causing entanglement and damage to fishing gear and loss of catch. Since the passage of the Marine Mammal Protection Act in 1972, populations of California sea lion and Pacific harbor seal *(Phoca vitulina)* have increased steadily along the West Coast. This increase in pinniped populations has resulted in an increase in the number of reports of pinnipeds interacting with fishing boats and depredating the catch in salmonid fisheries along the West Coast in recent years. Harvey and Weise (1997) found the pinniped depredation rate of the legal commercial salmon catch in Monterey Bay was 11.5 %. Adult California sea lions were responsible for 98.5% of the takes. Depredation rates by pinnipeds in the recreational salmon fishery have approximately doubled since 1983, and experienced a minimal increase since 1995, Seasonal and within season distribution and abundance of California sea lions and Pacific harbor seals at haul-out sites. (areas where pinnipeds come ashore to rest) along the California coast is essential in the assessment and evaluation of their potential impact on declining salmonid populations and fisheries. Few data exist regarding the seasonal distribution of pinniped populations, and the within season movements of pinnipcds in relation to fishing areas during the salmonid fishery season and periods of adult salmonid upstream migration. The objectives of this study are to: (1) identify and determine the seasonal utilization and relative abundance of California sea lion at haul-out sites along the Central California coast in relation to periods of smolt and adult migration of salmonids and salmon fisheries seasons.

II. WORK TO BE ACCOMPLISHED: Pinniped census flights will be conducted once a month using a single engine, high wing plane (Cessna 172) going approximately 80 knots at an altitude of 600 m (the legal altitude within the Monterey Bay National Marine Sanctuary) from Pt. Sur north to Año Nuevo Island. Photographs will be taken using a hand-held Nikon 8008 35mm SLR camera equipped with a 75-300 mm telephoto lens. A second observer will be searching for and censusing pinniped haulout sites using Minolta 7X50 binoculars. Counts will be made using a stereoscopic dissecting microscope by placing the color slides under the scope at varying magnifications, and then placing a clear sheet of acetate over each slide and marking each pinniped with a pen and then enumerating the marks for each slide.

HI. PREVIOUS RESEARCH

Harvey, J.T., and M.J. Weise. 1997. Impacts of California sea lions and Pacific harbor seals on salmonids in Monterey Bay, California. Moss Landing Marine Laboratories Tech. Report 97-03. 3 1 p.

Weise, M.J., and J.T. Harvey. 1999. Food habits of California sea lion (*Zalophus californianus*) and their impact on salmonid fisheries in Monterey Bay, California. Moss Landing Marine Laboratories Tech. Report 99-01. 32 p.

ATTACHMENT 1

To: F.A.M.B.
From: Dr. James T. Harvey - Moss Landing Marine Laboratories
Michael J. Weise - Moss Landing Marine Laboratories
Subject: Budget for 2000 Aerial Surveys of California Sea Lions
Date: 4/21/00

0362

Aerial Surveys (May - September)

1 survey/month (Mar.-Sept.) for 3 hrs @ $130/hr. =	$1,950
Observer Survey Hours - 3 hrs. @ $8/hr. / month =	$ 120
3 hrs. @ $20/hr. / month=	$ 300
Supplies (Film, Fim Processing, etc.) @ $100/mo. =	$ 500
Subtotal =	$2,870

San Jose State University Foundation Budget Summary

Salaries -	15 hrs. @ $8/hr. = $120 + ($120*0.05) =	$ 126
	15 hrs. @ $20/hr. = $300 + ($300*0.05) =	$ 315
Supplies -		$ 500
Airplane/Pilot/Fuel =		$1,950
Total Direct Costs		$2,891
Indirect Costs - $2,891 * 0.26 =		$ 752
Total Cost		$3,643

