NOVA SCOTIA

Office Use Only
Received March 11, 2026
E. Lynn Winfield

Aquaculture Licence/Lease Application

Applicant Information:

Applicant: Bay Tender Shellfish Limited Contact Person: Duncan Bates

Nova Scotia Registry of Joint Stocks Number: [redacted]

Revenue Canada Business Number: [redacted]

Telephone No. (Work): (902)2293386 (Home): _____ (Cell): [redacted]

Fax No.: _____ E-mail: bates.duncan@gmail.com

Mailing Address: 132 Highway 14, Robinsons Corner, NS

_____ Postal Code: B0J1J0

Civic Address: 132 Highway 14, Robinsons Corner, NS

_____ Postal Code: B0J1J0

Proposed Site Information:

Location of Site: Snake Island, Mahone Bay County: Lunenburg County Site Size (Ha): 4.5

Site Dimensions: 295m X 156m approx

Hydrographic Chart No.: 4381

Approximate Center Coordinates: Latitude: 44° 32' 38.28"

Longitude: -64° 10' 22.09"

Type of Licence Application

(Check appropriate boxes):

- ☒ Commercial licence/lease
- ☐ Experimental licence/lease

- ☐ Marine Plants ☐ Finfish ☒ Shellfish ☐ Other

Submit completed applications to: **Nova Scotia Department of Fisheries and Aquaculture, Aquaculture Division**
1575 Lake Road, Shelburne, NS B0T 1W0
E-mail: aquaculture@novascotia.ca

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- ☐ Land-based
  - ☐ Freshwater
  - ☐ Saltwater
  - ☐ U-Fish
  - ☐ Hatchery
  - ☐ Nursery Facility
  - ☐ Growout
- ■ Marine
  - ☐ Cage culture
  - ■ Suspended shellfish or marine plants
  - ☐ Bottom shellfish with gear
  - ☐ Bottom shellfish without gear

Application Materials

A complete application includes the following:

- Application fee (payable to Minister of Finance) according to Section 77 of the Aquaculture Licence and Lease Regulations for Nova Scotia made under Section 64, Chapter 25 of the Acts of 1996, *the Fisheries and Coastal Resources Act*
- Application Form
- Development Plan according to application
- Report on Public Engagement during Scoping (for all Marine applications and for other applications, as applicable)
- Copy of up-to-date Shareholder's Register which sets out the shareholdings of the company (if applicable, and if not already provided during the Option to Lease application process.

Public Notice and Disclosure

As part of the process for deciding on an aquaculture application, the Nova Scotia Department of Fisheries and Aquaculture ("Fisheries and Aquaculture") will disclose application information to other government bodies, including, if applicable, the Nova Scotia Aquaculture Review Board for use at an adjudicative hearing relating to the application.

In accordance with departmental policy, which seeks to promote public involvement in the process for deciding on aquaculture applications, Fisheries and Aquaculture may disclose application information – not including, however, personal or business confidential information – on the departmental website.

Privacy Statement

The personal and business confidential information collected as part of an aquaculture application will only be used or disclosed by Fisheries and Aquaculture for the purpose of deciding on the application.

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All application information collected is subject to the Freedom of Information and Protection of Privacy Act ("FOIPOP") and will only be used or disclosed in accordance with FOIPOP.

By signing and submitting this form, I acknowledge that I have read, understand, and accept the above statements regarding the collection, use, and disclosure of the information provided on this form.

Signature of Applicant [redacted]

Date March 11, 2026

Signature of Nova Scotia Department of Fisheries and Aquaculture Designate [redacted]

Date March 11, 2026

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1575 Lake Road, Shelburne, NS B0T 1W0
E-mail: aquaculture@novascotia.ca

2026

Application Class IB Development Plan

EXPANSION, NS LEASE #995

DUNCAN BATES, PRESIDENT, BAY TENDER SHELLFISH LIMITED

Section 1: Optimum use of marine resources:

This application is to amend the boundaries of NS aquaculture shellfish lease #0995, resulting in an increase in size. As such, it falls within Nova Scotia Department of Fisheries and Aquaculture application Class IB.

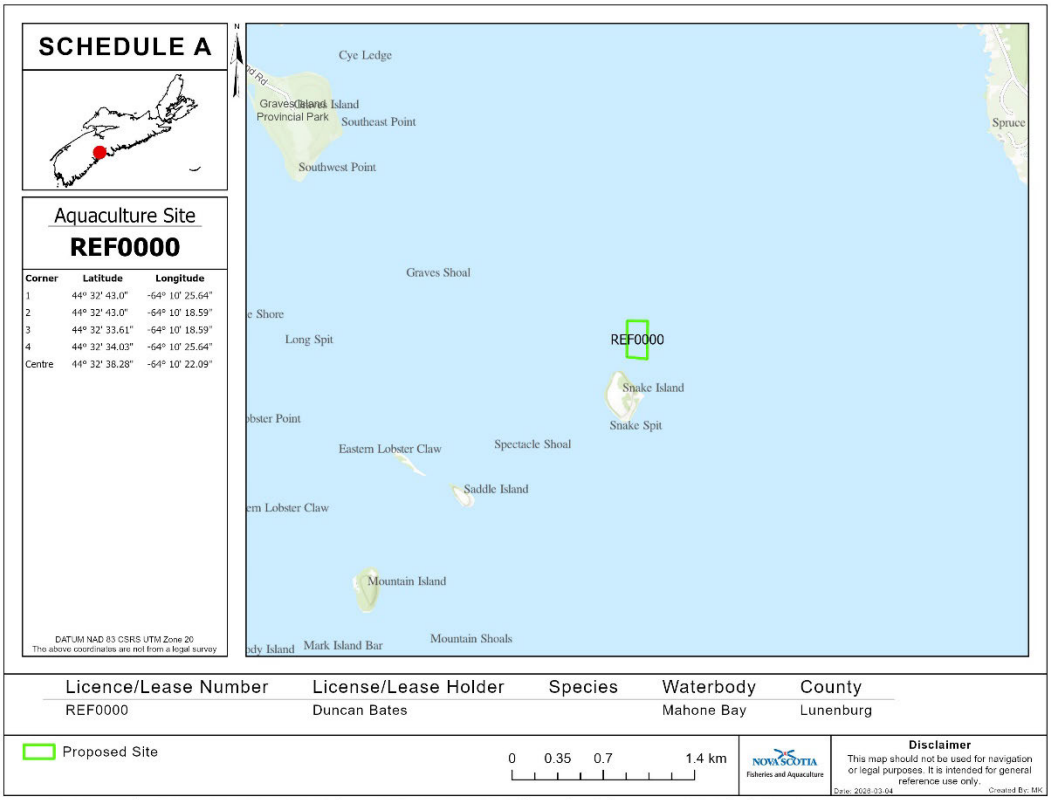
1.1 Description of Co-ordinate Changes:

Current coordinates:

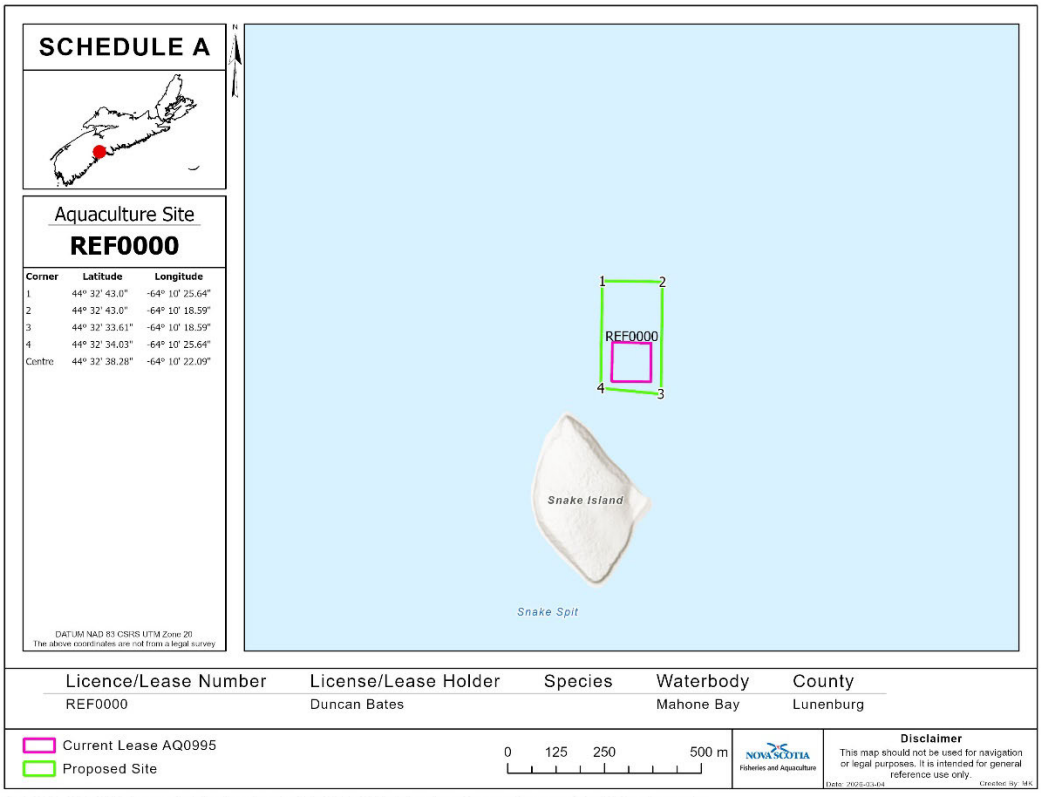
Center:	Lat 44° 32’ 36.25” Long -64° 10’ 22.09”
Corner #1, (NW corner):	Lat 44° 32’ 37.87” Long -64° 10’ 24.36”
Corner #2, (NE corner):	Lat 44° 32’ 37.87” Long -64° 10’ 19.82”
Corner #3, (SE corner):	Lat 44° 32’ 34.62” Long -64° 10’ 19.81”
Corner #4, (SW corner):	Lat 44° 32’ 34.62” Long -64° 10’ 24.36”

Proposed expansion:

Approximate Center:	Lat 44° 32’ 38.28” Long -64° 10’ 22.09”
Corner #1, (NW corner):	Lat 44° 32’ 43.00” Long -64° 10’ 25.64”
Corner #2, (NE corner)	Lat 44° 32’ 43.00” Long -64° 10’ 18.59”
Corner #3, (SE corner)	Lat 44° 32’ 33.61” Long -64° 10’ 18.59”
Corner #4, (SW corner)	Lat 44° 32’ 34.03” Long -64° 10’ 25.64”



Sources: Esri, Vantor, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community, Sources: NRCan, Esri Canada, and Canadian Community Maps contributors.



Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

1.2 Description of Lease:

Lease 995 is situated on the Northeast side of Snake Island, in Mahone Bay on the south shore of Nova Scotia. The lease was assigned to Bay Tender Shellfish Limited, (BTS), in October 2004. The boundaries were amended in 2022 resulting in a change of position with no increase in size. This amendment relocated the lease approximately 100 metres further from Snake Island into deeper water. Prior to being assigned to BTS the lease was assigned to [redacted], and prior to [redacted] the lease was originally assigned to [redacted] roughly 3 decades ago. The lease is comprised of 1.0 Ha of space containing 5 parallel longlines 100m in length spaced 25 metres apart. The lease is entirely devoted to scallop aquaculture, suspended method. The licence currently allows for the cultivation of sea scallop Placopecten magellanicus, and the blue mussel Mytilus edulis.

Lease 995 lies mainly over top of mud bottom with a depth ranging between 70 and 100 feet. Its position adjacent to Snake Island provides some leeward shelter from Southwest winds. The proposed expansion would carry the site further out into deep water over mud bottom as well as expanding the boundaries slightly in order to properly include all scope lines, moorings and independent marker moorings.

Snake Island is owned by the Nature Conservancy of Canada which purchased the island in 2017 with assistance from the Mahone Islands Conservation Association. MICA is supportive of this scallop farm.

