

# The Canadian Field-Naturalist

## SUPPLEMENTARY MATERIALS:

### The history of commercial freshwater mussel harvest in southern Ontario: a short-lived fishery with long-lasting consequences

CATRIONA HAYES MORRIS and TODD J. MORRIS

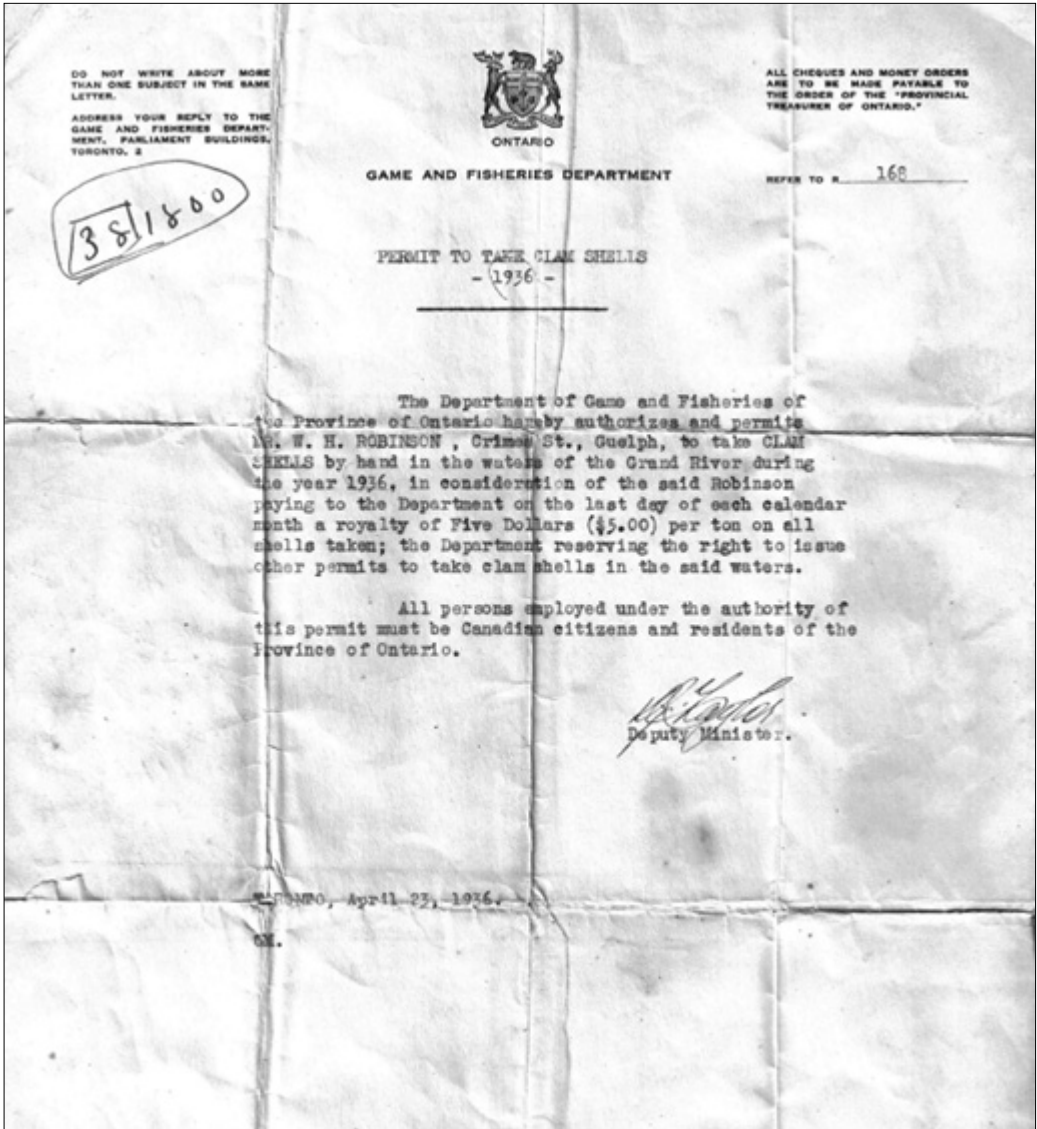


FIGURE S1. Ontario Game and Fish permit #168, 23 April 1936, authorizing W.H. Robinson to collect clam shells by hand from the Grand River. Provided to Michael King by Jack Robinson, son of W.H. Robinson.