ATTACHMENT 1

0363

FISHERMEN'S ALLIANCE OF CALIFORNIA

885 Abrego Street
Monterey, CA 93940

(831) 373-3720
Fax (831) 373-8098

SANTA CRUZ COUNTY
FISH AND GAME ADVISORY COMMISSION FUNDING REQUEST

I. Name of Group: Fisherman's Alliance of California

II. Amount at Funding Requested: $10,000.00

III. Name, Address and Phone Number of Contact Persons:

a. Richard L. Hughett. 885 Abrego Street, Monterey, CA 93940
Phone: 408/373-3720 FAX: 408/373-8098

b. Russ Colwell, P.O. Box 55, Moss Landing, CA 95039
Phone: 408/633-3359 FAX: 408/633-6279

IV. Description of Proposed Project:

Moss Landing Marine Laboratories, under the direct supervision of Dr. James T. Harvey, the noted professor of marine biology from the university, is presently completing all their study work from data gathered during the past three years. We have now determined that the feeding habits of California sea lions and Pacific harbor seals are a major cause for the demise of our endangered and threatened salmon and steelhead populations.

This year we will be undertaking four study projects. The first will be a study of equipment and various methods needed to stop sea lions and harbor seals from foraging on adult fish and smolts in the mouths and estuaries of our coastal rivers and streams. Our second study work will research various acoustic methods to keep sea lions away from fish hooked by commercial and sport fishermen. We will also continue to conduct aerial surveys every month during the study period to determine the location and numbers of sea lions and harbor seals, and any population changes. Our lead research agency for all this work will again be Moss Landing Marine Laboratories. In addition, we are also completing a comprehensive so&o-economic study for presentation to the U.S. Congress during the Marine Mammal Protection Act hearings.

V. Objective:

We have four objectives with this work: 1) To stop sea lions and harbor seals from devastating the in-stream adult and smolt fish populations, which must be done if our dwindling salmonid fisheries are to survive; 2) To stop sea lions from preying on hooked fish, and help our sport and commercial fishing industries; 3) To measure the growth of sea lion and harbor seal populations along Central California and within the Monterey Bay National Marine Sanctuary; 4) And to show our political leaders how our fishing industry is being negatively affected by sea lion interaction.

ATTACHMENT 1

0364

VI. Background end History of your organiltrtion, and or of the problem:

The Fishermen's Alliance of California was founded in 1995 by a group of sport and commercial fishermen who are very concerned about the over-population of California Sea Lions in Monterey Bay in and areas up and down the Pacific Coast of the United States, Our mission statement is attached. The F.A.C. is an on-going organization and our efforts continue. Since our creation we have been working the educate the public and our governmental representatives and agencies about this disastrous situation, created by a sea lion population that grows between 7% and 10% a year. Most of the natural predators that a one time kept the sea lion population at a much smaller growth rate are now gone, leaving the sea lion at the top of the food chain and creating a major problem in the balance of nature in our oceans. And, this problem does not only exist along our coastline, for sea lions have now expanded their area of hunting in search of food. They now travel miles up our coastal rivers and are also in the waterways of the Sacramento Delta. They have become more aggressive toward humans, and have become a major threat to the safety of anyone venturing out in the ocean where fishing activities occur.

VII. How will the project by accomplished?

The details for the interaction study were developed by Dr. Harvey of the Moss Landing Marine Laboratories. The plan of action and project timing are as follows:

a) April through December 2000 - study equipment and methods to deter sea lions and harbor seals in selected central coast streams.

b) April through December 2000 - research and study the effectiveness of various acoustic equipment as a deterrent to sea lion attacks on hooked fish. on vessels fishing the Monterey Bay area.

c) April through December 2000 - conduct aerial surveys along our coastline to determing sea lion and harbor seal populations.

d) April through August 2000 - complete collection of data and development of socio-economic study. This work includes:

1) Additional interviews with harbormasters and fishermen to gain information on the timing of fishing activities and observed trends relevant to the study.

2) Analysis of the data collected and preparation of a report on the economic impacts concluded from the survey results and associated research, and their effect on the commerical and sport fishing industries, and the local and regional economies.

