

AQUACULTURE DESCRIPTION FORM

Name: Last Trowbridge First Lawrence M.I. P

Business Name (optional): _____

Mailing Address 392 Tilden Rd

City/Town Scituate State Ma ZipCode 02066

Telephone _____ Cell Phone [REDACTED]

E-Mail Address [REDACTED]

A. SITE DESCRIPTION

Location of proposed aquaculture license sites and access routes (Include site map in USGS

1:24,000 or 1:25,000 format with boundaries clearly outlined)

City/Town: Scituate

Shellfish Growing Area (SGA): Briggs Harbor

of Acres: 2

Site boundaries in decimal degrees (i.e. 42.36115, -71.057083):

42.248619 -70.778075, 42.248749 -70.777801

42.247698 -70.77698, 42.247923 -70.776774

Have you conducted a survey of the site (Y/N)? No Date? _____

Method of Survey:

Average Depth at Mean Low Tide (MLW): 2ft

Mean High Tide (MHW): 12ft

What type of sediment or bottom substrate is on the site? (Benthic Habitat Conditions):
sand and gravel

Is eelgrass present on or within twenty-five (25) ft. of the proposed grant site (Y/N)? No

Are there shellfish currently on the site (Y/N)? No

If yes what species and approximate densities?

Is the proposed grant site located within an Area of Critical Environmental Concern (ACEC) (Y/N)?
No

Is the proposed grant site located within an Natural Heritage Endangered Species Project (NHESP) mapped habitat (Y/N)?

No

Is the proposed grant site located within an Outstanding Resource Waters (Y/N)?

No

Is the proposed grant site located in whole or in part within a 1-mile and 5-mile radius of Environmental Justice (EJ) Populations (See EEA EJ Maps Viewer) (Y/N)?

Additional information

B. SPECIES TO BE CULTURED

What species of shellfish do you plan to cultivate? (Select all that apply)

- o Eastern Oyster
 - o Quahog or Hard Clam
 - o Soft Shell Clam or Steamer
 - o Surf Clam
 - o Razor Clam
 - o Bay Scallop
 - o Blue Mussel
 - o Other
-

C. GEAR

What methods of culture will be used (specify by species if necessary)?

On- bottom Off- bottom Both

Describe the type of gear to be utilized, include dimensions (Cages, Racks, Trays, Bags, Nets, Floating):

We will be using cages each cage will have up to three racks inside that will hold the oyster bags. The cages will be about 17 in. in height and will be about 4 ft by 2ft, the bags that will be placed inside cages will be 40 in. by 20 in.

(Include with your submission of this form a site map on a USGS 1:24,000 map with site boundaries clearly outlined and a cross-section schematic of the gear to be deployed on the site.)

If you will utilize floating gear, what measures will you take to deter birds?

- Zip ties/spikes
- Kites/streamers
- Faux predators
- Wire cage exclusion
- Sweeps/spinners
- Other

Please describe your bird deterrence plan:

Not Applicable

What methods will you utilize to harvest shellfish? (Hand, Drag, Other) Please describe:

We will harvest by hand out of the cages.

How will the proposed license site be marked? (Buoy color, Type, Lines, Anchor)

The site can be marked with white go deep buoys 3/8 in line to an approved anchor for the area.

How will you access the license site?

We will access the site by boat .

What equipment do you plan on utilizing to maintain the license site and transport product?

Vehicle: Make: _____ Model: _____

Boat: Make: Lobster Boat Model: Wayne Beal 36

Will any accessory structures be used on the license site? (barge, float, upweller, etc.)

No

Has the site been used for private shellfish propagation within the last two years (Y/N)?

Has the site been used for municipal shellfish propagation within the last two years (Y/N)?

No



All information furnished on this application is true and accurate to the best my knowledge. I will notify the Marine Fisheries Shellfish Sanitation and Management Program immediately of any changes.

Signature of Applicant _____ Date Lawrence Trowbridge

Division of Marine Fisheries
ATTN: Aquaculture Coordinator
706 South Rodney French Boulevard
New Bedford, MA 02744
Phone: (508) 742-9766

Scituate Aquaculture Proposed Sites March 15, 2023. Public Hearing.