### **A Short History of Clam Digging on the Grand River**

by W.H. Robinson

The continuation of my education was the result of two unrelated events. I applied for a scholarship at the Ontario Agricultural college at the same time another student applied. The award was to go to the one with the higher marks and I was in this position. But the final say on the matter was in the hands of a Mr. Skinner, the Agricultural Agent for Haldimand County. He decided, for what reason I never found out, that the other student would get the award. My dad was not a little put out about this and somehow scraped together the fee required to pay the first year's tuition and board. This was the princely sum of \$225.00. So I got registered at the college in the year 1934. One of the Flowers boys named Sturdee James and two other boys from Caledonia High School, Cecil Johnson and Bert Howden, also started at the college that same year. Sturdee and I finished the four years but Cece dropped out after the second year as I remember.

The only way I could have continued at college was through a unique occupation which as far as I am aware was never carried on in any other place in Canada although it was common on the Mississippi River and some of its tributaries. This was the collection of clam shells from the Grand river. These shells were used in the production of pearl buttons for use on all sorts of clothes. An American by the name of Jesse Bowman started the operation, but he was required to have a license to gather this Canadian resource so he approached my dad to obtain it since an American could not hold such a license.



**1 The Clam Shell Pile (original picture)**

Eventually the operation became a Robinson one and was carried on by the family with the exception of George and Gar who were working at their jobs. The year that Gar left Canada for the U.S.A. he spent the summer digging clams<sup>1</sup>. He and his family lived along the river in a house trailer for the summer.

The clams which grew well in the river were literally dug out of the gravel bottom by hand and tossed into a flat bottom boat which was attached to the digger by a rope and floated behind or at his side. When the boat was loaded it was taken to the clam camp where a metal bottom, tank sitting on a fireplace, was filled with the clams and the clams were boiled until they opened and the clam meat as we called it was separated cleanly from the shell. The shells were then piled for later shipment to button factories in the state of Iowa. Sometimes they went to Muscatine and some times to Davenport. Once we sold them to a button factory in Montreal.

The tonnage varied according to the weather and the water height but ranged from thirty to sixty tons in a summer. It was a summer operation and only possible when the weather and the water warmed up. This was from about the middle of June to the middle of October. Those working at the job camped along the river and lived outdoors during the working season.



## 2 The Grand River (recent picture)

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<sup>1</sup> Note added by Jack. I believe this was 1947

The price varied from thirty five dollars per ton to one hundred dollars per ton. I took a coloured movie of the operation and it is still available, 1996. One summer Lloyd Newth's father asked if his son could work for us for the summer<sup>2</sup>. Lloyd became a bonafide "clam digger." I think he learned that working with the hands was not the way to wealth and later he acquired his accountancy degree. Our relationship has continued and he now has a cottage in Turkey point along side Arnold.

I still remember the names of some of the clams, such names as muckets, pocketbooks, pigtoes, threeridges, squawfoots, sheepnose. Perfect pearls ere occasionall found in the clams. Vera has a ring with a fresh water pearl taken from the Grand river at Caledonia and I have a quart of imperfect pearls known as slugs still in my possession from the last year that Oscar and Arnold and Huck and I dug clams.