ATTACHMENT 1

0365

VIII. Budget to Include the **precise use of grant monies.** Attached is our organization's **2000** annual budget. The specific work budget **for** items a), **b),** and **c)** is being developed by Dr. Harvey, and will be available in early April. The working **budget** for the **socio-economic** study is now being completed and **will also** be available in early April.

The grant funds we received last year are being used to complete our third year of study, which will be available in the next two months. The report we will be sending you will also include new data from the scat samples collected during the past three years. These samples were originally studied to collect and count **salmonid** ear bones to determine the total eaten by sea lions and harbor seals. New technology, though, now allows the researcher to use fish **vertabrae** and rib bones to determine a fish species, and therefore, we should be able to submit much more accurate findings regarding the amount of salmonids eaten by sea lions and harbor seals. Dr. Harvey will also be developing a recommendation to be presented during the **M.M.P.A.** hearings, based on the total three years of study. All this remaining work has been funded by last year's grant, and we **will** distribute all the reports to you as soon as they become available, along with our **socio-economic** study, which is being funded through another source.

In summary, the F.A.C. views these studies as mandatory if we are going to save our dwindling **salmonid** populations, The grant from your assodation to help fund this very important work. **Many local** commercial fishermen fish our coastal waters and have been effected by the sea lion problem, and therefore, we hope you will approve our request. This year we will again be working with some of the finest 'marine biologists in the nation. Under the leadership of Dr. Harvey, we have formed a working consortium which includes many "veterans" of the sea lion wars, including California D.F.G. Senior Marine Biologist Doyle **Hanan;** Senior Research Scientist Steve **Jefferies** for the Washington Department of Fish and Wildlife; and staff members from both the northwest and southwest regions of National Marine Fisheries Service. We are all working together to develop these non-lethal deterrents. We all realize we must pool all **our** resources **iff** we are to save the few **remaing** salmon and steelhead that have been spawned in the coastal rivers and streams of California, Oregon and Washington.

We appreciate your consideration of this request, and hope you will grant us the funds needed to help make these important studios **a** reality.

ATTACHMENT 1

0366

FISHERMEN'S ALLIANCE OF CALIFORNIA

885 Abrego Street
Monterey, CA 93940

(831) 373-3720
Fax (831) 373-8098

February 20, 2000

Fishermen's Alliance of California
2000 Operating Budget

Income

1) Memberships (200 members @ $25.00 each)	$5,000.00
2) General Donations	5,000.00
3) Grants (Private Foundations, Fish & Game Commissions Governmental Agencies)	30,000.00
4) Merchandise Sales	1,500.00
5) Events	10,000.00
	$51,500.00

Expenses

1) Studies and equipment	$30,000.00
2) Project Coordination	18,000.00
4) Long distance phone and FAX	750.00
5) Travel	1,000.00
6) Materials and Supplies	750.00
7) Printing	500.00
8) Video Production	500.00
	$51,500.00

SANTA CRUZ COUNTY 0367

FISH AND GAME ADVISORY COMMISSION FUNDING REQUEST

I. NAME OF GROUP/INDIVIDUAL:
Watsonville Wetlands Watch

II. AMOUNT OF FUNDING REQUESTED:
$1,000.00

III. NAME ADDRESS AND PHONE NUMBER OF CONTACT PERSON;
Carol Whitehill phone 728-5667
157 Rider Rd.
Watsonville, CA. 95076

IV. DESCRIPTION OF PROPOSED PROJECT;
We are publishing a book on the Watsonville slough system. 1/4 to 1/3 of the books will be used by PVSD middle school and high school children who are studying the sloughs and wetlands. The rest will be used to inform the general public about this special habitat.

V. OBJECTIVE
To educate the public of all ages about the life in and around the freshwater sloughs of Watsonville with the hopes of recruiting more people to be involved in appreciating them, helping with restoration and clean up projects.