Grant #1- Orange dotted line (One Acre). Applicant Jamie Davenport and Gregory Wallingford

Grant #2- Purple dotted line (One Acre). Applicant Michael Cotter

Grant #3- Red dotted line (One Acre). Applicant Lawrence Trowbridge

MA ShellFAST Snip 2023



Commercial Shellfish Grant Application for Briggs Harbor/Bassings Beach Pilot Program

Name: Lawrence Trowbridge

Email Address [REDACTED]

Address: 392 Tilden Rd

Part 4: Detailed Description of Experience

Education:

- B.A. Environmental Science/Fisheries Biology, Unity College (Unity, Maine)
- Scituate High School, Class of 1995
- Roger Williams University, Applied Aquaculture Shellfish Farming 2020

Work:

- Owner/Operator of Scituate-based Commercial Lobster Business's Dilligaf Fisheries and Snappy Lobster Co. since 2001 and 2008
- USCG Captains License
- Commercial State and Federal Fishing Licenses
- Strong working relationships with local aquaculture growers/suppliers
- Local marketing emphasis focusing on benefit of Scituate products
- Close cooperation and communication with DMF, state enforcement and observers
- Strong knowledge of and commitment to compliance with all local/state/federal regulatory requirements, including reporting
- Participant in Gear Retrieval Project with MA State Officials
- Supplier of lobster, scallops, striped bass, oyster, mussels ect. to in-town restaurants as well as surrounding areas
- Worked with and for The New England Aquarium as their Lobster Specialist/Biologist
- Member of The Mass Lobstermen's Association, elected Delegate and voting member of the Association for over a decade.

Scituate Harbor Commercial Fishermen Association:

- President (2019 - current)
- Manage and maintain commercial float system
- Collaborate with Harbormaster on law enforcement concerns
- Maintain positive public relations on behalf of the association and Scituate Harbor
- Maintain friendly relations with adjoining harbors, commercial associations and fishermen.

Part 5: Detailed Business Plan

- a. Site Plan:

- Please see attached map/plan (Appendix A)
- Access to Site- via water using a commercial lobster boat launched from Scituate Harbor; use of town pier/Back Floats/current lobster car for gear and product; 2 skiffs already docked on Float/Back Float as well as use of float located at head of harbor.

b. Market Analysis:

- Existing Market -

Local and global seafood demand has steadily risen over the last 20 years. In 2012, wild caught global seafood consumption was 51%, while 49% farm raised. However, wild harvesting is becoming a less and less sustainable option to meet this demand over time. For example, projections estimate global seafood consumption numbers in 2030 to be 62% from farm raised sources and 38% from wild caught sources. At the same time, New England sourced oysters have been gaining popularity and demand has been steadily growing. To meet this increased demand, several local communities have permitted the operation of thriving oyster farms, and have proven this to be a viable and mutually beneficial business for both the community and its citizens.

Scituate is now in the unique position of being both ready and able to benefit from this advantageous opportunity of oyster farming.. Since each oyster bed produces oysters with their own, individual taste as a result of the plankton, minerals and salt quantity in their environment, Scituate oysters will have their own place in the market! Many restaurants we have relationships with, both locally and nationally, have expressed enthusiasm for serving Scituate oysters. We believe the demand will be strong and a Scituate branded oyster will be sought after.

- Product Distribution -

We plan to distribute Scituate oysters via existing Snappy Lobster distribution networks which include local town chefs, Boston chefs, and chefs in various major national cities. Our existing network is already interested in and excited for the opportunity to serve Scituate oysters alongside Scituate lobster. We also have a network of bicoastal shellfish dealers to optimize distribution to sources outside of our existing professional connections.

- Sustainability-

Use of existing commercial fishing infrastructure will minimize any additional footprint impact on the area. Our current existing infrastructure includes: current membership of Back Floats and Town Pier, current lobster car, current mooring, 50' floating dock, and a 36' lobster boat. It also includes a maintenance building (trap shop) already in place. By using these already available systems and infrastructure additional environmental impact on the Briggs Harbor and Bassings Beach areas will be minimized, thus allowing for increased natural sustainability.

Sustainability will also be achieved through the hopeful acquisition and farming of multiple acres simultaneously by our company. This will allow for minimal new infrastructure and equipment congestion to be introduced into the natural environment which will help prevent deterioration of the site or overfarming due to increased competition.

- Community Outreach-

As a business owned and operated by a second-generation Scituate lobsterman with close ties to the community (including children in the Scituate Public Schools), we see it as vital and necessary to give back to the town that has provided us with the opportunity to achieve professional and personal success. That said, providing our community with involvement in, and exposure to, the shellfish industry is something that we are dedicated to making a priority in our business.