Frank or Huck as he was universally known had become a very good softball pitcher and played for a long time in the leagues around Hamilton and Mount Hope and later on in Guelph, as did Bill and Ron, his boys. He was also the best clam digger due to his long arms and strong muscles. During the off times he became almost a legend as a fisherman in the Grand River. I remember eating sturgeon caught by him in the river. It was seventy-two pounds in weight and nearly six feet long. It fed the family for a few days and was excellent tasting. Every Spring when pickerel came in season we dined on fish quite often I see pickerel fillets now sell for nine to ten dollars per pound. They have come up a long way in the price scale.

The money we earned in clam digging was a real boon in those times of depression. It was responsible for me being able to go on to post high school education. About this time also my father was awarded an army pension for the disabilities he suffered from being wounded and gassed in the first world war. This was a welcome boost to our standard of living.

The house we lived in was mortgaged to a man by the name of Bertrum and in 1936 he decided to call for his money. As I recall the Mortgage was for \$1100.00 and the interest was at 3%. The house was worth about the mortgage money so we made the bold step to move to Guelph. We had a family powwow and decided that the cost of the room and board I was to pay at the college would finance the rent of a house in that city so we moved hoping that jobs would be available for those old enough to work. George, Gar and Frank (Huck) obtained work soon after moving. So we found that our hopes were realized but looking back at it the move it must have seemed to many to have been a leap in the dark. It turned out that it was a start in the direction of a much more prosperous situation for the family as time went on. To have remained in Caledonia would have limited the outlook of nine children who were willing and able to work to get ahead. To have stayed in Caledonia with its lack of opportunities would surely have stifled any

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<sup>2</sup> Lloyd may be able to give a first hand account. Phone him at: 519-750-1332

budding ambitions.

We moved to Crimea street (picture) in Guelph. George and Gar went to work at the Gilson Manufacturing Co. and Huck obtained work at the Guelph Stove Co. a plant run by the T. Eaton Co. The first winter we spent in Guelph at 23 Crimea Street was one of few luxuries for it took a few months to locate work. For two years there was little money to use for carfare to the College on the hill so I became a good fast walker. One year the year book made mention of Blacksmith Bill striding rapidly over the hill.

Dad became ill in the winter of 1936-37 and was taken to the veteran's hospital in London. He died there in the early spring of complications brought on by his war injuries (shrapnel) wounds and gas damage to his lungs. Oscar and I carried on the clam digging for a few years until he got a job in Toronto. When the second world war broke out and I was called for military service. I registered as a conscientious objector. This resulted in my "voluntarily" donating more than half of my pay to the Red Cross. Having just bought the house at 53 Abigail Avenue and having one child I had to find some source of income to pay the bills. Once again the clam digging came to the rescue and I obtained a license. I spent every Saturday, holiday, and some Sundays as did Huck and Arnold and Gar?, working in the river. The money we earned was split among us. It prevented the loss of our newly purchased house and bought our first dining room set which cost the sum of one hundred and fifty dollars. It is still serving its purpose in Dorothy's home.