1.3 optimum use of marine resource:

Lease 0995 in its current state produces a high quality scallop in high demand serving a market that is underexploited. Bay Tender Shellfish intensively farms the site, and the lease has been operating at full capacity for the last several years. This proposal represents a moderate expansion which effectively would allow me to double the growing space and at least double the potential production of the lease. The proposed coordinates represent an area change from 1 Ha to 4.5 Ha, with the larger space allowing room for all associated scope lines, moorings and anchors to be contained within the expanded lease. Currently the results of scallop culture at 0995 are very good and improving all the time. This is reflective of the high level of knowledge of the operator resulting from over three decades of experience farming scallops. The operations of Bay Tender Shellfish are respected within the industry both locally and in the United States as being at the forefront of scallop aquaculture development. Lease 0995 has proven to be an excellent scallop growing site utilizing relatively deep water, and the processes are well developed, understood and routine. The lease does not compete with other user groups for space. This moderate expansion will fit well in the bay and with respect to other users of the marine resource. Navigationally the proposed expansion does not create any challenges. Recreational access to Snake Island is preserved. It does not interfere with local fisheries. Biologically the operation does not harm the local ecosystem. The operation has wide community support and no opposition. No concerns or objections to the proposed expansion were raised during the scoping process. Given all of these factors I believe that lease 0995 and this proposal for expansion truly do represent the optimum use of this marine resource.

Section 2: The contribution of the proposed operation to community and Provincial economic development:

2.1 Production plan: suspended culture:

- Species: Sea scallop, Placopecten magellanicus and also blue mussel, Mytilus edulis. Sea scallops is by far the primary species being cultivated whilst blue mussels remain an option but are not actively in culture at this time.
- Gear unit type: The culture gear is suspended in the water column, approximately 10 metres below the surface, on longlines. The longlines are suspended using a combination of 16" surface floats and 10" subsurface floats. The number of surface floats is minimized in order to minimize the transfer of wave energy to the culture gear below. This is important for supporting optimal growth. The resulting few surface buoys, (4 per 100m longline), also means that the visual impact of the farm is reduced to a minimum. Pearl nets and ear hanging form the vast majority of the culture gear used on the lease. Spat bags are also deployed for the purpose of seed collection. To a far lesser extent, lantern nets may be used temporarily or periodically. Pearl nets are pyramid shaped and approximately 12" square. Used primarily for intermediate growth, pearl nets are arranged in "strings" of 12 nets with each string being approximately 25 feet long. Ear hanging lines are approximately 30 feet long and each ear hanging line will hold approximately 120 scallops being grown to maturity.
- Maximum number of gear units: The proposed expansion would see the potential carrying capacity of the lease increase from 5000 pearl nets and 500 ear hanging lines, to approximately 10 000 pearl nets and 1000 ear hanging lines. Also several hundred spat bags could be deployed.
- The proposed expansion would see the number of 100 metre longlines increase from 5 to 10.
- Maximum shellfish introduced: Lease 0995 in its current format can accommodate approximately 100000 scallops per cohort. The proposed expansion would allow space to approximately double this production. Thus approximately 200000 scallops or more may be introduced each year. Three different year classes or cohorts may be held on the lease at any given time. The possibility of holding some animals of a fourth, (extra-large), cohort might be investigated as a way of increasing per unit value.
- Seed source: Seed supply is mainly from Université de St. Anne, collected in the wild from the waters of Chedabucto Bay in Cape Breton and transported under licence to the site in Mahone Bay. Some scallop seed will also be collected directly on lease 0995. Efforts are also underway to identify other sources of seed and to try to identify other locations where wild collection via spat collectors is feasible.
- Expected time to achieve maximum production: Achieving maximum production will require building out the new longlines. This will require the acquisition and placement of 10 large mooring blocks and their associated anchors. The mooring blocks are easily sourced locally and I have relied in the past on friends with large fishing boats to assist me in their placement. BTS has a reliable source of cheap anchors for the purpose of secondary anchors to the blocks, (fisherman, Tancook Island). Longlines will be constructed of 7/8" polyethylene rope which is easily sourced at relatively low cost. BTS has enough serviceable pearl nets to make a good start on the expanded numbers. Acquiring more, modern style pearl nets will also be a priority. BTS also has some of the required extra flotation. More flotation would be acquired over time. Overall, assuming

that the required numbers of scallop seed are available, maximum production would be expected to be achieved by the year 2030, approximately.

2.2 Infrastructure:

Bay Tender Shellfish is an actively farming scallop aquaculture company with more than three decades of experience. As such the processes used are developed and routine and the infrastructure supporting the current 1 Ha lease are in place. The planned expansion would see a doubling of the number of culture lines, though the lease space being applied for is slightly larger to properly allow for scope and mooring hardware placed on this deep water site. The hardware necessary to complete the expansion are mooring blocks, anchors, rope and buoys. These are easily sourced locally at reasonable cost. The company already possesses enough nets and flotation to partially fill the expanded space. More, modern pearl nets will be added over time, likely sourced from China as was done in the recent past.

The five new lines will be added over time, with each line built representing a 20% completion of the expansion. Lines can be added strategically such that utilizing new line space allows the operator to vacate an old line which can then be replaced. It is difficult to preform line maintenance on a full line. Line maintenance is ultimately important since a broken line or moved mooring instantly creates an enormous amount of work that the operator doesn't have time for, not to mention the inevitable loss of product. Some of the current infrastructure is in need of maintenance. Replacing lines and replacing /adding additional moorings and anchors will greatly reduce the risk of loss from ice and storms.

The company currently operates as a farm gate producer with no land based infrastructure other than a barn and garage which serve as storage and maintenance buildings. These buildings are located on the operator's land. The shellfish are landed directly from the farm and shipped immediately by truck to a licenced plant/distributor. Moving beyond the farm gate is not currently planned, but may remain an option in the future.

BTS hopes to continue developing and importing new equipment technology to support higher production efficiency.

2.3 Services and suppliers:

The company will continue to source most services and supplies locally, which benefits the local community. Some equipment and supplies are not available locally and so are imported internationally. Examples of these are scallop specific culture equipment such as pearl nets and ear hanging supplies which are sourced from China and Japan.

Ideally new equipment technology will be incorporated, streamlining efficiency and boosting production. Introducing new equipment technologies represents an opportunity to access new suppliers and utilize funding programs.

2.4 Employment:

Lease 0995 currently provides 100% of my livelihood. In addition it supports employment for a summer student as well as a couple of occasional deckhands. There is already as much work as can be handled by this small crew, so adding to it would obviate the need for more employment. The rationale is that the increased man hours will initiate a positive feedback loop realizing greater production which better enables the operation to provide for human resources. It is not easy to initiate this increased production human resource loop since the inception is cash negative. Producing a farmed product means the payoff of increased labour comes some time later. BTS plans to incorporate a strategy of building production over time in order to fully utilize the expansion. Remember, at this time lease 995 is operating at 100% capacity. The business is in an actively growing phase supported by excellent results

on the farm with constantly improving efficiency, capacity and price. Given these results BTS is poised to expand. Over the next five years the business will certainly need to add full time and seasonal employment to achieve the projected growth. Supporting this amendment is a step in the process.

2.5 Other economic contributions to the local community and province:

Of course there are economic benefits and spin offs all the way up and down the supply chain from source to plate. The resources used and the product produced support a web of other individuals and companies. This web serves to support individual livelihoods and acts as a significant tax base for the provincial and federal governments.

Scallops are a high value, highly sought after food which helps drive tourism. Even tourists' wharf side interaction with our operation provides them with a very quality experience. Again, Bay Tender Shellfish enjoys broad support from the local community many of whom seek out and buy the food.

Lease acts like a reef serving as a congregating point for many fish and other marine species. A great number of scallops at relatively high density will spawn each season releasing a significant amount of larval scallop to the local waters. This can only have a benefit on the local scallop population which in turn serves a benefit, (possibly even economic), to the local community.



2.7 Adverse economic impacts:

In approving the expansion of lease 0995, it is hard to imagine any adverse economic impact on the community and the Province. Bay Tender Shellfish operates a well-organized, properly marked, small aquaculture lease which is located relatively far from mainland shores. Sightlines are not an issue, it is not in anyone's backyard; Snake Island is owned by the Nature Conservancy of Canada. No pollutants, drugs or chemicals are released at the farm. Invasive species are a potential hazard to any local habitat. Bay Tender Shellfish has a history of clean seed transfers and is constantly cleaning and removing any biofouling organisms as a matter of the husbandry systems in place. This husbandry goes hand in hand with increased production. No disease or pathogen has presented itself and the scallop farm poses no risk to local salmon or any other marine population. So overall there is no adverse economic impact.

Section3: Fisheries Activities in the Public Waters Surrounding the Proposed Aquaculture Operation:

3.1 Status of Fisheries activities:

There is only one active commercial fishery being executed in the vicinity of lease 0995 and that is the lobster fishery. Lease 995 lies within Nova Scotia lobster fishing area 33. The commercial fishing effort around the lease is quite low. There are approximately 7 boats lobster fishing in the immediate vicinity of my farm.

In terms of the recreational fishery there is, for the most part, only one species and that is mackerel. On nice days recreational mackerel fishers will putter around the bay including the area around the lease. The recreational fishing effort around the lease is very low.

3.2 Impacts on fisheries activities:

The lease expansion will have very little impact on the fishery activities in the public waters surrounding the proposed aquaculture operation. Whereas I have been operating lease 0995 for decades, I am very familiar with and actually have a very positive and good relationship with all of the lobster fishing captains that execute the commercial lobster fishery in the vicinity of my farm. We have mutual respect for each other. The fishing pressure at the lease is quite low. This is because the lease is situated over mud bottom which is not ideal lobster habitat. There is a rocky reef just to the east and west of the lease and its proposed expansion where the fishers set traps. The fisherman also tend to set traps just on the North and South sides of the lease as close to my moorings as they can. They have told me that they do quite well around the lease, (personal communication [redacted], [redacted]). Presumably this is because the moorings provide habitat and there is quite a bit of biofouling that drops to the bottom during farm work/cleaning. Over the last number of years I have purposely observed the fishing pressure to the North of the farm in the main area of the expansion. I would estimate that the expansion might displace fewer than 10 traps, total. There is usually between 3 and 6 traps set in this area, and some of these are purposely being set close to the farm moorings. The fisherman know what they are doing, they can see the structure of the scope lines on their sounders. I have no problem with them setting close to my gear. One lobster captain, [redacted], attended my public meeting. He is a prominent captain in the area and I would say was representative at the meeting of the group of fishermen who set around my lease. After the presentation and discussions he stated, "we have no issues with this." I am very encouraged by my positive relationship with the local fishermen and the wider public. I see it as a necessity. There have been no concerns raised during the scoping process. To the contrary, all discussions I have had with all of the fishermen who set traps in the vicinity of my lease have been supportive. They support and respect the lease in its current form and are supportive of the expansion.

There are no negative impacts on recreational fishing activities.

Section 4: Oceanographic and Biophysical Characteristics of the Public Waters:

4.1 Oceanographic environment:

This site has experienced many major events since its assignment and development by BTS In 2004. The lease has withstood a number of major hurricanes, and tropical storm force winds. The lease has proven very resilient to these types of storms and has not suffered significant damage due to storms. The site also experiences the movement of passing ice sheets during the months of February and early march. This ice is usually quite thin but does put pressure on surface buoys as it passes through the site. During the ice season I employ a floatation strategy which minimizes resistance between surface floats and passing ice. Bay Tender Shellfish is always working to maintain and re-enforce the longline moorings using secondary anchors.

The currents are tidal and while significant, are not extremely strong. The currents generally push the gear east and west and this seems to work fine. I don't know current speed values in cm/sec, but I have farmed here for over 3 decades and there are not going to be any surprises. Annual maximum wind speed is approximately 100 Km/hr. Maximum wave height is approximately 2 m from the southeast. Tides are approximately 2 – 3 meters. The site is at full ocean salinity, particularly at depth of culture, 35 ppt. Annual minimum temperature is approximately -1 degree Celsius. In the summer Mahone Bay thermally stratifies. Maximum surface temperature can reach 23 degrees Celsius, but at culture depth would remain significantly cooler.

