Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

62.37

Spring 1930

How to Propagate Natural Foods that
Will Attract Wild Ducks, Fish and
Game

U. S. Department of Agriculture

Wisconsin Aquatic Nurseries
P. O. Box 331
Oshkosh, Wisconsin, U. S. A.

INDEX

	Page
All together—Heave.....	1
Foreword	2- 3
Wild Rice	4- 5
Wild Celery	6- 7
Sago Pondweed	8
Wampee—Duck Corn	9
Wapato Duck Potato.....	10
Wild Duck Millet.....	11
Smartweed	11
Ducksmear or Duckweeds.....	12
Coontail	12
Elodea	12
Water Milfoil	13
Widgeon Grass	13
Spatterdock or Yellow Waterlily.....	14
White Waterlily	14
American Lotus Waterlily	14
Burreed	15
Cattails	15
Reedgrass	15
Bulrush	15
Muskgrass	16
Water Cress	16
Chufa or Nutgrass	16
Eel Grass	17
Duck Wheat	17
Milo Maize	17
Baiting Ducks	17
Sweet Flag	18
Water Iris	18
Najas or Bushy Pondweed	18
Pheasant, Quail, Grouse—Food & Cover.....	18
Percentage of Various Wild Duck Foods Eaten.....	19
How to Get More Ducks.....	20
Facts About Duck Marshes.....	20
Sunlight Found Harmful to Fish & Fish Eggs.....	21
Necessity of Aquatic Vegetation for Fish.....	21
Information For The Muskrat Farmer.....	22
What Constitutes a Good Game Refuge.....	23
Terms	24
Guarantee	24
Where to Find the Various Food Plants.....	24
Professional Investigation and Planting Service.....	Inside back cover

Wisconsin Aquatic Nurseries

OSHKOSH, WISCONSIN

You Can Enjoy This Sport

Thousands
of Wild Ducks
Come to the
Waters Where
Their Natural
Foods Grow

"All together—Heave"

THIS world has never known a country equal to ours in size, having greater natural beauty of conformation, diversity of scenery and wealth of animal and plant life.

.... "Only as a day in the evolution of the world is 300 years, and after this length of time, *we, today*, are called upon to answer for our stewardship of plethora of riches and beauties. We have handled these natural wonders, this profusion of riches in a spirit of insane recklessness. . . .

.... "Today we are squarely facing the problem of reparation for we must make reparation or we must meet disaster. There is no question of whether we will or not, we must as a matter of protection. . . .

.... "We must save every brook and stream and lake. . . .

.... "We must save the natural resources which remain to us. . . .

.... "If we desire comfort, food and beauty for ourselves and any sort of a heritage at all to bequeath to our children each of us must lend a hand. Those of us who see the vision and most keenly feel the need, must furnish the motive power for those less responsive. . . .

.... "It is time for all of us to get together and in unison make a test of our strength. . . .

.... "One man could not do this work nor could two or three but working in unison for the same purpose many men could do it. . . .

"All together—Heave."

—Courtesy of Outdoor America.

GENE STRATTON-PORTER,

Foreword

A PRACTICAL game restoration program. In the following pages of this booklet are given suggestions and helpful ideas derived thru years of experience by specialists on the development of attractive places for Waterfowl, Fish, Muskrats and Upland Game Birds. How to propagate natural food and cover plants there-by improving the Hunting on both land and waters and better the Fishing in ponds and streams.

Like the Indians of old who wandered over prairie, mountain and stream in search of food to the better hunting grounds, so do the wild life migrate in search of the kinds of foods they like. Similar to the human being, they like a change of diet or a variety of foods, some species of wild life prefer certain foods more than others as the Mallard Duck searches for the Wild Rice so does the Canvas-back Duck scan the water for Wild Celery. Again in comparison, as the people populate the rich lands of Illinois near the great blue waters of Lake Michigan, against, the sandy deserts of Arizona. Why? Because in the land of prosperity they find contentment, plenty of food, shelter and enjoyment with the least exertion. It's the same with wild waterfowl, fish or game. Great numbers will congregate where they find a plenty of their favorite foods, good cover, greater protection and the easier feeding conditions.

SUPPOSE!

Just suppose you had a pasture with sufficient feed growing to keep one hundred cattle throughout the season.

Suppose instead of one hundred that you turned one thousand head in there to feed.

What would happen?

They would either starve or break out and wander into other fields where food is more plentiful.

It's the Same with Wild Ducks or Other Game

When the Wild Ducks stop on your waters or the game at your preserve and find little or no food, they go on their way in search of better feeding grounds, but if they find plenty of their natural foods growing there you can't drive them away.

To have the best of Hunting or Fishing all that is necessary is to start a growth of their favorite foods. Provide cover and give them a chance, they will do the rest. Soon you will have game or fish in abundance. One planting of these hardy perennials makes a permanently attractive place.