VI. BACKGROUND AND HISTORY OF YOUR ORGANIZATION, AND/OR OF PROBLEM
The Watsonville Wetlands Watch was formed in 1990 to save the Watsonville Slough System from a large development. Our mission statement is *"To protect,* restore and appreciate *the* wetlands *of the Pajaro Valley."* The WWW implements this mission in two ways. One way is to use the political and legal processes available to us to ensure that the sloughs are preserved and protected. The other is through education of the public. We received our 501(c)(3) non profit status last October and are increasing our educational work. The WWW is run entirely by volunteers.

VII, HOW WILL PROJECT BE ACCOMPLISHED.
The book is written and illustrated and in the hands of a designer. We have plans for distribution and use by Pajaro Valley schools, but we need money for printing costs.

VIII, BUDGET
Expenses total $17,900. We have $10,000 and need $7,900 for printing. We request $1000 to help with the cost of paper.

February 25, 2000

0368

Fish and Game Commission, County of Santa Cruz
701 Ocean Street, Room 400
Santa Cruz, California 95060

Dear Santa Cruz county Fish and Game Advisory Commissioners;

I am writing to request $1000 on behalf of the Watsonville Wetlands Watch. Our project is to publish a book which will help us in our efforts to preserve the Watsonville Slough System, the largest remaining freshwater coastal wetland in Central California. This book will be a keystone in our efforts to preserve this endangered natural resource by educating both older school children and the general public.

The Watsonville Wetlands Watch is a grass roots organization which began in 1990 when development threatened to put 800 homes on the uplands of the sloughs. A group of concerned Watsonville citizens banded together to form the Watsonville Wetlands Watch and were successful in stopping this project. The mission statement of the Watsonville Wetlands Watch (WWW) is ***"To protect, restore and appreciate the wetlands*** *of the* ***Pajaro*** *Valley."*

Not only have we monitored development in the sloughs, but we have also participated in planning the $200,000 watershed management plan for the wetlands in Pajaro Valley, and have instigated an ongoing program of slough clean-ups and restoration projects. Last year we received our non-profit status, 501(c)3, and we are now in a position to undertake larger educational projects.

Your grant guidelines indicate that you want to benefit the greatest number of local wildlife species and the greatest number of the local population. California has already lost more than 90% of its freshwater wetlands, and many species along with them. The Watsonville Slough System is the last remaining remnant of what was once vast acres of the central California coast's freshwater wetlands. The uplands are teeming with meadow voles, ground squirrel colonies, and other rodents, making them the most important raptor habitat in Santa Cruz County. The sloughs support many rare breeding and wintering species, some of which have begun to disappear as development slowly encroaches. ***They provide habitat*** *for* ***22 of the 73 endangered and threatened species in California,*** and increasingly rare breeding habitat for migratory song birds.

Although these waters play a crucial part in the overall ecological balance, ironically, few residents of the Pajaro Valley know exactly where these sloughs are and how valuable they are to us today. It has became clear that we need not only to work with public agencies and the courts on issues for preservation, but we must also educate the public about this valuable local resource. Through slide shows, talks, slough walks, clean up days and restoration projects, the WWW has gathered about 200 members.

However, we face some unique obstacles. Because the fingers of the six

ATTACHMENT 1

Budget for producing the book

0369

Expenses

copy editing	$1500.00
art costs (7 woodblocks @ $100 each)	$700.00
designer (layout, scans, proofs)	**$6,700.00**
printing costs (printer, paper, binding, etc.)	**$9,000.00**
Total	**$17,900.00**

all figure represent a 30% discount.

request $1000 toward paper cost B. in this grant request.