Lease 0995 is closely monitored for the presence of toxic algae within the scallops. CFIA collects samples for testing on a weekly basis from spring through fall and on a monthly basis during winter. Levels normally remain very acceptable.

4.2 Environmental monitoring:

The suspended scallop farm has a fairly minimal impact on the benthic environment. Some scallop shells will be discarded to the bottom and have no negative impact. Some organic debris will fall to the bottom during times when the culture medium is cleaned, particularly when pressure washing tunicates from the gear. In the summer this activity can attract many fish who gather to feed on the shredded tunicates and other organic debris. In general when organic material is removed from the main back and headlines by hand, the material is not cast overboard especially in the area of the lease. This important husbandry technique prevents seaweeds and other light materials such as hydrozoans, (Tubularia), from settling and tangling in the ear hanging lines. Likewise, mussels and their spat would never be cast overboard as they will settle and re-attach to the pearl nets below. Often the collected material is brought ashore for making into ocean compost.

Observation of the bottom of the lease by SCUBA diving has shown the bottom to be relatively pristine mud bottom. Occasionally a piece or line of gear may be lost to the bottom but this is rare and obviously undesirable. Live scallops and a few species of benthic fish would inhabit the bottom, but whereas it is mud, it is not a lively place. There would be a considerable amount of scallop “drop-off” which would go to the bottom of the lease. Naturally occurring scallop spat are generally left to go to the bottom since collecting them would generally slow down the task at hand. This natural seeding of the bottom underneath the scallop lease is regarded as a positive impact.

There would be very little to no vegetation under this deep mud bottom lease. The inner moorings are in approximately 70 feet depth of water and the outer moorings are in approximately 100 feet.

4.3 Site design:

The site is arranged in typical shellfish aquaculture longline fashion. There are 5 parallel 100m long lines arranged approximately 25 metres apart and arranged north to south. The expansion will

consist of another 5 longlines of 100m length, again arranged north to south. Each 100m longline is suspended by four, 16” surface floats which is a relatively low density of floats at the surface. The low density of floats at the surface and the deep suspension of the culture gear give the farm good resilience to environmental stress from storms. This deep-water site is proven (several decades) to be effective for shellfish culture and resilient to environmental stresses.

Four large, yellow corner marks are located at and just to the outside of the longline moorings. These guard markers are on their own moorings. There is also a high flyer deployed at the NE corner which acts as a radar reflector. The expansion would likely see the addition of two more corner markers for a total of six, (communication Transport Canada).

Section 5: The other Users of the Public waters surrounding the Proposed Aquaculture Operation:

5.1 Description of other users:

There are no adjacent (private) property owners. Snake Island is owned by the Nature Conservancy of Canada and was purchased by them with assistance from the Mahone Islands Conservation Association (MICA). The lease is far enough away from any other shores as to be barely visible from them and I would say not to be considered adjacent.

Pleasure craft traffic is very light in the area. During the summer months occasionally a sailboat will pass. Occasionally recreational boats visit the shores of Snake Island or pass by the farm. The area is wide open from a navigational perspective and the lease and its expansion will not pose a navigational challenge to any boats in the area. Commercial traffic, as expressed earlier in this application, is solely that associated with the commercial lobster fishery, at least within the immediate vicinity of the lease. Occasionally large coast guard vessels come into the bay and stay for short periods of time, day(s). These large vessels stay far from my gear and the expansion will not impact them. With regards to the lobster fishery, as stated earlier, I have a very good relationship with the local fishing captains who know the lease well, are supportive of it, and will not be significantly impacted by the expansion. There are no other users identified in the region of the proposed development.

5.2 Significance of proposed area to wildlife:

Birds such as seagulls and common cormorants, and migratory birds such as arctic terns, loons, various species of ducks would inhabit or migrate through the area. Porpoises and seals would also inhabit the area. Many species of fish would also inhabit or migrate through the area. Examples would be Mackerel, recently Atlantic Menhaden, possibly Salmon although this would minimal. Some fish use the lease and gear as a reef such as lumpfish, rock gunnels, perch-like fish etc. Lobster would use moorings as habitat. Not all of the species mentioned here even interact with the lease, and many other species frequent the area but do not interact with the lease, (blue herons, osprey, bald eagles, flounder, etc.) The farm functions like an artificial reef, attracting and providing habitat for some wildlife including a vast array of invertebrates that colonize the gear and are constantly being cleaned off as biofouling. On the topic of invertebrates, the lion's mane and the moon jellyfish would occur in the area. There is very little to no vegetation beneath the farm as it is such a deep, mud bottom site.

5.3 Impacts to other users including wildlife:

This proposed development, the expansion of the boundaries of lease 0995, would appear to have very minimal impact to other users, including wildlife. The expanded boundary will possibly displace a small number of lobster traps, yet the local fisherman are allied with me, the proponent, and do not have any issues with the expansion. They will continue to fish the borders of the farm. The area is not a highly used fishing area. There were actually no concerns raised during the scoping process.

I once saw a lion's mane jellyfish interacting with some ear hanging lines. They must be able to pass through the lease though because although I occasionally see them in the summer, I never see them entangled in the culture gear. The lease as an artificial reef would become a larger artificial reef. The expansion is a moderate one, the resulting lease is still relatively small and should fit quite well into the local environment. As such I believe the lease represents the best use of the marine resource.

5.4 Impacts by other users including wildlife:

I have not positively identified any negative impacts from other users or wildlife beyond the normal biofouling organism management. Ducks do not present a problem for scallop aquaculture.

Section 6: The Public Right of Navigation:

6.1 Navigation Protection Act (NPA) approval

An application to Transport Canada has been submitted for an NPP approval of the expanded coordinates. Initial telephone discussions, (Melanie Leblanc), indicated that there were no red flags.

Lease 0995 is in an area which from a navigational perspective is quite easy and open. Vessel traffic in the area is light.

Section 7: The Sustainability of Wild Salmon:

7.1 Identification of local salmon populations:

N/A

7.2 Support of the sustainability of wild salmon:

N/A. Not a finfish farm and not close to salmon rivers. Any salmon recovery or restoration efforts would presumably be centred on Gold, Middle, or East rivers. Lease 995 is not in close proximity to these rivers. Lines of acoustic receivers and other scientific data collecting devices have been deployed or maintained in the general vicinity of Mahone Bay which may be of benefit to salmon science. Currently there are no plans for lease 995 for any such data gathering or any other measures in support of the sustainability of wild salmon.

Section 8: The Number and Productivity of Other Aquaculture Sites in the Public Waters Surrounding the Proposed Aquacultural Location:

8.1 Interactions of other aquaculture sites:

There are 3 other aquaculture leases in the public waters of eastern Mahone Bay surrounding lease 0995. These are AQ0652, AQ0595 and AQ1244. Lease 0652 is 525 meters to the southwest of lease 0995, and is located on the west side of Snake Island. The owner, [redacted], cultures sea scallops and blue mussels at this site, [redacted]. Lease 0595 is located 1.7 kilometres west of lease 0995 and is located on the eastern side of Graves Shoal. The owner, [redacted], mainly cultures sea scallops at this site, however there has been very little production in recent years. Lease 1244 is located 3 kilometres to the north of lease 0995 and is located near East River Bay. The owner, [redacted], would most likely culture sea scallops and blue mussels [redacted]

It does not appear that leases 0995 and 0652 interact with each other physically in a significant way. The other leases mentioned here are far enough apart that no significant physical interaction occurs between them. Whether there would be any biological interaction between any of these leases, (for example due to biological tunicate or mussel load), is not known and might be difficult to assess, particularly because there is not currently much biological load at these other sites at this time.

8.2 Interactions with other aquaculture operations:

It does not appear that the establishment or operation of the expansion of lease 0995 will create any risk to the aquaculture activities of the above mentioned leases. I am eager to foster a cooperative relationship with other local growers and as such I am willing to support these other aquaculture operations where possible.



Fig 1. A view of Snake Island from line 5 on the lease. Note the SW corner marker at the right and recreational activity on Snake Island.

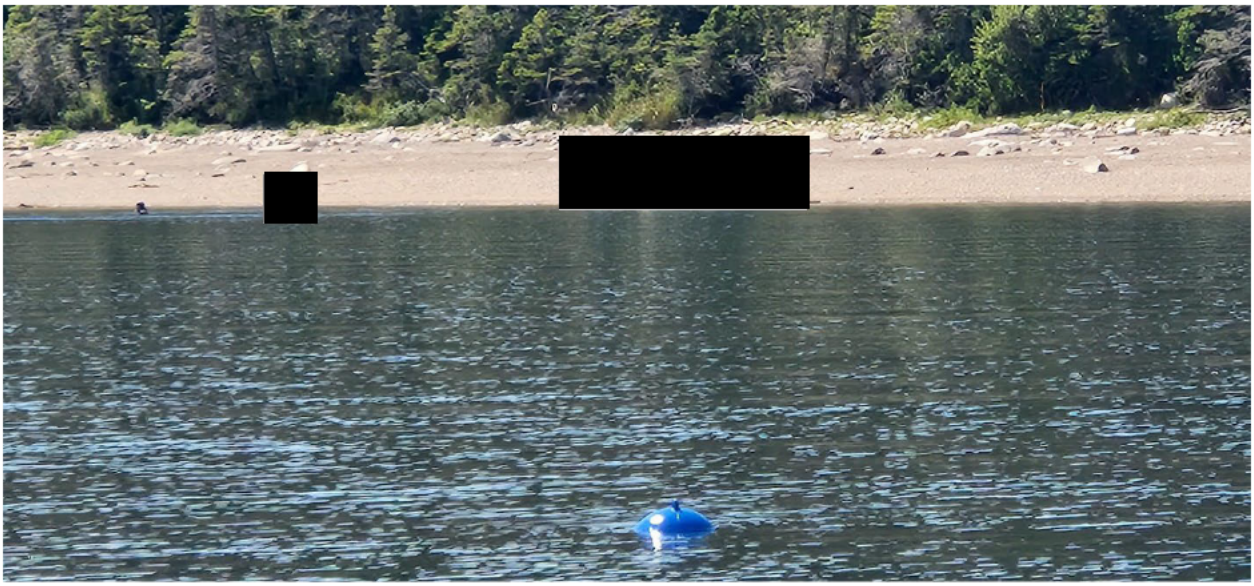


Fig2. The same view at higher zoom.



Fig 3. A view across the lease toward the SW corner with Snake Island in the background.



Fig 4. Results of a spat collector, 2022.



Fig 5. Excellent results in intermediate growth pearl nets.



Fig 6. Excellent ear hanging development





Figs 7,8. Destined for market.



Fig 9. The wildlife getting curious.