Good Planting Materials Important

AQUATIC seeds, tubers and plants are of a perishable nature and must be carefully handled by persons experienced in growing, handling and planting them to insure the expected results. Poor materials are a waste of time and money, no matter how cheap they may be. We have learned of many failures in growing Wild Rice and other aquatic materials were due to the fact that the seeds and tubers planted had been improperly handled by some amateur seedsman or naturalist who did not know how to care for same. Worthless materials were acquired.

Pioneer Aquatic Nurserymen

You can depend upon an Old Reliable Nursery with years of experience behind them and a reputation for Fair and Square dealings. Our materials are grown on properties from the far north to the extreme south to meet all conditions and climates. These seeds, tubers and plants are produced on twelve different properties located in various parts of the United States and Canada from the Gulf of Mexico to the interior of Canada and the Pacific Coast to Atlantic Ocean.

During our years of specializing in the development of more attractive feeding and breeding grounds for waterfowl, fish and game, we have studied the habits and haunts of this wild life. We have examined the contents of thousands of stomachs to determine their principal foods and studied the propagation of the natural foods of prime importance.

On the following pages it tells what, where, when and how to plant these natural foods. How to improve your hunting on waters or in the field. How to increase your sport with rod and reel.

*"There! Right by
that lily
pad,"*

—ZOWIE!—

*"What a
whopper!"
"That's where
they lay!"*

—Courtesy—James Heddon Sons—Dowagiac, Mich.

WILD RICE

To Lure the Marsh Ducks

Wild Rice Head

MALLARDS, PINTAILS, BLACKDUCKS, TEAL, WIDGEON AND CANADA GEESE fly hundreds and hundreds of miles to the Wild Rice Marshes. During Fall they find the ripened grains in great abundance, also shelter and hiding places among the tall growth. If there are several Wild Rice marshes in the vicinity, great numbers of these waterfowl will be seen passing from one marsh to the other. In the north only the freezing water will drive them out. Farther south they will stay on these good feeding grounds throughout the entire winter. Wild Rice is also very important as a Muskrat food.

A field of Wild Rice once established makes a permanent feeding ground, for Wild Rice reseeds itself from year to year.

Where to Plant

The best places for planting wild rice are in fresh water streams, sloughs, marshy lakes or ponds, having an outlet, soft mud bottom and waters from 6 inches to 3½ feet in depth. In sunny sheltered bays or coves on larger lakes, streams or rivers where it is protected from waves or strong currents are excellent places to plant. If planted upstream, parts of the plants and some of the seed produced, will be carried downstream each year, and become established in suitable places all along the waterway.

Near the seacoast wild rice will thrive in streams where the waters are not salty to taste and where the tide is not over four feet. Tame rice fields that depend on tides for their water supply are usually very good places for growing wild rice, or in old abandoned rice fields where there is a change of water.

Wild Rice is easy to grow. It does very well in Canada and the northern states above the Mason-Dixon line. It has proven a success in a few of the southern waters where conditions were nearly exact. A free change of fresh water is the main requirement.

Places Not Suitable

Years of experience has taught us that Wild Rice does not do well in landlocked lakes or ponds (those having no outlet) waters salty to taste, strongly alkaline or on white marl bottom soil. Such places as along the Mississippi River and its tributaries where the water rises and stays ten feet or more above the low water mark for several weeks during spring

are also unsatisfactory. Wild Rice will be drowned out by such a condition. If conditions such as described exist in your waters then we suggest the planting of other duck foods which are suited to such places, find them described on the following pages.

When to Plant

In Southern waters Wild Rice Seed may be planted from January to June. In the North as soon as the waters are free from ice during spring. We suggest planting as early as possible to give it full advantage of the entire growing season so that the expected results may be obtained by fall, fully matured plants, lots of feed and plenty of ducks. Good seed is important, we supply only the best, hardy Giant Wild Rice Seed, guaranteed to grow (see guarantee on page 24).

How to Plant

Wild Rice seed is very easily planted, all that is necessary is to broadcast the seed on the waters ranging in depth from 6 inches to 3½ feet. Plant where there is a fairly rich bottom soil, scattering about one handful of seed to each two or three square yards. The seed will immediately sink to bottom and within a short time will bury itself in the bottom soil.

A Wild Rice Bed 45 Days After Planting

We urge you to plant early as possible for in late spring the seed is inclined to sprout which makes it necessary to mix the seed with mud in order to sink it to bottom. Sprouted seed will float on the waters and is more bothersome to plant.

Our supply of wild rice seed is very limited, therefore, we suggest that you place your order early and be sure of your supply. We will store your seed until you wish shipment. Complete planting instructions are sent with each order. Fifty pounds will plant an acre.

Price \$0.75 per pound, quantities of 10 pounds or more. \$0.85 per pound quantities less than 10 pounds.

F. O. B. Oshkosh—add 10c per pound for postage if desire shipment prepaid. See page 24 for terms and discounts.

"Wild ducks, Mallards at least, do not go South because of cold weather. They go to the warmer climate because of better feeding conditions," states Mr. Edwin Ansrita in his article "Fever River, Where the Ducks Abound," from *Sportsman's Review*.