Whenever possible we intend to use a local workforce in order to provide job training and career opportunities to Scituate townspeople. We also intend to provide summer jobs to Scituate teenagers and internships to Scituate college students with an interest in aquaculture and aquafarming careers. We would also be interested in building an internship program with local New England colleges, thus creating a symbiotic relationship for the town and the colleges.

In addition to providing career and employment opportunities for Scituate youth, we would also be excited to provide educational experiences for the Scituate Public Schools and the Town Recreation Department. Building on state standards for various age groups, we would create immersive experiential learning opportunities with the help of a licensed public school educator. We would create programs that would provide on-site exposure to the local industry and could be carried over into the classroom with lesson plans, activities, and in-school presentations and hands-on demonstrations. This will hopefully inspire future generations of Scituate residents to become involved with the environment that we are all so lucky to have at our fingertips.

c. Description of Gear and Approach:

- Proposed Quantity/Culture Devices- Please see attached schematic for dimensions and deployment design (Appendix B)
- Species of Shellfish- Oysters
- Quantity/Density of Shellfish- The Quantity and Density goals per acre are up to 400 cages holding 4 bags with 200-300 pcs per bag. The annual harvest is projected to be 400 to 500 thousand individual pieces per acre. Depending on the growth rate and other environmental factors this number could increase. We have purposely underestimated the annual harvest in order to minimize financial and long-term risk

- Sources of Shellfish- TBD through the Mass approved hatchery list. Our plan is to try multiple sources at the beginning to see which seed varieties have the best success rate in terms of both growth and marketability. By diversifying early, we should be able to find the best fit for the conditions in Briggs Harbor.
- Farming Plan Frequency of Seeding- new class of oysters every 6-12 months. By introducing a new class of oyster seed in a staggered manner there will be a steady stream of market sized oysters to bring to market throughout the busy summer, fall, and holiday seasons.
- Farming Plan Frequency of Harvesting- The initial harvesting of the first class of oysters will be 18-24 months after initial seeding. Larger more robust seed will be used at first to help minimize unforeseen die-off and/or environmental conditions. This should also help to allow for the first harvest to be closer to the 18 month mark. As time progresses, harvesting will be consistently available to meet market demands.

d. Risk Analysis:

The inherent risks of oyster farming are unique and varied due to its reliance on Mother Nature and the unpredictable ocean. However, these risks can be mitigated when thoughtful application of good stewardship practices, proper planning, and understanding of the industry are combined to create a holistic approach to risk management.

A. Environmental Risks - Climate/Weather

- Storm Management Plan - create and maintain a storm management plan for how to secure gear, equipment, and oysters when storms threaten the region. Examples include: create, apply, and vigilantly monitor an anchor system as needed, tag and label all in water gear in case of breakaway, be prepared to pull off-site to lessen damage in rare, but highly dangerous, situations
- Climate Rotation Plan - following the natural flow of the New England Region's climate patterns, prepare and schedule times to deploy and withdraw cages, move cages with oysters off-site to inside storage during winter months to prevent ice damage and loss of inventory and gear

B. Environmental Risks - Ecosystem and Predation

- Open ocean water opens up avenues for natural predation
- Pea Crabs - monitor for infected shellfish; once identified isolate and continue to monitor infected shellfish through their lifespan
- Moon Snails/Drill Snails - monitor and observe for signs of infection ("drilled hole" usually found in dead loss oyster shells); remove egg sacks from farm whenever located to prevent initial snail population growth; use cages or bags to prevent moon snails from entering oyster growth areas
- Crabs - monitor for disease and infestation through vigilant visual inspection; continue use of cages and bags to prevent crabs from entering grow out area.

C. Human-Environment Interaction

- Minimize disruption and invasion of the harbor area to the largest extent possible in order to preserve the area for wildlife and human use
- Maintain positive, considerate, and cooperative relationships with abutters and other users of the lease area to decrease negative consequences (ie vandalism, theft, protest)

e. Funding:

- Initial funding has been lined up to cover the start-up costs, including acquisition and purchase of inventory and infrastructure. Initial inventory costs revolve mainly around the acquisition of varied seeds from a diversified pool of providers in order to assess long term viability and success. Initial infrastructure costs include minor investments in reusable pieces of equipment, such as cages, and more significant investments in more specialized equipment such as an oyster tumbler. This secured initial funding is expected to cover all costs of this nature for the first three "roll-out phases" of farming.
- Additional funding required to sustain the farm long-term will be sourced, as needed, from a variety of options: internal profits, Snappy Lobster partnership, existing relationships with lenders (banks) and proven record of strong credit and repayment