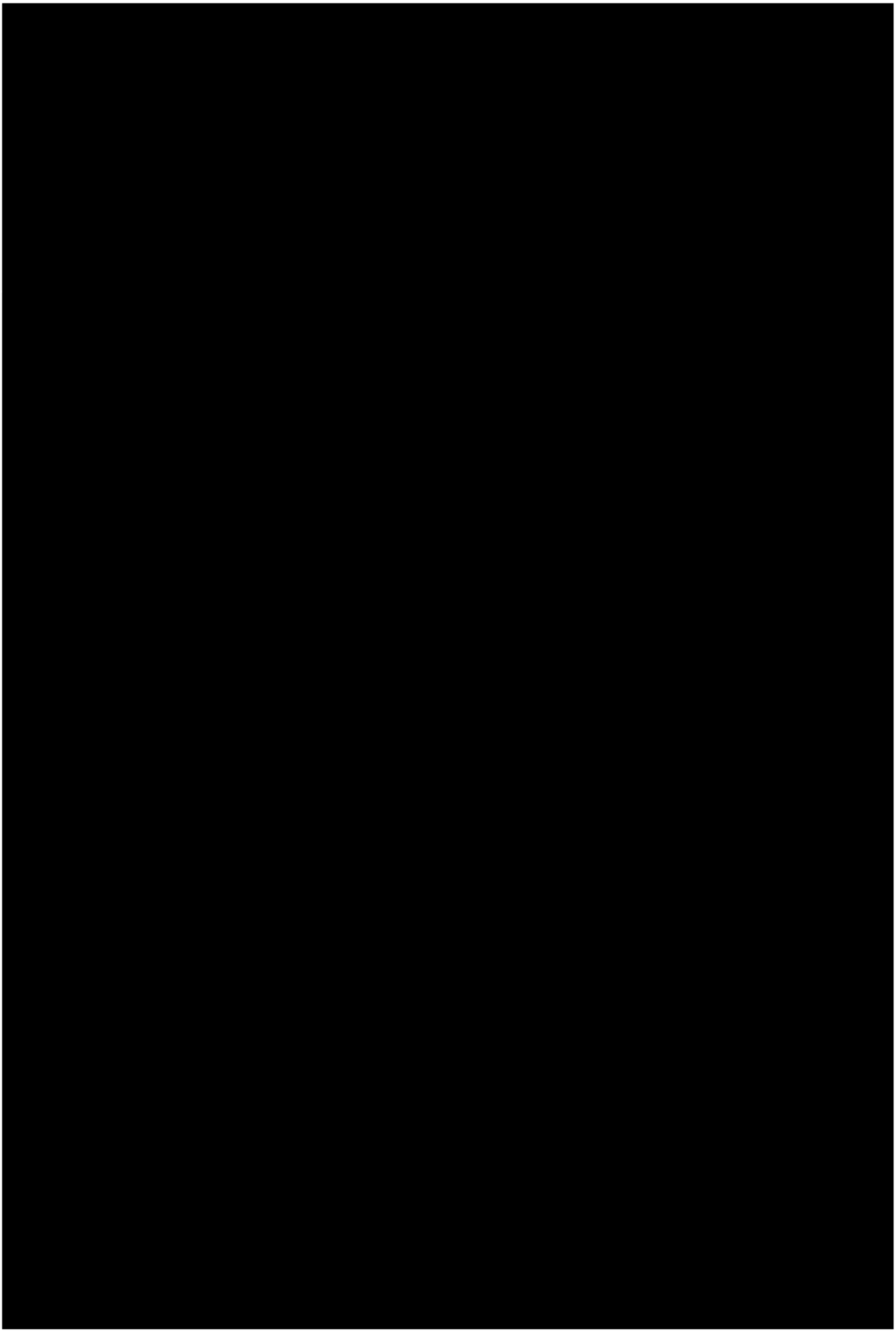
Fig 10. Optimum use of the water column. This is an incredible result from a single ear hanging line.