Project income to date

individual donors	$2.450.00
Organizations	**$1,850.00**
WWW contribution	**$3,700.00**
Nicholson Foundation	$2000.00
sub total	**$10,000.00**

Projected income

grants	$7900.00
Total	**$17,900.00**

References

Congressman Sam Farr
701 Ocean Street
Santa Cruz, Ca. 95060

Sierra Club, Santa Cruz Chapter
Chris Johnson-Lyons
120 Meidle Avenue
Watsonville, CA. 95076
Phone: 831-724-2183

The Elkhorn Slough Foundation
Mark Silberstein, Director
P.O. Box 267
Moss Landing, California 95039
Phone: 831-728-5667

Open Space Alliance
Dave Walworth
Cherryvale Ave.
Soquel, CA 95073
Phone: 831-476-8225

0371

Watsonville wetlands Watch
28 Arbolado Dr.
Watsonville, CA 95076
(408) 684-1861

Watching the Watsonville Wetlands

published by
Watsonville Wetlands Watch

Purpose

The purpose of the book is to educate the public about the natural ecosystem and history of Watsonville area wetlands, and to be a guide for people exploring these wetland sloughs. It will also be used by Pajaro Valley schools to educate students of various ages about the wetlands.

General description

Pages-- around 80-90
black and white photos and **wood** blocks illustrations
color cover

Contents

slough blessing song by Patrick Orozco
introductory essay geological history of the sloughs by Gary Kittleson
introductory essay on the on social cultural history by Chris Johnson-Lyons
5-8 B&W wood block illustrations by Andrea Rich
4 maps of the sloughs with places for public **access** marked
6-8 B&W photographs to of the sloughs
14 short nature narratives by Jerry Busch previously published as "Slough Niches" in the WWW newsletters.

Back matter-

species list of birds and plants to be found in the sloughs
short bios of authors and artists
donor list

SANTA CRUZ COUNTY
FISH AND GAME ADVISORY COMMISSION FUNDING REQUEST 0372

I. Name of Group/Individual:
Native Animal Rescue of Santa Cruz (NAR)

II. Amount of Funding Requested:
$1600

III. Name, Address and Phone Numbers of Contact Person:
Rob Stevens, 308 Arthur Ave., Aptos, CA 95003-5202
(83 1) 688-9722

***IV. Description of Proposed Project:**
Provide material support for pathology services provided by the Marine Wildlife Veterinary Care and Research Center.

***V. Objective:**
1. Determine cause of death in suspicious cases.
2. Determine reference and pathological values for deer with suspected capture myopathy.
3. Track distemper epizootic.

***VI. Background and History of your organization, and or of the problem**
NAR was founded in 1982, and is an incorporated 501(c)(3) charity. Its mission is the rescue, treatment, and rehabilitation of injured, orphaned and diseased wildlife. NAR is permitted by the California Dept. of Fish & Game, and by the U.S. Dept. of the Interior.

***VII. How will project be accomplished (design specs/plans if applicable).**
We will continue to work with Dr. Melissa Chechowitz, veterinary pathologist at the Marine Wildlife Veterinary Care and Research Center, to identify cause of death in suspicious cases. Funding will be used to reimburse the Center for histopathology and microbiology services provided by U.C. Davis. Blood values will be drawn and complete blood chemistries obtained for both stressed and unstressed black-tailed deer as part of an ongoing study on capture myopathy, an important cause of mortality in rehabilitated deer. Samples will be taken from animals which are suspected to have died from the current distemper epizootic for diagnosis, and banked for future study.

***VIII. Budget to include the precise use of Grant monies**

Histological preparation at U.C. Davis (embedding, sectioning, staining) approximately 10 cases at $80/case	$800
Microbiology services at U.C. Davis, 5 cases, 2 plates each @ $20/plate	$400
Complete blood chemistries on 5 deer at $40 each, from IDEXX	$200
Misc. supplies (culturettes, plates, loops, reference materials, etc)	$200
Total	$1600

*Give a brief description under each section and use additional sheets to -fully explain your proposed project

3-15-00
MR 1:55 P.M.