MASSACHUSETTS

DRIVER'S LICENSE

NOT FOR FEDERAL ID

USA

Class C Driver's License



06/05/2018

07/02/2023

[REDACTED]

07/02/1977

0 CLASS 70 REST NONE

END NONE

1 TROWBRIDGE
2 LAWRENCE P
3 392 TILDEN RD
4 SCITUATE, MA 02066-2134

Lawrence P. Trowbridge

10 EYES HAZ
15 SEX M 16 HGT 6'-04"
5 DD 06/09/2018 Rev 02/22/2018

07/02/77



Commonwealth of Massachusetts
Department of Fish and Game

**COMMERCIAL PERMIT
COASTAL LOBSTER**

Permit ID: 132565 EXPIRES: 12-31-2020

DILLIGAF FISHERIES INC (TROWBRIDGE, LARRY P)

7 JAY RD DOB: 07-02-1977

SCITUATE, MA 02066 ISSUE: 02-15-2020

BOAT: DILLIGAF LENGTH: 36' 0"

MS/DOC#: 1049535 HOMEPORT: SCITUATE HARBOR

Signature: *[Signature]*

The two sections above are your Division of Marine Fisheries permit. Do not tear the top two pieces apart. You may separate the top two sections from the rest of the form, and fold it in half. If you choose to laminate your permit, be sure to fold the two halves together so that all your permit information faces out. Your permit is not valid until you sign the Signature line above. You must carry your permit while engaged in the activity that this permit authorizes.

Charles D. Baker, Governor
Commonwealth of Massachusetts

Kathleen A. Theoharides, Secretary
Executive Office of Environmental Affairs

Ronald [Name], Commissioner
Depa

COASTAL LOBSTER

DILLIGAF FISHERIES INC (TROWBRIDGE, LARRY P)

BUOY COLOR(S): WHITE GREEN

LMA(S): 1 MAX POTS: 800

ENDRSMNTS: AMERICAN EEL, DOGFISH, FRV, SCUP, SEA BASS, SHELLFISH, STRIPED BASS, SURFACE GILLNET

Acting
DIRECTOR: *[Signature]*

Daniel J. McKiernan

CUSTOMER RECEIPT

This is your receipt. Retain receipt and store in a safe place.

DILLIGAF FISHERIES INC (TROWBRIDGE, LARRY P)

7 JAY RD FTN: 000254952

SCITUATE, MA 02066 ISSUED: 02-15-2020

PAY TYPE CHECK

DMF - CAUSEWAY STREET, BOSTON

COASTAL LOBSTER, RESIDENT	\$ 310.00
SCUP, RESIDENT	\$ 30.00
SEA BASS, RESIDENT	\$ 30.00
STRIPED BASS, RESIDENT	\$ 30.00
FED REPORTING VESSEL, RESIDENT	\$ 0.00
DOGFISH, RESIDENT	\$ 30.00
AMERICAN EEL, RESIDENT	\$ 30.00
SURFACE GILLNET, RESIDENT	\$ 30.00
SHELLFISH, RESIDENT	\$ 0.00
FEES PAID THIS PAGE	\$ 490.00

Apply to this page only. If you purchased additional supplemental pages with fees listed on those pages.



Division of Marine Fisheries (617) 626-1520



Quota Monitored Species:

Quota information is available by phone 24 hours a day. Call (978) 282-0308, and listen carefully for the menu options. In addition, DMF will fax notices to all authorized dealers while providing fishermen access to the information over the Internet at:

(www.mass.gov/marinefisheries).

or by e-mail directly from DMF. To receive e-mails, see instructions on the reverse of this license.

DILLIGAF FISHERIES INC (TROWBRIDGE, LARRY P)
7 JAY RD
SCITUATE, MA 02066

From: **Chris Himmel** CHimmel@himmelhospitality.com
Subject: **Larry Trowbridge of Snappy Lobster Company Letter of Recommendation for Oyster Grant**
Date: **March 24, 2020 at 1:24 PM**
To: snappylobster@gmail.com

To Whom It May Concern,

As President & Owner of Himmel Hospitality Group, with restaurants located in Boston, MA (Grill 23 & Bar, Post 390 & Bistro du Midi) and Cambridge, MA (Harvest Restaurant), I have had the pleasure of knowing and working with Larry Trowbridge of Snappy Lobster Company for ten years. Larry has exclusively provided Scituate Lobster and other fresh seafood to our four restaurants and has truly helped our group to achieve and maintain the local and national acclaim that we have been so fortunate to receive as some of the best restaurants in New England and the entire country.