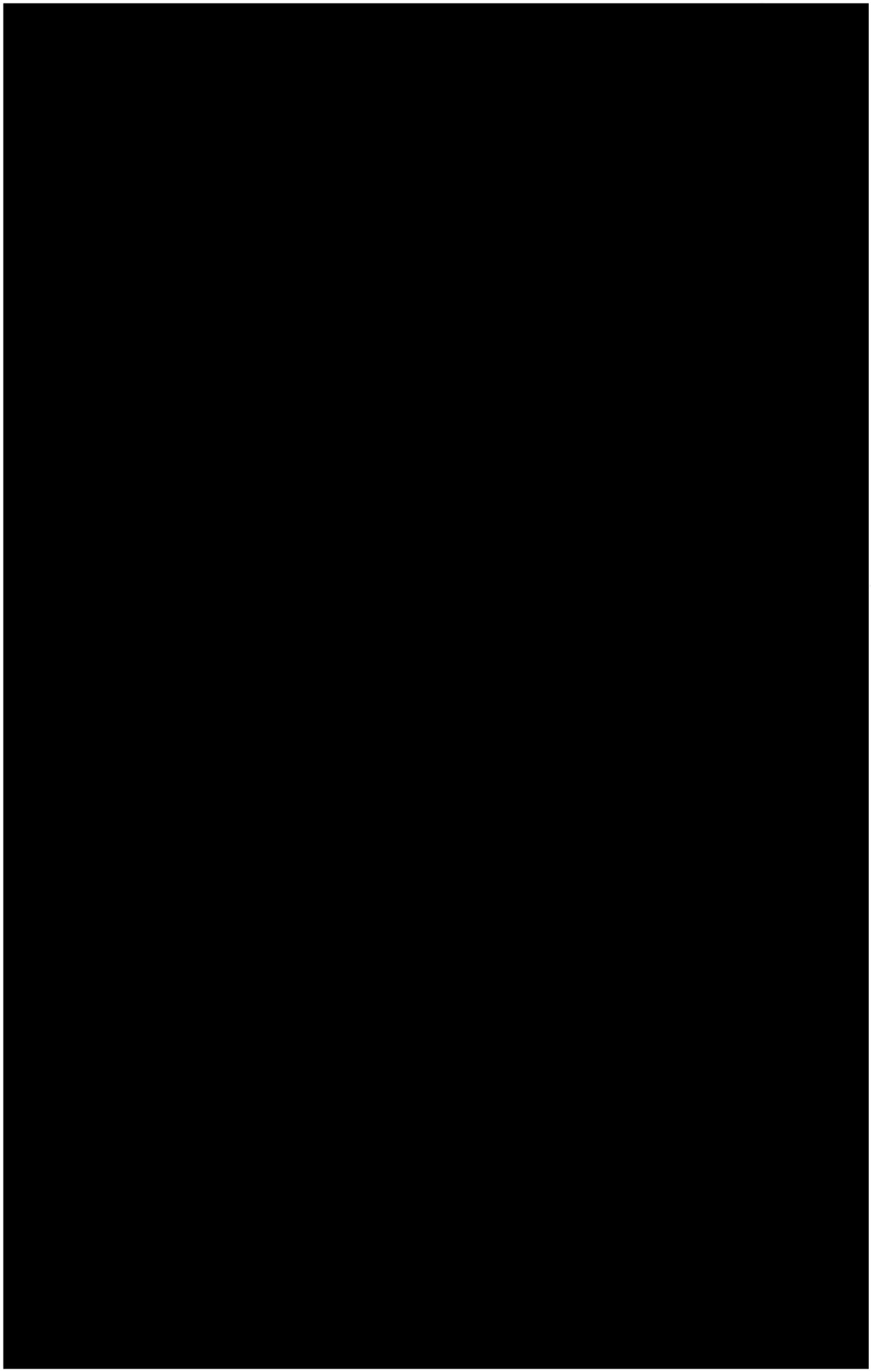


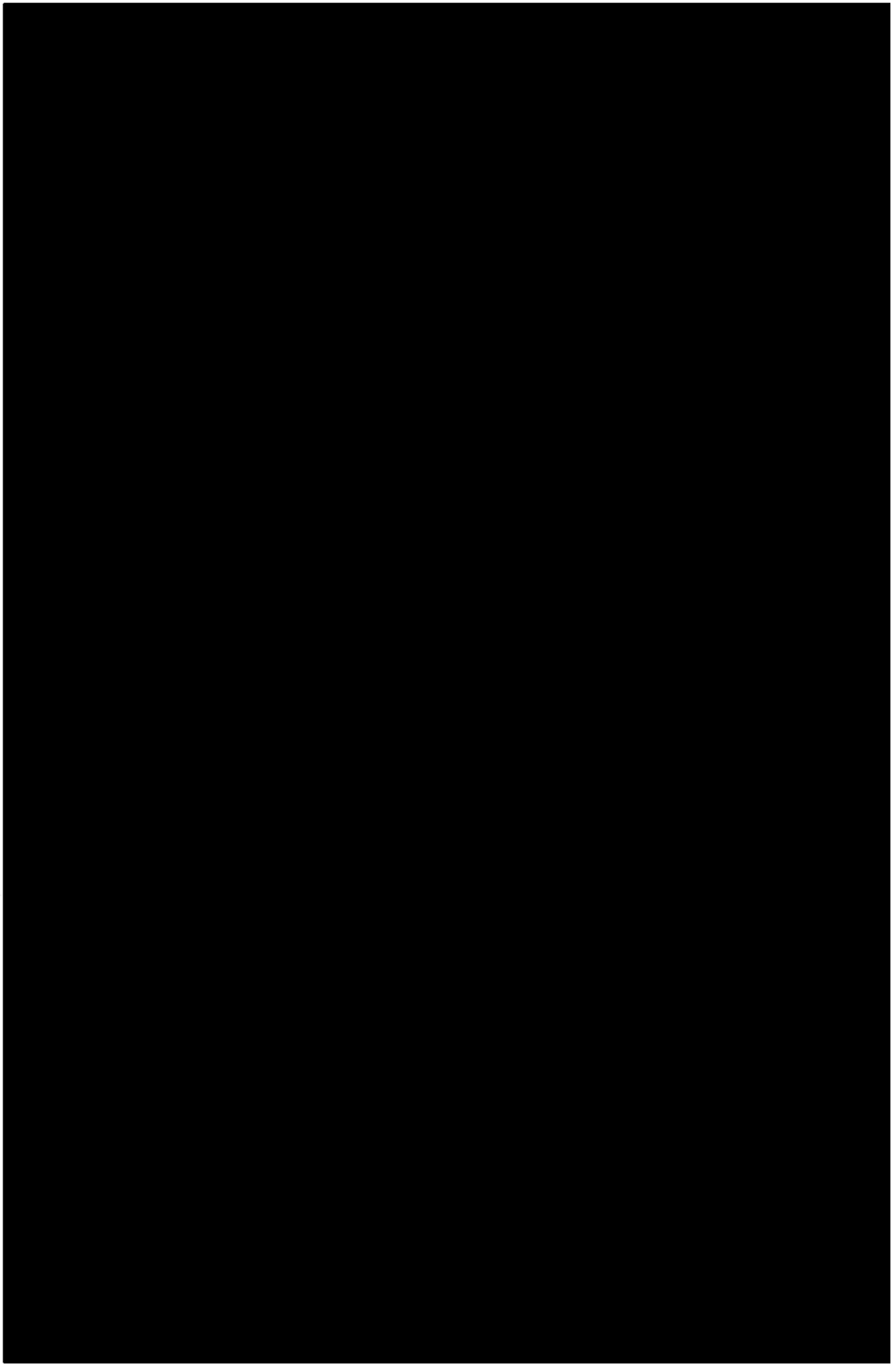
Fig 11. Future harvest

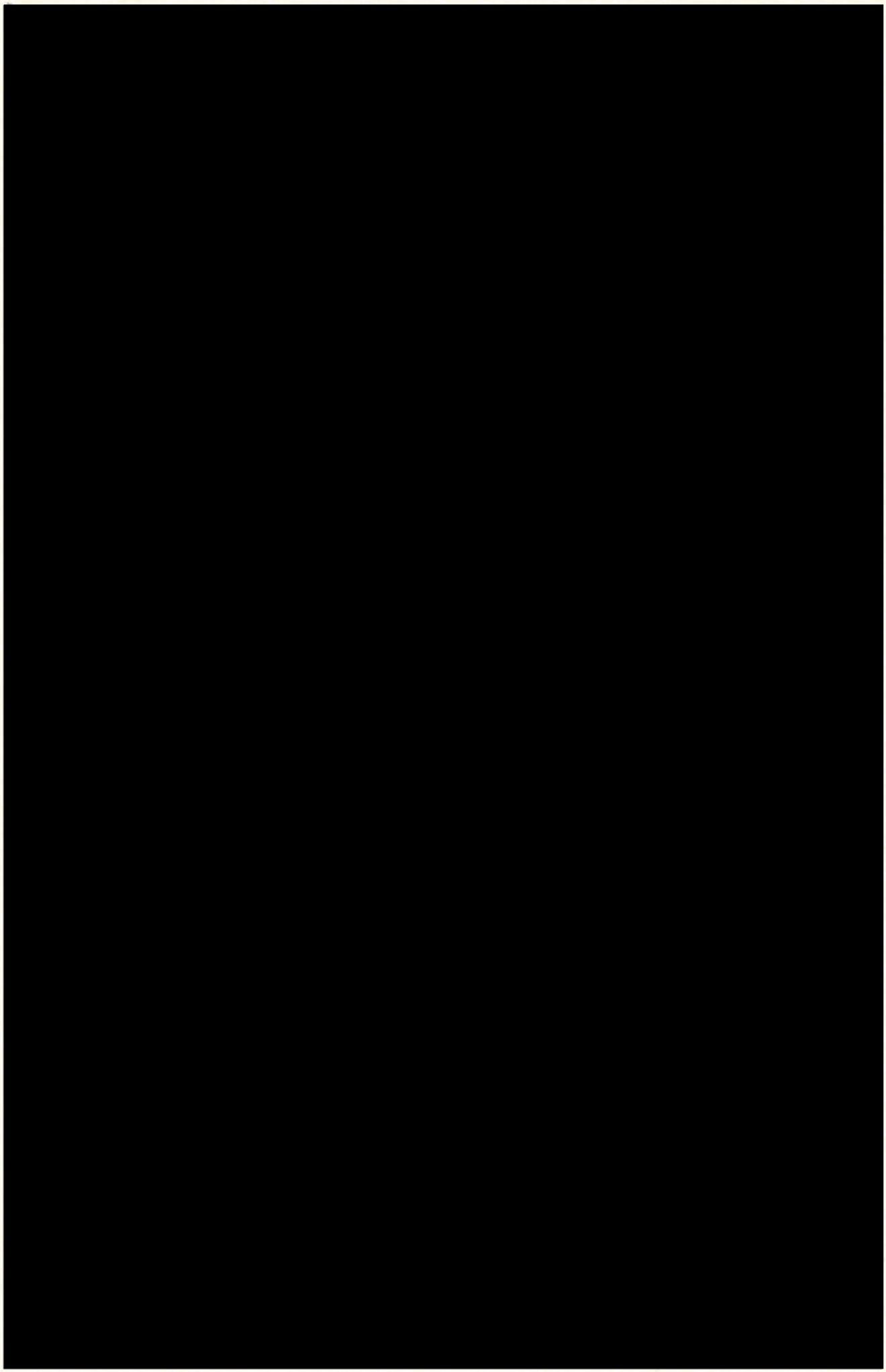


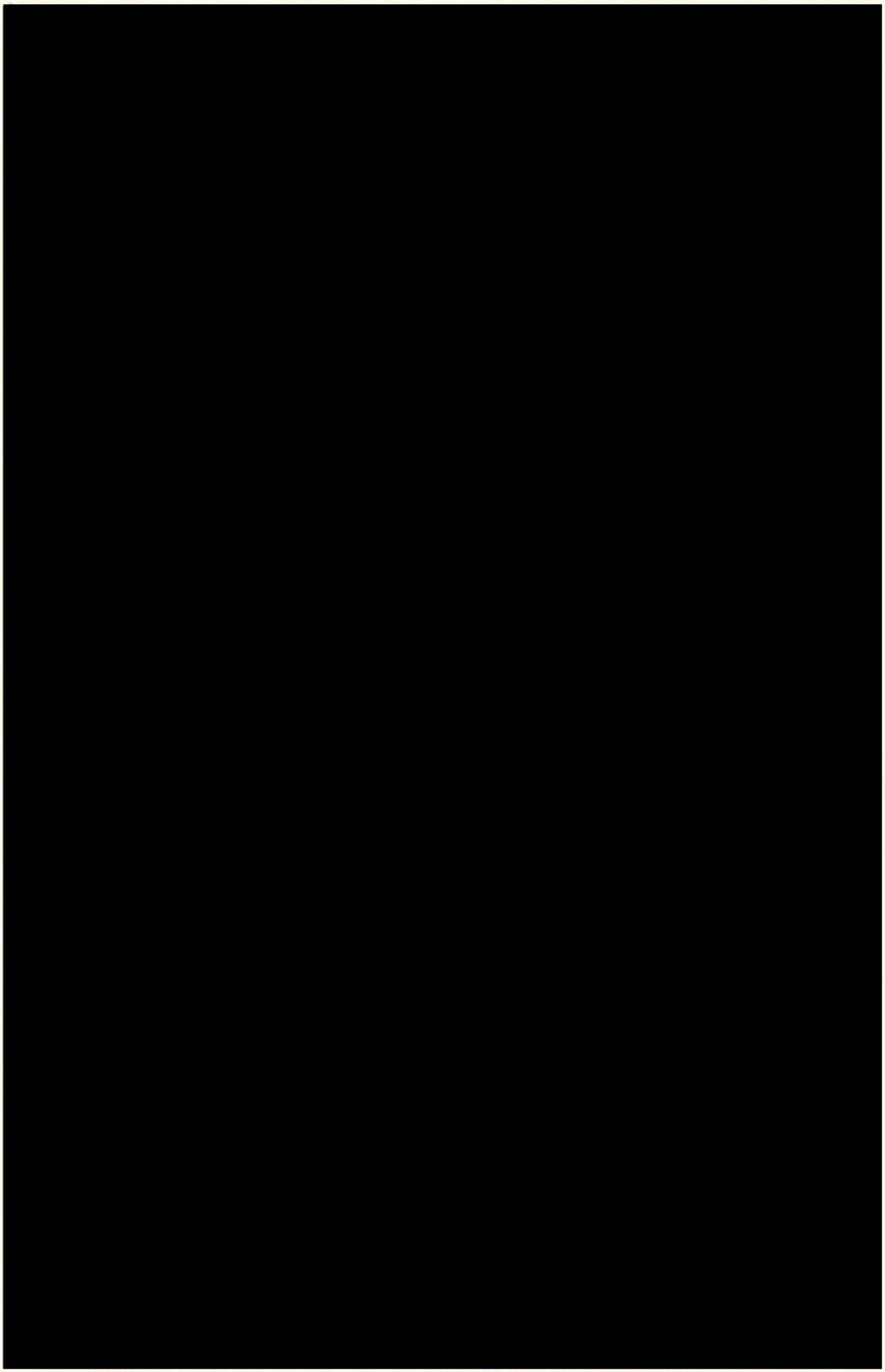
Fig 12. Growing them BIG! There is no carrying capacity, (size), limit on an ear hanging line.