Excerpt from Memories by W.H Robinson



W.H. (Bill) Robinson and his Clam Boat

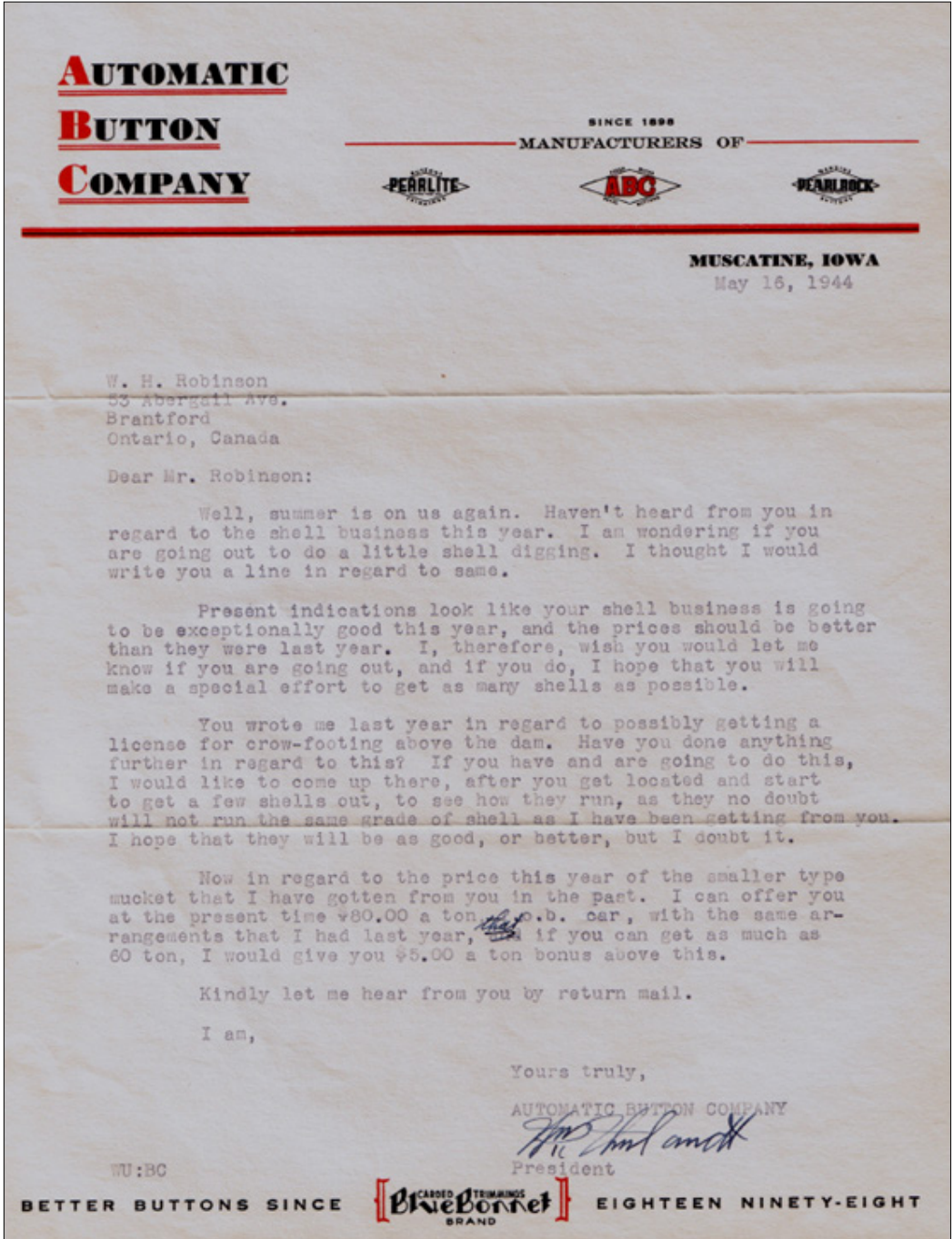
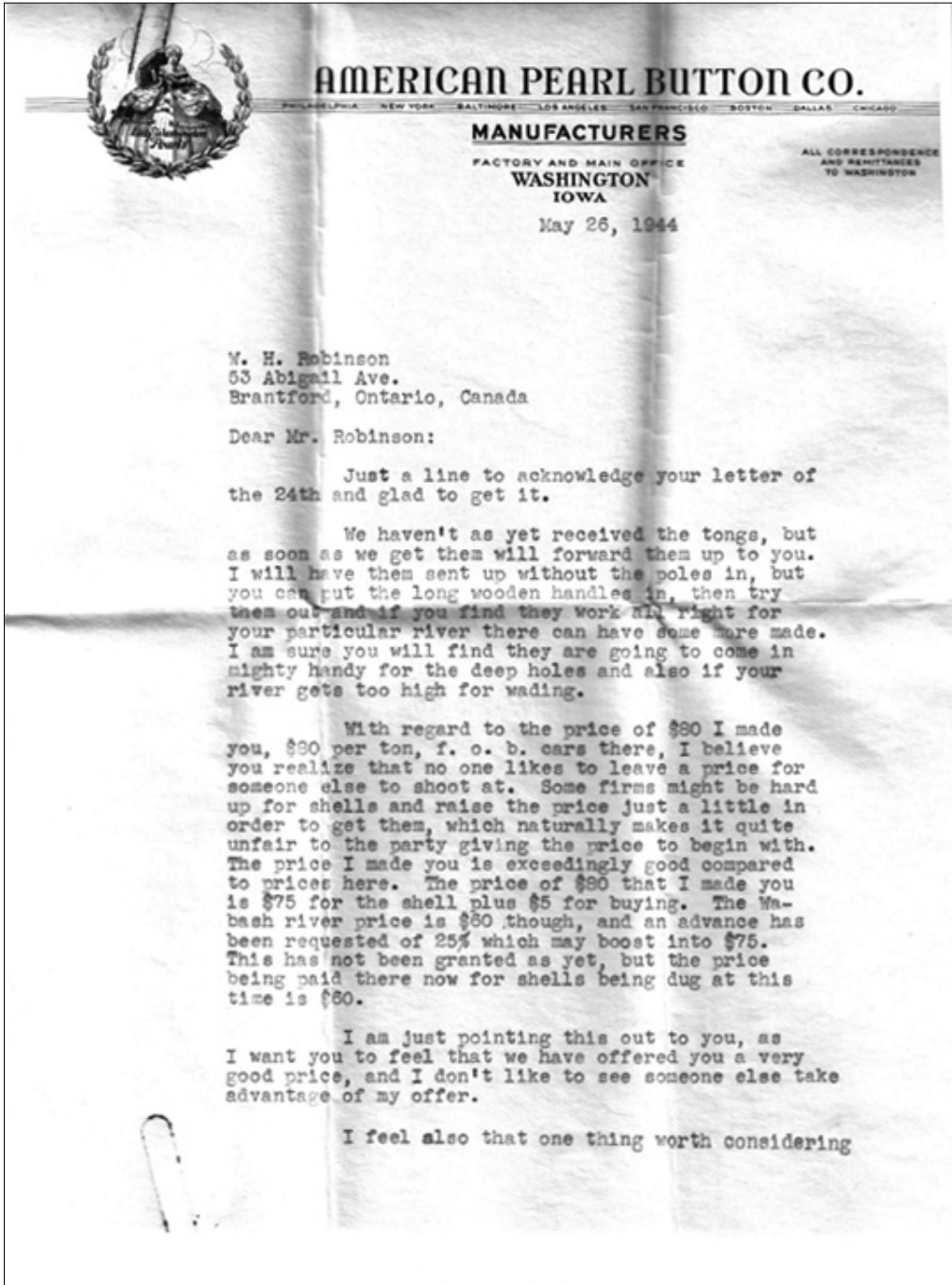