IV. Description of Proposed Project 0373

We are fortunate in having an abundance of scientific resources in this area which can help us to understand wildlife disease processes better. One especially valuable such resource is the Marine Wildlife Veterinary Care and Research Center, which includes a well-equipped pathology facility, and which last year hired a full-time veterinary pathologist. The MWVCRC has been extremely generous to NAR with its facilities and its expertise. NAR currently stores the samples it gathers for the Wildlife Investigation Laboratory's ongoing adenovirus project in the MWVCRC's cryogenic refrigerators, conducts necropsies at the MWVCRC facility, and consults with staff vets.

The MWVCRC is able to fund pathology studies of seabirds from NAR under its mandate from the Department of Fish and Game, and the staff pathologist has shared a great deal of her expertise with us. However, terrestrial mammals and birds are normally handled by the Wildlife Investigation Laboratory in Rancho Cordova, which does not have the time or the budget to conduct necropsies on unexplained wildlife deaths. Recently the MWVCRC processed samples for us from a deer which died of a serious bacteriological infection, since there seemed to be justification to do so on grounds of public health; in fact the pathogen turned out to be *Yersinia* ***pseudotuberculosis,*** which is closely related to bubonic plague (*Yersinia pestis*).

NAR is requesting the Fish and Game Commission to grant us funds to reimburse the MWVCRC for expenses it incurs in working up terrestrial animals for us. This will help ensure that serious disease occurring in wildlife will not go unrecognized., and will help prevent zoonotic infection of both our volunteers and the public at large.

In addition, NAR is requesting funds to study rhabdomyolosis, or capture myopathy, in deer. We are currently one of a very few rehabilitation organizations permitted to work with deer. It has happened several times that apparently healthy rescued animals have died within two or three days of rescue. We suspect that the cause of death is exercise-induced rhabdomyolosis, or capture myopathy. We are working with Wildcare in San Rafael to better understand the mechanism of death from the condition, and to develop a treatment. To this end we are requesting funding to have blood chemistries run on both stressed and unstressed animals.

Finally, we hope to bank samples for future study from the distemper epizootic which is currently affecting raccoons, grey foxes, and skunks in the area. This epizootic seems unusual in that it is not affecting domestic animals (unlike a recent strain in southern California which killed a number of dogs). Distemper, a morbilivirus, belongs to a class of pathogens which is of great concern to researchers of marine mammals, and it is to be hoped that a researcher will emerge to do work on this disease.

V. Objective

As previously described

VI. Background and History of NAR

NAR rehabilitates a variety creatures, ranging from songbirds to raccoons – in 1998 we treated about 2000 animals and birds and responded to more than 5000 calls from members of the public. NAR does not have a central rehabilitation facility, but coordinates the activities of a dozen experienced rehabbers working from their homes, and supported by another 40 or so volunteers. We have two part time employees: a wildlife care supervisor, and a program coordinator. Our main interface to the public is through a wildlife hotline which is answered seven days a week by volunteer dispatchers. We maintain a small business office in Santa Cruz, where we conduct training classes for new and existing volunteers once a month. Our budget in 1999 was just over $65,000.

VII. How will the project be accomplished

As previously described

VIII. Budget

As previously described

In the coming year we plan to continue to use the microscope both for fecal screening and blood work. This year we plan to screen all carnivores for roundworm as soon as they are presented to us; this will give us important information on the prevalence of roundworm in infants, information which will be valuable to the entire community of wildlife rehabilitators throughout the country.

County of Santa Cruz

0376

FISH AND GAME ADVISORY COMMISSION

701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060

(831) 454-3165 FAX: (831) 454-2131 TDD: (831) 454-2123

Fish and Game Advisory Commission

MINUTES

Santa Cruz County Governmental Center
Planning Department Conference Room
Santa Cruz, CA 95060

May 4, 2000

1. CALL TO ORDER The meeting was called to order at 7:05 P.M.

2. ROLL CALL Present: Commissioners Smith, Peterson, Murphy, Ritchey, McCrary, Frediani, Lease, North, Estrada
Excused: Commissioner Gallagher,
Absent:

3. APPROVAL OF MINUTES The minutes of the April 6, 2000, Commission meeting were approved as written. Motion Ritchey, second Lease. All aye.