In my time with Larry I have always found him to be incredibly thoughtful, honest and hardworking, and having joined him for many trips fishing aboard his boat I can attest firsthand to the knowledge, skill and integrity that he brings to his craft and industry each and every day.

Upon hearing that Larry and Snappy Lobster Company were applying for a grant to begin farming oysters in Scituate, MA I immediately offered my support as well as the support of my four restaurants which see sales in excess of \$25 million per year to help him in any way possible. Should Larry and his seafood company be fortunate enough to receive approval to begin raising oysters we would be truly excited to serve them at all of our restaurants and we would be honored to help him spread the word about even more of the exceptional seafood being sourced "ocean to table" from Scituate, MA.

I highly recommend Larry Trowbridge of Snappy Lobster Company for an oyster grant and am happy to provide any other information or answer any questions in support of his efforts should they arise. Thanks very much for your attention and I look forward to hearing final word at some point in the near future.

Sincerely,

Chris Himmel
President
Himmel Hospitality Group
Grill 23 & Bar ~ Harvest ~ Post 390 ~ Bistro du Midi
20 Park Plaza
Suite 1102
Boston, MA 02116
chimmel@himmelhospitality.com
978-395-5308 (Mobile)

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Jeff Orcutt
774 722 9853
Pleasant Bay Sc61
Barley Neck Sea Farms