FIGURE S3. Correspondence between Grand River shell fisherman W.H. Robinson and Henry Umlandt, president of the Automatic Button Company of Muscatine Iowa, 16 May 1944. Provided to Michael King by Jack Robinson, son of W.H. Robinson.



**FIGURE S4.** Correspondence between Grand River shell fisherman W.H. Robinson and Carl Jungbluth, president of the American Pearl Button Company of Washington Iowa, 26 May 1944. Provided to Michael King by Jack Robinson, son of W.H. Robinson.

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AMERICAN PEARL BUTTON CO.

is the long run. I believe that we have always offered you a good price for shells for the market and I believe you will also agree with me that we took your shells when others were not buying them. Frankly I also feel that we should have had your shells last year.

At any rate I sincerely hope that you *will* let us have your shells this season as frankly we do need them, and will appreciate getting them.

By advancing you the buying money you can finance the shells as you dig them, which I trust will be of some assistance to you as well.

At any rate, please think this over and let me hear from you at your earliest convenience and should anyone quote you a better price would appreciate your at least giving us a chance at them.

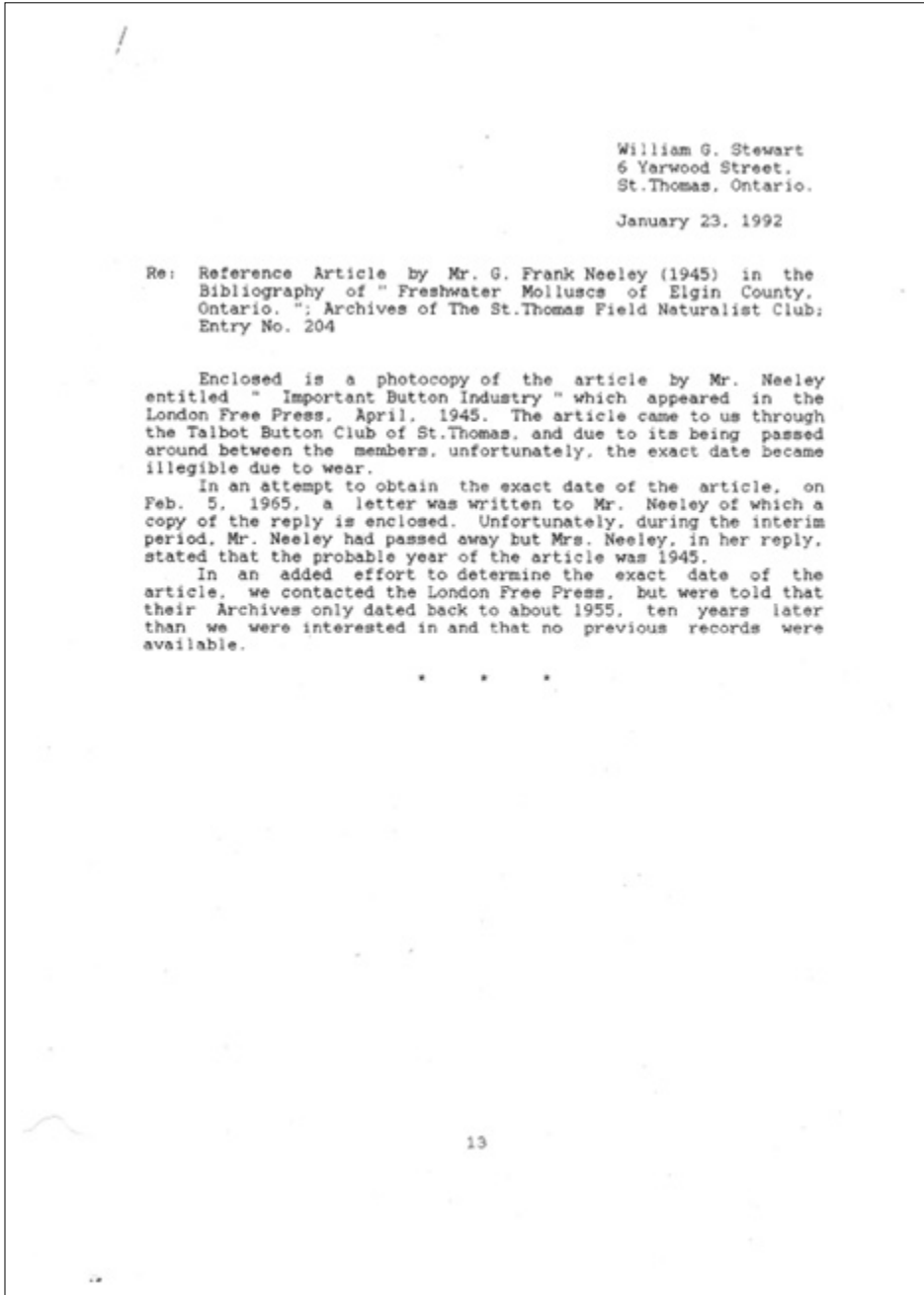
Respectfully yours,

AMERICAN PEARL BUTTON COMPANY

*[Handwritten signature]*

CJJ:JW

FIGURE S4. Continued.