4. GUEST INTRODUCTIONS
Mike Weise, Moss Landing Marine Laboratory, Rich Hughett Fisherman's Alliance, Carol Whitehill, Watsonville Wetlands Watch, Milos Radakovich, Bay Net, Russ Colwell, Fisherman's Alliance, Jack Hawkes, Native Animal Rescue. Lt. Dennis Baldwin, Department of Fish and Game.

5. ORAL COMMUNICATIONS
Commissioner Peterson noted that Mr. Pierce of Aptos, has had some success with an experimental pig trap, some have been caught, though some figured out how to get out with the bait.

Commissioner Murphy noted the benefit of salmon carcasses for stream nutrient cycling. Suggested that staff contact Fish and Game regarding taking salmon carcasses from the harbor and placing them in streams.

Rich Hughett noted that the Monterey County sea lion resolution was beginning to take

shape. He also noted that he attended a joint meeting of Southern California Commissions. Issues to note were sea lions, net fishing, and fine money. 15 commissions attended. The vice chair of the Ventura County Commission, Mr. Jeff Alexander, researched the fine money going to Monterey County, and it is reported that by the time the County took their cut from the 50% of the fine, the commission was only getting 12% of the money. Mr Hughett stated that Mr. Alexander could attend a Commission meeting.

Lt. Baldwin noted that there was a serious pollution incident which occurred today (May 4) in Carbonera Creek. The spill was an accidental chlorine leak which has devastate a 3/8 mile reach of the stream, killing at least 100 native trout and 1200 non-game fish.

6. OLD BUSINESS

A. Second review of Fish and Game Grant Proposals.

Bay Net, grant award $2000. Motion North, second Peterson, All aye.

Department of Fish and Game, grant award $4,368.74. Commissioner McCrary noted that this was a great investment for the commission since it would return fine money back. Motion Estrada, second Peterson, all aye.

Cal TIP, grant award $800. Motion Estrada, second Murphy, all aye.

Watsonville Wetlands Watch, grant award $1000. Motion North, second Frediani, all aye.

Fisherman's Alliance, grant award $5000. Commissioner Frediani stated concerns with some of the earlier studies which showed a wide range of sea lion commercial fishers from 30% of the catch in '98 to 2% in '99. Commissioner Murphy was concerned with the reliability of commercial fishery numbers. Commissioner Frediani asked why FAC thought that their acoustic deterrents, which have yet to been made, will work. Also of concern was assumptions based on short-term studies, and a grant from a special interest group (Fisherman's Alliance) as opposed to a request from the research facility, which would make her feel better about the grant. Commissioner McCrary stated that trying to preserve the coho salmon was the issue, and that in Scott Creek this year there were only two females with good eggs. He stated that the Commission needed to keep the study going, that the National Marine Fisheries Service was only talking, but taking no action. Motion Murphy, second Peterson. Aye: Lease, Estrada, McCrary, Peterson, Murphy, Smith. No: North, Frediani, Ritchey.

Native Animal Rescue, grant award $1600. Motion North, second Peterson, All aye.

Coastal Watershed Council. There were questions regarding the request. Commission directed staff to contact applicant to come to next meeting to discuss equipment proposal.

7. NEW BUSINESS

A. Elections of Officers. Commissioner Peterson made a motion nominating Commissioner Gallagher for Chair, and Commissioner McCrary for Vice Chair. Second Commissioner Murphy, all aye.

B. Kelp Harvesting in the Monterey Bay. Milos Radakovich gave an excellent summary of the kelp harvest pros and cons. Both the Calif. Department of Fish and Game and the U.S. Department of Commerce (Monterey Bay National Marine Sanctuary) are in the process of preparing regulation proposals. These will be circulated soon for comments. The first proposal will be out soon from the Sanctuary.

8. PRESENTATIONS

9. STAFF REPORTS/ANNOUNCEMENTS None

10. ADJOURNMENT The meeting was adjourned at 9:35 p.m.

Note: Next meeting is August 3, 2000.