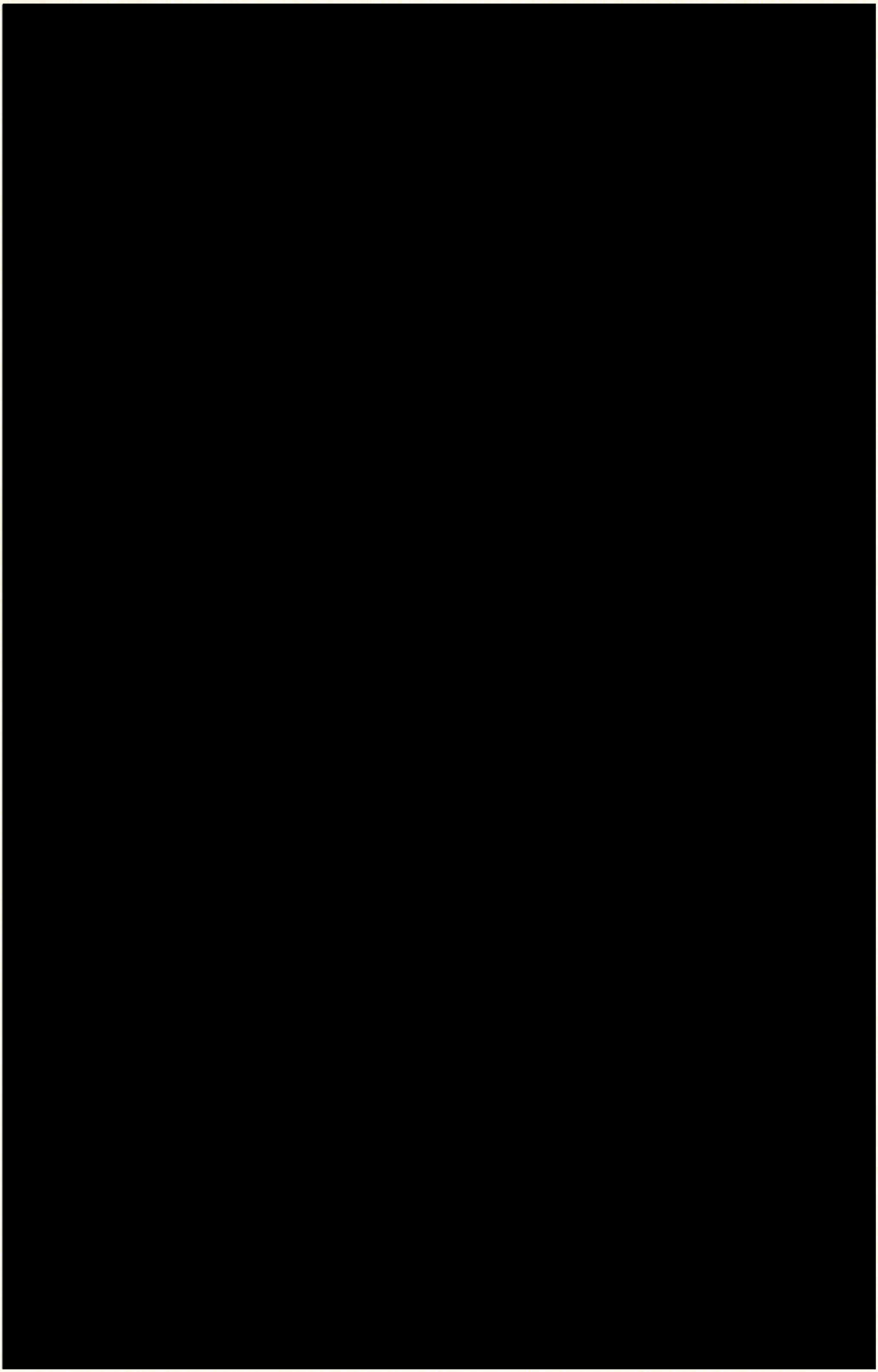


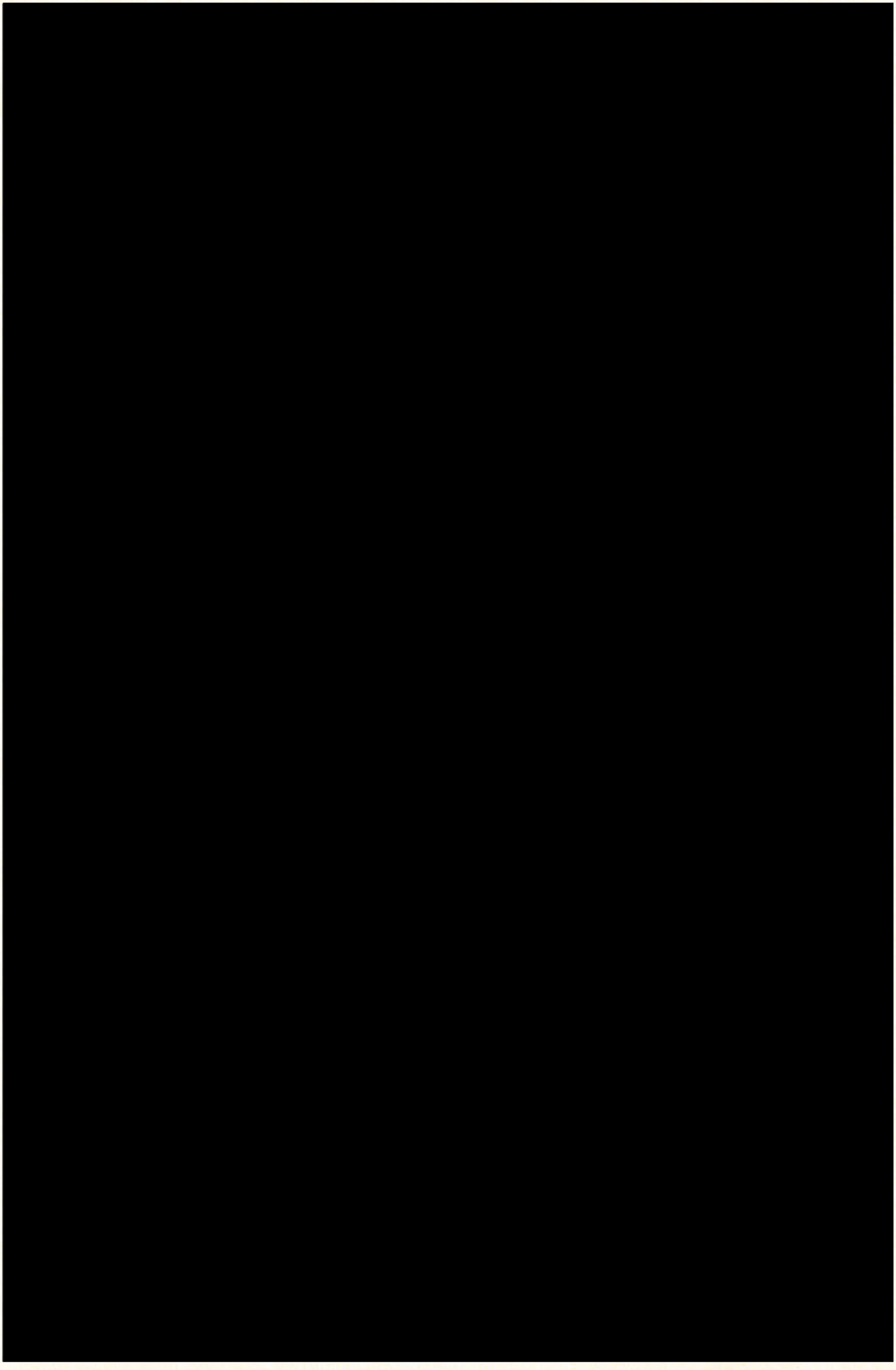


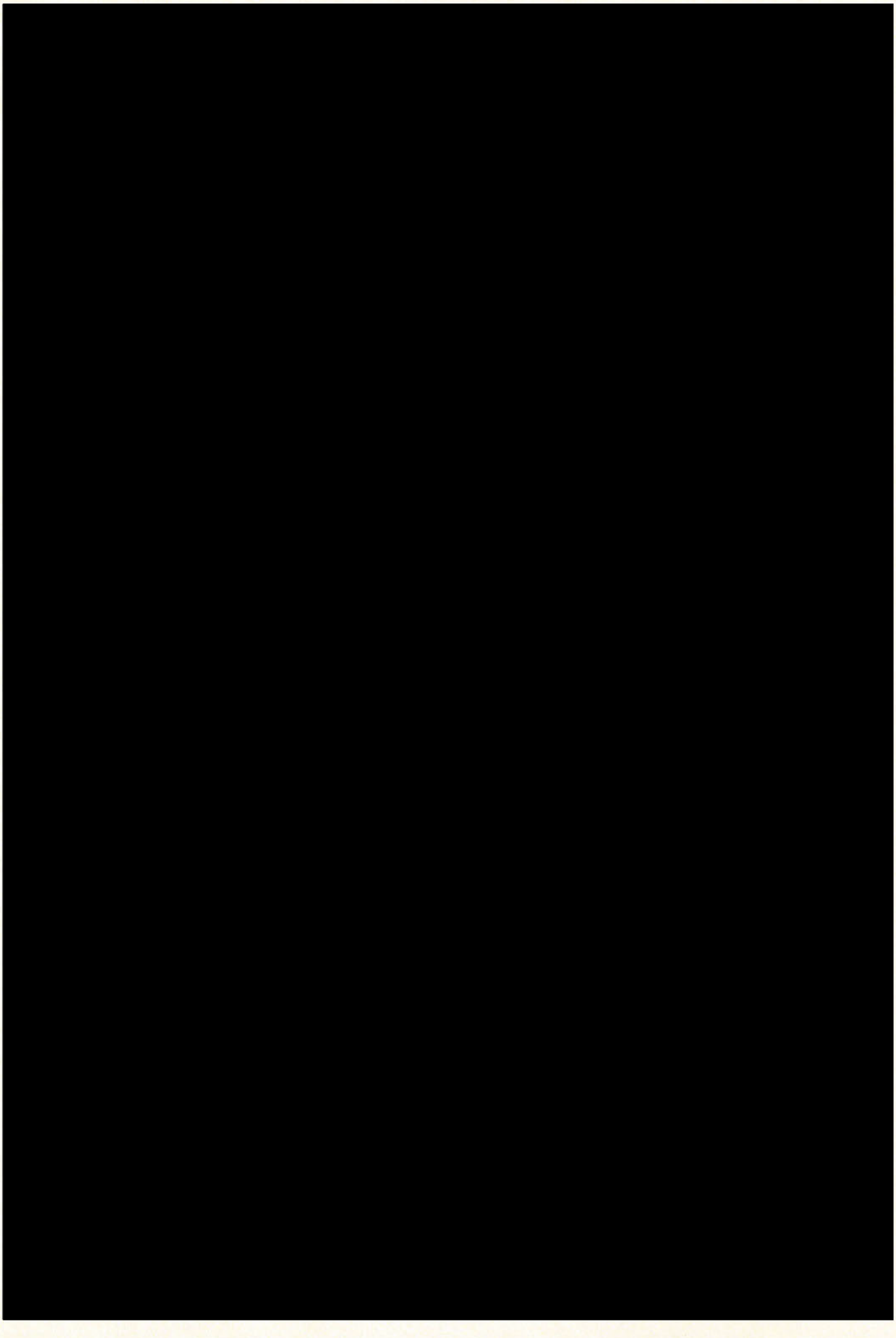




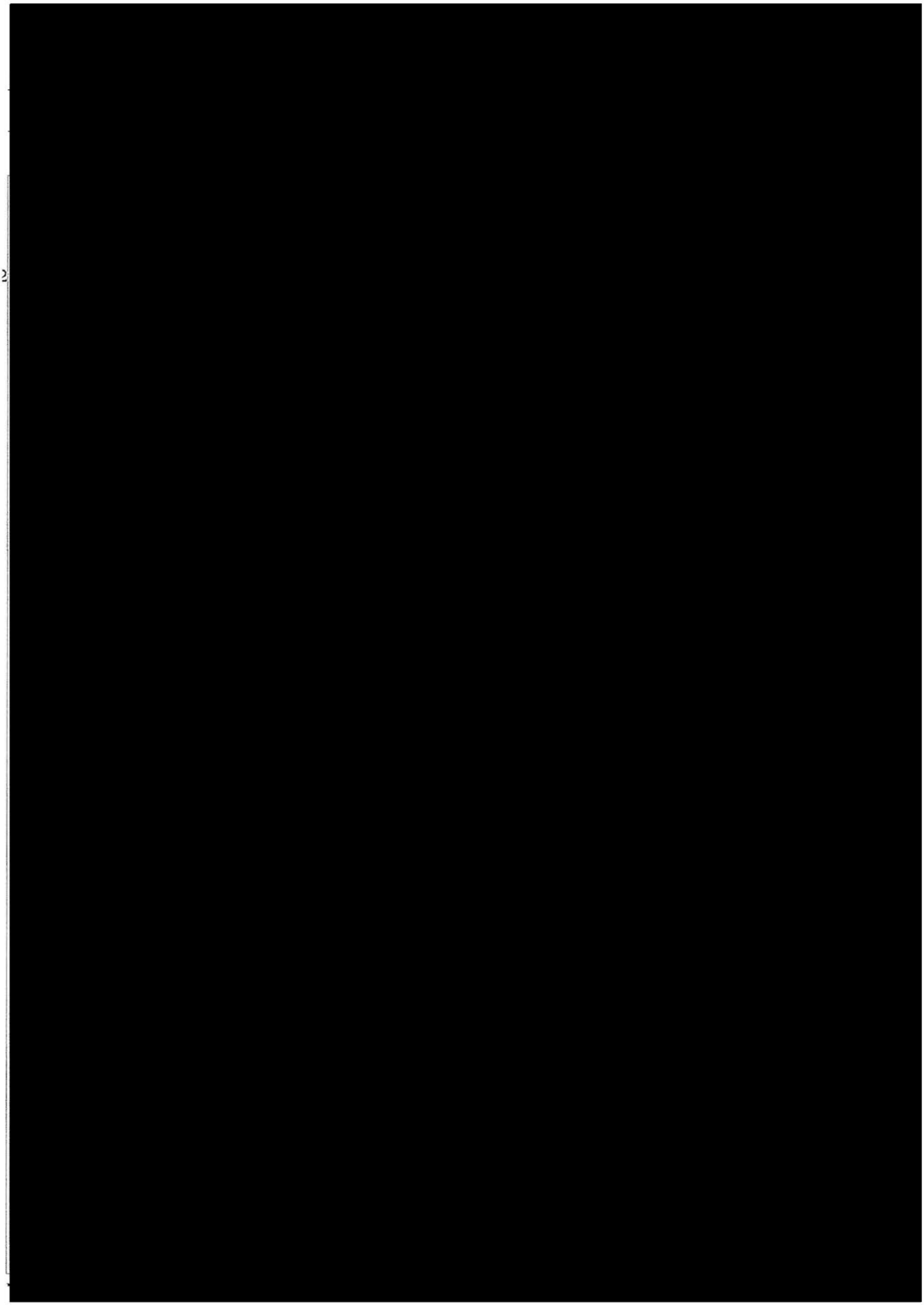




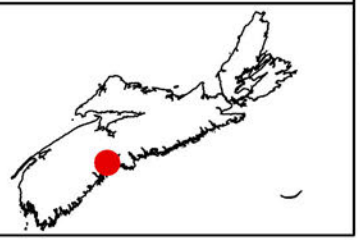








SCHEDULE A

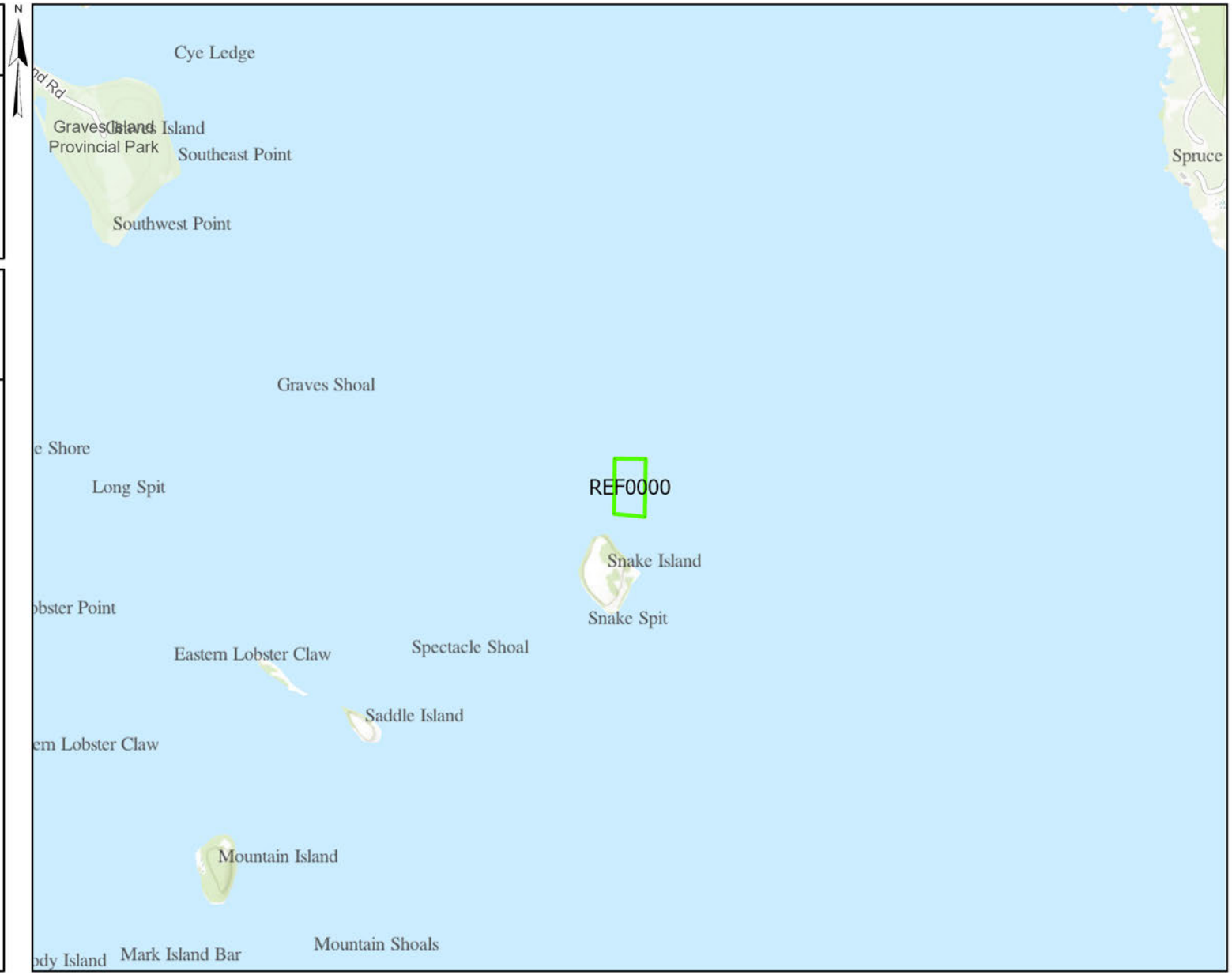


Aquaculture Site

REF0000

Corner	Latitude	Longitude
1	44° 32' 43.0"	-64° 10' 25.64"
2	44° 32' 43.0"	-64° 10' 18.59"
3	44° 32' 33.61"	-64° 10' 18.59"
4	44° 32' 34.03"	-64° 10' 25.64"
Centre	44° 32' 38.28"	-64° 10' 22.09"

DATUM NAD 83 CSRS UTM Zone 20
The above coordinates are not from a legal survey



Licence/Lease Number	License/Lease Holder	Species	Waterbody	County
REF0000	Duncan Bates		Mahone Bay	Lunenburg

Proposed Site

0 0.35 0.7 1.4 km

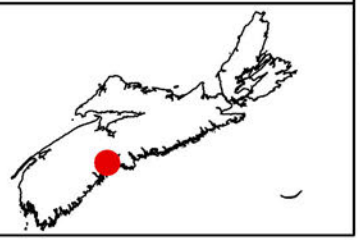
NOVA SCOTIA
Fisheries and Aquaculture

Disclaimer
This map should not be used for navigation or legal purposes. It is intended for general reference use only.

Date: 2026-03-04 Created By: MK

Sources: Esri, Vantor, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community, Sources: NRCan, Esri Canada, and Canadian Community Maps contributors.

SCHEDULE A

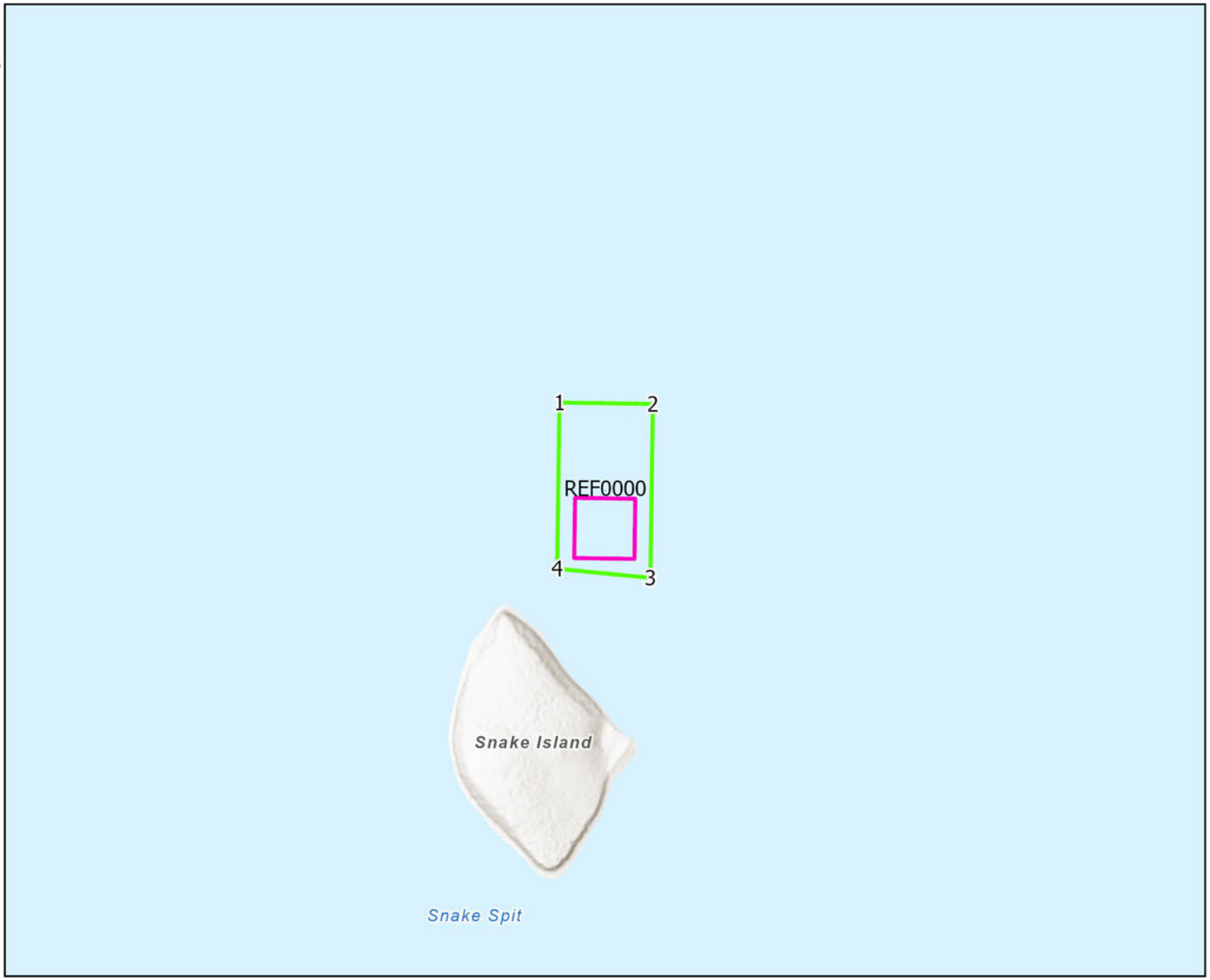


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Licence/Lease Number	License/Lease Holder	Species	Waterbody	County
REF0000	Duncan Bates		Mahone Bay	Lunenburg

Current Lease AQ0995
Proposed Site

0 125 250 500 m

NOVA SCOTIA
Fisheries and Aquaculture

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Date: 2026-03-04 Created By: MK

Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

2026

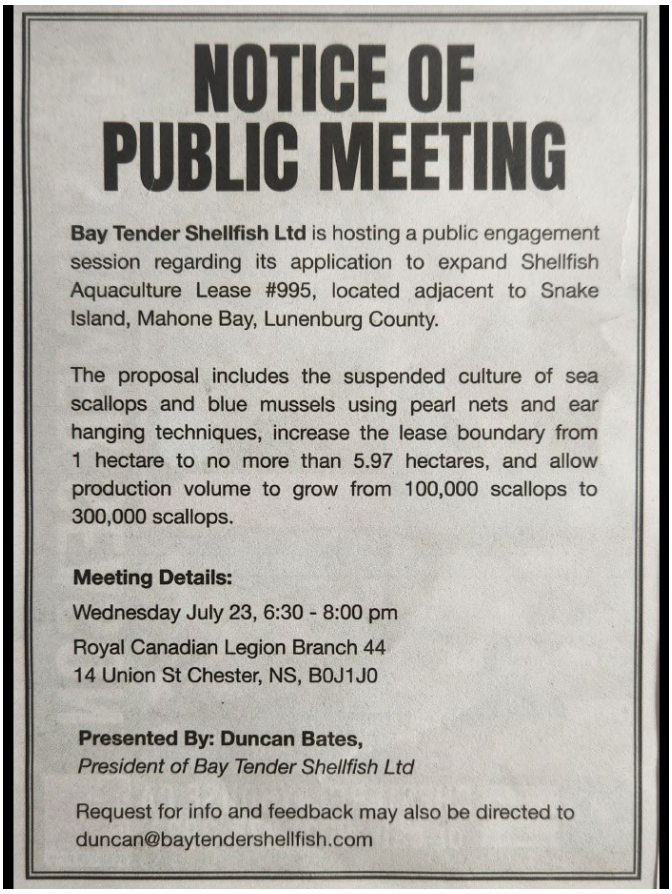
Application Class IB
Report on Scoping Process

EXPANSION, NS LEASE #995

DUNCAN BATES, PRESIDENT, BAY TENDER SHELLFISH LIMITED

Part 1: Public information meeting:

As part of the scoping process, a public meeting was held at the Chester Legion, (Branch 44), in Chester NS on the evening of July 23, 2025. The meeting was advertised in the local paper, The Masthead News, July edition and a notice was also posted at the Chester post Office, well in advance.



NOTICE OF PUBLIC MEETING