**FIGURE S5.** Correspondence between Eileene Stewart and William G. Stewart, 23 January 1992, containing text of an article purportedly written by G. Frank Neeley and published in the London Free Press in April 1945. A search of the London Free Press archives through Library and Archives Canada failed to turn up the published article during the specified period (3 March–7 May 1945). Letter available in the archives of the St. Thomas Field Naturalists held at the Elgin County Archives (accession number 2010-09).

IMPORTANT BUTTON INDUSTRY

The London Free Press, 1945,  
London:Ont.

Thousands of industrious clams, as busy as their ancestors in the days before Columbus, are working frantically in the Thames River, down below the Muncey Reserve, to end the critical shortage of buttons in America.

The fact came to light, reports an article in the Echo, when G. Frank Neely, 36 Duke St., appealed to city councillors, to put a halt to pollution of the Thames by sewage. Researchers for a button company in Guttenburg, Iowa, were set to the task of finding out why the best Thames River clams, with a stainless record, are turning out inferior shells. Even the good old Black Sand clams whose shells have always had a pearly white inside have been troubled with a purplish patchy discoloration. So have the Muckets the big round Pocket Book clams and the Pig Toes and the Nigger Heads. These have been the mainstay of the button industry and none in the whole of North America could hold a candle to a Thames River clam when things were going right. The button men were not surprised at some of the others for inferior workmanship has always marked the shells of the Squaw Foot clams. The Three Ridge clams could stretch six inches long and better but the color inside has been far from satisfactory. The Warty Backs are just naturally purplish and hence inferior.

But the good old clams on which people have relied for buttons for all their vital fastenings are getting the worst of it, the research men say. First the researchers reported to Mr. Neely that his clam shipments were deficient because of pollution which they expected came from a paper mill perhaps 50 miles up stream. Since the Thames has no paper mills in either Perth or Oxford they took another look at the situation. They still blamed paper but said it comes to the Thames from London's disposal works. That is what Council will be asked to remedy.

It came as a surprise to some city officials that one of the best clam beds in North America is in the Thames near Muncey Reserve, perhaps 25 winding miles west from the foot of Dundas St. But all along the Thames good clams are constantly and dilligently making more clams. Some of the best of the clams can be counted upon to produce 10,000 more clams a year, says Mr. Neely

FIGURE S5. *Continued.*

which of course is barring strikes, lockouts, and events beyond the control of the clam in question

Mr. Neely can claim a place in the London race for strangest occupations. For years he has held a government permit to harvest clams from the Thames from Putnam to Chatham. For this he pays a royalty of \$5.00 a ton. He usually ships about a hundred tons a year, 40 bushels of clam shells to the ton, for 4000 bushels.

The strange thing about the business is that Canada buys most of her supplies from China and Japan. The U.S. has tariff bars against the same sources, and buys her raw clam shell material from Canada and makes her own buttons. Mr. Neely looks forward to the end of a wartime ban on pearl buttons as a luxury item in Canada and expects to market some of his output in Kitchener where an important button company operates.

Mr. Neely said "We will get busy again in May as soon as the water is warm enough to work in. I hire Indians on a piece work basis. We work from small scows in hip boots. There is an inexhaustible supply of clams in that bed, buried down as deep as 15 feet in the clay of the river bed. We dig them with farm forks like potatoes. I have taken out as many as 13 clams in one fork full."

"The Indians dump them into scows and bring them ashore. There we set up a big pan, filled with boiling water and we boil them, six bushels at a time. Next they go into a cold bath. We sort out the meat. I don't care for clam meat myself but I had one button company official at Kitchener who used to ask me to bring him six gallons every season. He said they were the best in the world."