Submitted by M. Baldzikowski

FISH AND GAME COMMISSION

GOVERNMENTAL CENTER

COUNTY OF SANTA CRUZ

701 OCEAN STREET, ROOM 400, SANTA CRUZ, CALIFORNIA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123

FISH AND GAME ADVISORY COMMISSION GRANT FUNDING SUMMARY

GRANT FUNDING 1997

1. $4,988 donation to Fishermen's Alliance of Monterey Bay to study the interactions of California sea lions and harbor seals with local salmonid fisheries. The study will be completed this year under the direction of Dr. James Harvey from the Moss Landing Marine Laboratories. This study will help to address the significance of this issue which the Commission has had concern with for a number of years.

2. $3,537 for the purchase of a night vision scope and compatible video camera, to be maintained as County property, on loan to the local State Fish and Game Wardens. The video camera is to replace a similar purchase/loan by the Comm ission which has been used by the local Wardens for the past ten years in documenting violations for prosecution. A portion of fine money from such cases is given to the Commission, so these items are anticipated to pay for themselves. The night vision scope will aid Wardens particularly with regard to poaching cases. They are currently disadvantaged since poachers are regularly using similar scopes, undetected. This also puts the Wardens safety in jeopardy.

GRANT FUNDING 1998

1. Monterey Bay Salmon and Trout Project, $6,430. This donation will be used to purchase an emergency generator for facility operations.

2. CalTIP, $800. This donation to CalTIP will be used to help continue the support of this program which encourages citizens to turn in Fish and Game Code violators.

3. CARES Region 5, $750. This donation will be used to match funds for environmental education and training for 79 school districts, 586 K-12 schools, 16,800 teachers and 361,000 students in Monterey, San Benito, Santa Clara, and Santa Cruz Counties.

4. Coastal Watershed Council, $1095. This donation will support the Clean Streams Program currently monitoring water quality in Arana Creek, Soquel Creek, Corralitos Creek, and the San Lorenzo River.

5. Fishermen's Alliance Monterey Bay Chapter, $4000. This donation will help support the second year of study regarding sea mammal interactions with sport and commercial fisheries on the Monterey Bay, and sea mammal/salmonid interactions.

6. Friends of Santa Cruz State Parks, $250. This donation will be used for campfire programs at Manresa, Sunset, and New Brighton Beach State Parks which will focus on the Monterey Bay, and its diverse species.

7. The Pelagic Shark Research Foundation, $1000. This donation will be used to tag and release Blue, Mako and Thresher sharks in the Monterey Bay to learn about their movement, and range.

8. The San Lorenzo River Institute, $675. This donation will be used as part of the ongoing project to restore the San Lorenzo River by facilitating watershed educational activities, offering teachers resources, and promoting river stewardship in 16-20 classes up and down the watershed.

The Commission also voted to donate $6,563 to the Monterey Bay Salmon and Trout Project to help offset the cost of damages to the rearing facility suffered during this winters severe storms.

GRANT FUNDING 1999

1. CalTIP, $800. This donation to CalTIP will be used to help continue the support of this program which encourages citizens to turn in Fish and Game Code violators.

2. Native Animal Rescue, $850. This grant will be used to fund a racoon roundworm study within Santa Cruz County.

3. Native Animal Rescue, $1000. This grant is to help Native Animal Rescue with their wildlife outreach project.

4. Arana Gulch Watershed Alliance, $500. This grant is for an interpretive display along Arana Creek adjacent to Harbor High School.

5. Fishermen's Alliance Monterey Bay Chapter, $5000. This donation will help support the second year of study regarding sea mammal interactions with sport and commercial fisheries on the Monterey Bay, and sea mammal/salmonid interactions.

Additionally, at the Commissions February 4, 1999 meeting the Commission voted to support the Salmonid Restoration Federation Conference to be held in Brookdale, in February, with a donation of $500.