Bay Tender Shellfish Ltd is hosting a public engagement session regarding its application to expand Shellfish Aquaculture Lease #995, located adjacent to Snake Island, Mahone Bay, Lunenburg County.

The proposal includes the suspended culture of sea scallops and blue mussels using pearl nets and ear hanging techniques, increase the lease boundary from 1 hectare to no more than 5.97 hectares, and allow production volume to grow from 100,000 scallops to 300,000 scallops.

Meeting Details:

Wednesday July 23, 6:30 - 8:00 pm

Royal Canadian Legion Branch 44
14 Union St Chester, NS, B0J1J0

Presented By: Duncan Bates,
President of Bay Tender Shellfish Ltd

Request for info and feedback may also be directed to
duncan@baytendershellfish.com

There were 13 people in attendance plus Carla Buchan and Robert Ceschiutti from the NS Dept. of Fisheries and Aquaculture. In the list of attendees per the signup sheet provided, there are several of particular note. [redacted] is manager of [redacted], [redacted] is a long-time mussel and scallop farmer from nearby Indian Point. [redacted] is a well-respected and prominent lobster fisherman in the area. [redacted] fishes all around the eastern portion of Mahone Bay and definitely sets gear around all of the farms on the eastern side of Mahone Bay. I was very pleased that [redacted] attended, though at the time, embarrassingly, I did not recognize him. Not recognizing [redacted] at the meeting was the worst part of the meeting for me. I see his boat out there all the time, but not necessarily him directly. Anyhow, [redacted] voice should be given a great deal of weight as far as local public opinion goes, at least amongst the fishing industry. [redacted] is with the [redacted]. And [redacted] was in charge of taking notes.

The rough notes from the meeting are attached or inserted here. It should be said that they are a bit disjointed from my perspective, as I am intimately familiar with all of the details of the development. So in a way, notes from a lay person's perspective. I chose to include them here

completely unedited. Although I could have made corrections, I feel they give a good overall flavour of the meeting.