Down around Boston the tourist routes are plastered with signs offering clams as a table delicacy at 50¢ a bushel. But Mr. Neely does not intend to develop that end of his industry. He however, has orders this year for quantities of clam meat to be fed to mink in nearby fur farms. The mink thinks clam is good eating.

"I sort out the shells in different types," Mr. Neely explained. "We bag them up and take them away in trucks for shipment to the button companies."

Mr. Neely produced a small but valuable collection of a strange by-product of his business--fresh water pearls. One nearly as big as a fair-sized pea has one flat side but its beautiful

FIGURE S5. *Continued.*

iridescent lustre is striking.

"I showed it to one of London's best known diamond and gem jewellers," he said. "He said at first it was too fine to be natural. He gave it close examination, polished it, and said he had never seen a finer pearl from any source in his long experience. I watch carefully for pearls and slugs when sorting out the clam meat in the cold bath and find an average of one and a half ounces to the ton. The slugs are irregular shapes, some of them an inch long or better. These are in demand in Oslo, Norway and Stockholm, Sweden and I understand are used to decorate ceremonial trappings made there for the sacred elephants of the rajahs of India.

"The pearls are found in the mouth of the clam, and the slugs in the back of the shell. Slugs are worth \$25 an ounce. Many of them are good ornaments for fine jewelry. I have been investigating the possibilities of installing machinery and cutting buttons here. There is also a good market for ornaments made from the shells. The pearl can be dyed in many beautiful colors and some of the most attractive buttons sold over North America are cut from clam shells from the Thames around London.

"Researchers say a clam will travel a mile in about a hundred and ten days. People speak of a clam's tongue hanging from the shell. It isn't his tongue. It's his foot. He puts it out and pushes himself along. Often I have followed the track he leaves in the mud, and at the end of the trail picked up the clam. His sense of direction isn't very good, because he often wears himself <sup>out</sup> walking in circles. You could look at the bed of the river and never suspect his presence, but thousands of them are buried in the mud from a few inches down to 15 feet deep. When the water goes down suddenly I have seen them pop up to the surface in search of a new location. One day after the dam was opened at springbank I went along the shore and picked up 300 bushels of clams in two days."

This business was started in 1935. Indians are employed at 45¢ a bushel and they dig as many as 25 bushels a day.

From:  
Eileen Stewart,  
6 Yarwood Street,  
St. Thomas, Ontario.  
N5P 2Y3

FIGURE S5. *Continued.*

E MORRIS 5147 128 100  
resides at 145 Colborne St

Feb. 10, 1965

195 Bolborne St  
London Ont.

Dear Mrs. Stewart,

My husband was the man in the story. If you ask the year the story was published I would think 1945. As far as I know no one has taken clams from that spot since then. The writer is so polluted that it is difficult to get white shells without discoloration from the sewage being dumped in the river. I am not sure but I think there is very little demand for pearl buttons as plastic ones can be made much more cheaply.

If you would care to make up a questionnaire I would be glad to answer it to the best of my ability but not knowing exactly

what you need and have, I probably would be repeating what you already have.

I can tell you Smokey Pearl Buttons are made from a shell of that color imported from Europe, also Australia. There are button factories in Kitchener, but the majority of the clam shells taken from the river here were sent to Iowa which is the centre of the button industry in the U.S.

I would be glad to help you in any way I can if you can give me more detail. I neglected to say my husband passed away several years ago.

Yours truly  
A. Z. Neely

**FIGURE S6.** Correspondence between A.Z. Neely and Eileene Stewart, 10 February 1965, discussing Neely's recollections of her husband's (G. Frank Neely) shelling operation on the Thames River. Letter available in the archives of the St. Thomas Field Naturalists held at the Elgin County Archives (accession number 2010-09).