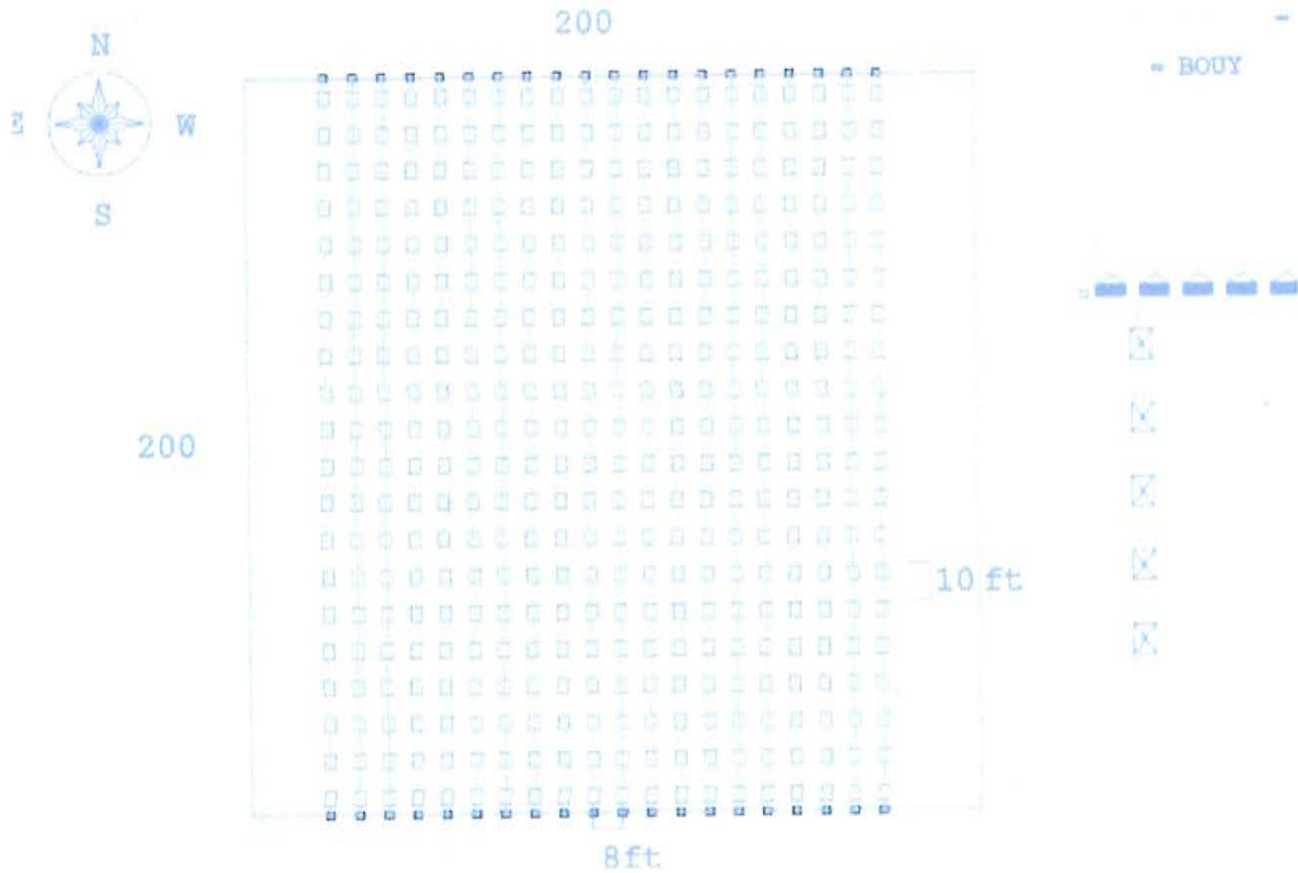
To Whom it May Concern,

Its my pleasure to provide this letter for Lawrence Trowbridge who I feel would be an excellent nominee for the Town of Scituates Shellfish Pilot Program. Lawrence has worked closely with us for a number of years helping marketing and promoting our Pleasant Bay Oysters from Chatham Ma. as well as other local fish. He has proved to us that he is very dedicated to providing Snappy Lobsters Customers quality local shellfish and Seafood, which the company prides itself on directly sourcing from the Harvesters. He is very motivated easy to get along with and work with, and is a very hard worker. He has a passion for the marine environment and the people that produce fresh well cared for products from the sea. He has been to our farm and to our gear lot and appears educated and familiar with the equipment and process of growing and Harvesting Oysters. I believe that Lawrence would be a valuable addition to the pilot program in Scituate. His distribution network as well as his commitment to sustainability and hard work ethic would be of great value for a successful pilot program. We would be happy to be a resource for Lawrence for any questions or issues he may run into during his startup. We have over 30 years of aquaculture experience in Pleasant Bay and have contacts all around the North East and would be happy to see Lawrence succeed in this venture.

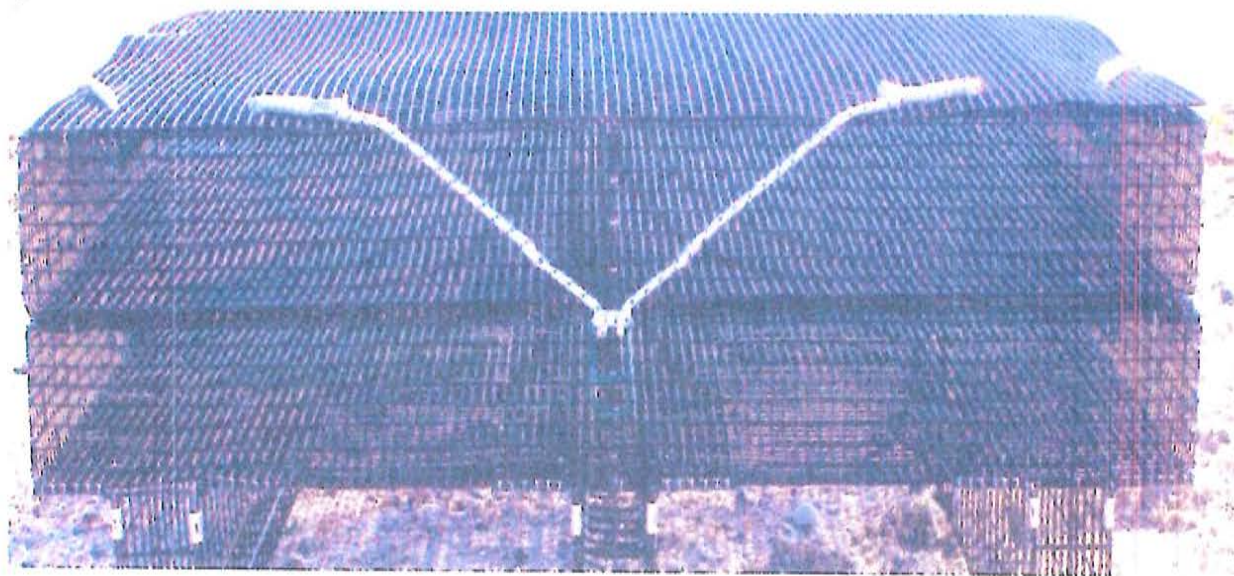
Appendix - A

Sent from [Mail](#) for Windows 10

1 acre cage layout



Appendix-B



Proposed Bottom cage to be used

Dimensions

45 inches long x 36 inches wide x 15 inches high