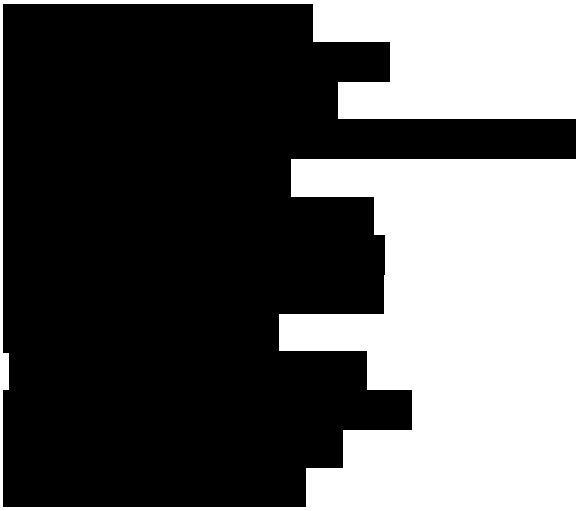
First though I will give a description of my impression of the meeting. So I gave a presentation, sharing images and maps and a "Google Earth" tour of the farm and its history and its planned expansion. A discussion, and question and answer period followed and I shared as much as possible about the farm, its processes and the proposed expansion. There was unanimous support. This matches all of my interactions and engagement with all members of the community and beyond, stretching over decades. It may sound odd, but I have not ever received a negative response or a concern from anyone in my community, or anywhere for that matter. So besides a few comments and questions that reveal themselves in the notes, I have nothing to address here in terms of peoples concerns or objections. I am very happy that the local community fully supports my development.

Meeting Notes as compiled By [redacted]:

Bay Tender Shellfish Lease Expansion Public Meeting

Date: July 23, 2035, 6:30 PM
Location: Chester Legion (Branch 44), Chester NS
Meeting called and presented by Duncan Bates

Sign in sheet provided. In attendance: 14



Plus: Carla Buchan and Robert Ceschiutti from Department of fisheries and aquaculture

Duncan: I'll let you know there is a 30 day comment period for Public consultation if anyone wants to make comment

Duncan: There was one emailed question from [redacted] who asked a question about the boundaries and boating access and I answered (sent her the map of farm and proposed boundaries). I also heard comments second hand from one other person in community who was concerned about

interruption to Saddle Island but other have not him know that there is no affect on Saddle Island, only the North East side of Snake Island.

Duncan presents the visual boundaries of the lease and proposed expansion using google earth (projected on screen). There are also some general photos shared of the farming and the farm during the presentation.

Duncan: The license was first registered to [redacted] by Dept of fisheries and aquaculture in early 1990s, it was then transferred to [redacted] and then to me, and I applied to move it (showing the slight change in location on the map)

Back when the sites went in, there was no GPS, the surveyors measured it. I am farming on one hectare, but it was not exactly in the right area. In 2023, there was a formal application to change the site to the correct boundaries which was accepted and approved.

One participant makes comment on another lease in a similar area.

Duncan: I won't comment on the other leases in the area, the meeting is about what I'm doing with my own lease.

Other participant asks about the location of another lease, owned by [redacted],

Duncan: [redacted] holds two leases – in the East River and Sucums Island area

Duncan: My site is fully utilized and I'm out of space, I'm out there on the farm all the time, I work it full time. I sometimes hear concern when others that are out on the water look at my boat from a distance – when I am pressure washing, it looks like the boat is on fire. It's just the spray.

Duncan: The farm is 1 hectare right now.

[redacted] (attendee): And you are looking to expand 4 x that size?

Duncan: No. I don't want to go East as it shallows up and not West as there is a reef there, so to form 1 hectare, the scope lines (refers to scope lines which are shown on the map on screen) run out in deep water so that the moorings and anchors can fit inside the boundary. The department of fisheries said they have side scan sonar, so I asked for data and I'm showing the actual boundary, including the scoping area. I have blocks out there but there is tremendous pressure on the lines so use extra anchors to hold everything. But the actual lease boundary proposed would be doubling the size of my lease, with 5 more lines extending into deeper water so the expansion is including scoping area. That is 5.97 hectares (per the public notice) on paper, but this includes the scoping and anchor area. The lease size proposed is doubling the size of the lease. The space closest to Snake Island was part of the original lease area but it is too shallow for scallops - but could grow kelp. Where Kelp is harvested by May, it does not affect boating, but I've elected not to grow kelp, so I modified the application to lesson this area. You'll see on the map (pointing to map on screen) that it's a diagonal line – that's the shape of the bottom, where the boundaries lay at the bottom.

Duncan – I also have an application into Transport Canada. It is required they be informed of the change to lease boundaries – the corners need to be marked with reflector tape and a high flyer (pole) with

radar reflector at the North East Corner, which is in place currently, but after expansion, they may require more marks and a light

Duncan: the farm at the deepest part (furthest part toward East River) is 110 ft deep. The deepest part of the bay is actually further from my farm, toward East River at 220 feet.

Duncan: with regard to navigation issues, there are no issues.

Duncan: I spoke with a local lobster fisherman [redacted] who says there are no issues with the farm for them, but he decided not to attend the meeting.

Duncan introduces Carla Buchan and Robert Ceschiutti from the NS department of fisheries and aquaculture (in attendance) and [redacted], manager of [redacted], adding 99% of his sales are to them.

Duncan: The biggest problem with scallop farming right now is seed supply. We have a source in Cape Breton operating as a non profit by University Saint Anne. But [redacted], who collected the seed and has the knowledge / expertise has recently been injured and this source may go away, we really have to support this group, but are also exploring other sources. My own collectors are really inconsistent, this past year was a bad year for scallop collectors locally. Collectors collect in the fall and are sorted in the spring. Usually it's a 50% success rate in planting, for every 100,000 seed you plant, 50,000 will survive. It's a delicate animal, hates warm water, and the mantle cannot be separated from the shell at all.

Duncan: The price right now is $2.00 per piece on average. My best year is [redacted] is sales before any expenses etc. I'm falling short, and my farm is full. The intention is to increase the lease space as proposed and hire a full time deck hand, to achieve a sustainable business. I do this because I love it.

Questions and comments:

[redacted] (local lobster Fisherman): I have no problem with your farm and this expansion, all the fisherman have expressed support.

Duncan: I feel it really fits the area

[redacted] resident: in the morning, to see your boat out there, it's a beautiful local sight.

Duncan: tourists also love it, I feed them a raw scallop and they love it, there's a lot of benefits.

I recently took out 20 students and said to them the sea scallop is the most desirable and we are elevating it. They say it's the best because it has more fat content, and shells are thinner. For the farming, it takes two years to grow a scallop. You have 100,000 growing and some of that larvae will come off. There's 5 lines with 4 buoys, there's very little visual impact – you can barely see the farm. The animal density is lower than mussel or oyster farms. There are surface buoys for the reason that scallops hate motion. You can't put a fixed line because it moves and tangles under the buoys. They do well between the buoys

[redacted] – resident and sailor: I'm for it. I'm a sailor and this farm is no problem (the one at Graves Island is a mess, it's in the way and unmarked, boat can get caught up). Your farm is protected geographically from being a navigational hazard.

[redacted] This is the most sustainable way to grow scallops – on a line, must more sustainable than dragging. Only concern is you are not growing seaweed (laughs) –You can put seaweed only at 3 feet below – I'll help to work with you on that.

[redacted]: I have been doing this (growing scallops) for 30 years. It's not easy. We need Introduction of seed transfer license with Quebec, even if we don't proceed with transferring seed from Quebec, just in case. Also, the new nets from China are revolutionary, getting great results now in increase of efficiency.

[redacted] I am a sailor from here in Chester. If I run over your farm, is there obstruction? It sounds like no.

Duncan: No, there's not but I would not encourage driving over it or diving in the farm area, but if you accidentally drive over, it would probably be just fine.

[redacted]: I do a "cruising guide to NS" for visitors, there are a lot of boaters from Maine where they are used to a lot of buoys, marks everywhere like sprinkles on a cake.

[redacted](student at Dalhousie): Regenerative farming going on here is great. I live in St Margaret's Bay

----- End of meeting -----

Part 2: Public Engagement:

During the scoping process, a number of organizations were contacted as per my scoping requirements. All people I contacted were given a description of my development proposal and informed of the details of the public meeting.

On July 17, 2025 I contacted and spoke with [redacted], director of economic development for the Municipality of the district of Lunenburg. I discussed the development and informed him of the public meeting. [redacted] did not raise any concerns about my development. He did mention the [redacted] proposal. I include this piece of information only because I recorded it in my notes, but I don't recall what he said about it.

On July 11, 2025 I spoke with [redacted], port cluster representative for Indian Point / Mahone Bay. [redacted] suggested I contact a fishermen's representative more local to my area, [redacted] of the Blandford area. I know [redacted] from the time I spent in the lobster fishery working as a deck hand out of the same harbour as his boat in New Harbour. I spoke with [redacted] who saw no issues from his perspective but added that since he didn't set traps near my farm, I should talk to those who did. The fishermen who regularly set traps in my area and around my lease are: [redacted], [redacted] I know all of these fishermen and have an excellent relationship with all of them. I have spoken to all of them directly about my proposed expansion, with the exception of [redacted] attended the public meeting and communicated that none of the fishermen had any issues with my proposal.

On July 17, 2025 I spoke with [redacted], manager at the Chester Yacht Club. I gave [redacted] e description of my proposed expansion and informed her of the public meeting. [redacted] took my contact details. I did not hear back from the CYC nor did a representative attend the public meeting.

Coastal Action Foundation: I called and left a message on July 11, 2025. I also sent an email with a brief description of my plans, notice of public meeting and requesting consultation, but did not hear anything back.

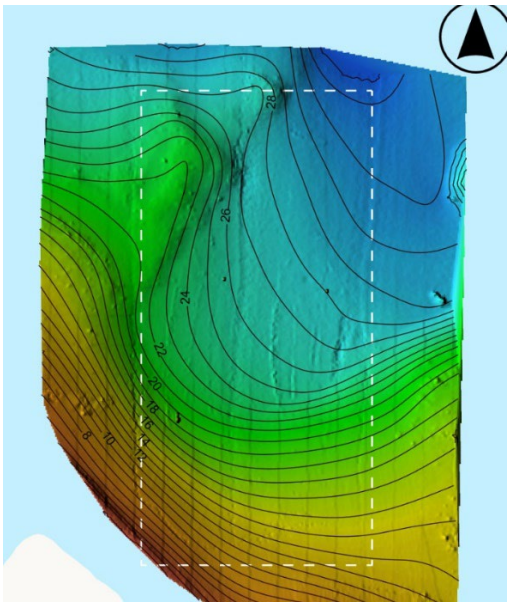
I made several attempts to contact the Mi'kmaw Conservation Group (commercial fisheries division), and was eventually directed to contact [redacted], Manager of Indigenous fisheries. I telephone [redacted] on July 11, 2025 and left a message with brief description of my development and details of the public meeting. I did not hear back.

The Mahone Islands Conservation Association (MICA): On July 11 2025 I sent a message via an online contact form, but did not hear back. I followed up with an email to info@mahone islands.ca on July 17. I then became a member of MICA and attended a MICA social held in Mahone bay later that summer. At the social I spoke with many members about my development proposal. Everyone I spoke with generally had no issues with my proposal. Several members raised concerns about the Blue lantern Shellfish proposal. This was the feedback I got, generally positive.

Part 3: Bathymetric / Oceanographic data collection.

During the scoping process I collected bottom video at lease 0995 at all 4 corners and across a number of transects through the existing lease and through the proposed expansion area. These were submitted to NSDFA, (Gretchen Wagner), on June 20, 2025. In addition, the department also visited the site and conducted extensive baseline monitoring the week of sept 15, 2025. Gretchen Wagner created a number of bathymetric maps from this data and shared the video files with me. All of this data should currently be in the possession of NSDFA and can be used to support this application. The bottom video confirms the mud bottom characteristic of lease 0995 and the proposed expansion.

The currents are tidal and while significant, are not extremely strong. The currents generally push the gear east and west and this seems to work fine. I don't know current speed values in cm/sec, but I have farmed here for over 3 decades and there are not going to be any surprises. Annual maximum wind speed is approximately 100 Km/hr. Maximum wave height is approximately 2 m from the southeast. Tides are approximately 2 – 3 meters. The site is at full ocean salinity, particularly at depth of culture, 35 ppt. Annual minimum temperature is approximately -1 degree Celsius. In the summer Mahone Bay thermally stratifies. Maximum surface temperature can reach 23 degrees Celsius, but at culture depth would remain significantly cooler.


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