WILD CELERY

Brings the Diving Ducks

Wild Celery

CANVASBACKS, REDHEADS, BLUEBILLS, etc., darken the sky over the wild celery beds. A few years ago it was no trick at all to go out and get the limit of those big old Canvas-backs and Redheads, neither is it today where the Wild Celery beds abound. But, many of the vast Wild Celery beds of former years have disappeared; drainage, pollution and other causes have destroyed many and many an acre of them. We must utilize every lake, pond and stream to prolong this sport.

You will find no better way to increase your enjoyment during your hours of recreation than shooting these leery old divers. Thousands of them can be attracted to your local waters by establishing a growth of Wild Celery.

All parts of the plant are eaten by the Wild Ducks, but the tender winterbuds and rootstocks are relished most. Once the Wild Celery is established in your waters it will grow there permanently. There is no danger of the ducks destroying the growth for there are many tubers which break off remaining in the mud and many plants never molested which will produce the following year.

Important for Fish

Wild Celery being a submerged water plant is also important as a food and cover plant for fish. The plants support countless numbers of minute insect and animal life which fish depend upon for food. Fish also eat portions of the plants themselves. A bed of Wild Celery will keep your waters pure and clear and well oxygenated, which is important for fish life. The plants provide shelter and hiding places for young fish, where they can escape from their enemies, assuring many more of them reaching maturity. Wild Celery is an excellent winter food for Muskrats.

What and When to Plant

The Wild Celery propagates in three ways, by seed, runners and winterbuds, a sort of tuber. It is by planting these winterbuds (tubers) during the months of April, May and June that one can establish a quick and very good growth of Wild Celery in their waters. Results may be noticed by the following fall.

Where to Plant

Wild Celery grows best in waters from 2 to 10 feet in dept preferably on a mud bottom, although it will grow on sandy loam or clay. It requires fairly fresh waters, that is waters which are not salty to taste or alkaline. This plant does not grow well in landlocked lakes or ponds.

How to Plant

Get a quantity of clay and moisten until it becomes about the consistency of putty. Then take a handful of clay and mould it into a ball about the size of a tennis ball. Break this clay ball in two and place 2 of the Wild Celery tubers between the halves and press firmly together. After a quantity has been made take them to the desired planting place and drop one by one into the waters about 3 to 6 feet apart. We furnish more complete planting instructions with each order.

One Thousand Tubers plant one Acre.
Price \$32 per 1,000; \$4 per 100 Tubers.

Canvas-Back

Bluebill

A True Fisherman

The *American Forest Life* gives us this:

"Doin' any good?" asked Jim Gilgore, looking over the rail of the bridge.

"Any good?" answered the fisherman below. "Why, I caught 40 bass out o' here yesterday."

"Say, do you know who I am?" asked the man on the bridge.

The fisherman replied that he did not.

"Well, I'm the fish and game warden."

"Say," asked the fisherman, "do you know who I am?"

"No," replied the officer.

"Well, I'm the biggest liar in the country."

SAGO PONDWEED

Best All Round Duck Food

EARLY in the season the Sago Pondweed will attract Mallards and Teal, later the Canvasbacks and other divers. It's the most important of water plants for both wild ducks and fish. All species of wild ducks feed upon its roots, tubers and seeds which are produced in abundance. In fact all parts of the plant are eaten by the wild ducks, but they cannot destroy the growth for it has a very strong root system which makes a net work thru the bottom soils. Many roots and tubers remain unmolested to produce a growth the following year. One planting will make a permanent growth. Sago Pondweed produces more food for the Wild Ducks than any other aquatic plant. It is also an important food plant for the Muskrats.

Excellent for Fish

Like the Wild Celery the Sago Pondweed also provides food, cover and protection for the fish. It purifies and clarifies the waters, takes up the poisonous gases and puts forth oxygen into the waters. Various kinds of insect life deposit their larva on these plants which is food for the small fish. The Sago Pondweed plants shade and cool the under waters and will not only improve the fishing but also the quality of the fish.

What and When to Plant

The tubers of Sago Pondweed should be planted during April, May and early June. They will produce some food for the Wild Ducks the following Fall. These plants have a very strong root system and are indestructible by Carp.

Where to Plant

These plants are very hardy and will grow in almost any waters except salt waters. On practically every kind of bottom soil except gravel. They are submerged plants and do best in waters from 2 to 6 feet in depth, altho Sago Pondweed will grow in water from 1 to 10 feet in depth. When possible plant where there is some mud.

How to Plant

The tubers are planted in the same manner as Wild Celery tubers (see how to plant on page 7). Complete planting instructions are furnished.

One Thousand Tubers will plant an Acre.

Price \$42 per 1,000 tubers, \$5 per 100.

WAMPEE—DUCK CORN

A good Wild Duck Coaxer for Southern waters. Marsh ducks are particularly fond of the Wampee Seeds which shell off the stock in late fall like kernels of corn shelled from the cob. It will help hold the Mallards and other shallow water feeders after many other foods are gone.

When and Where to Plant

Wampee Plants may be transplanted during late May and the month of June. They grow in wet marshy boggy places or on fairly rich mud bottom in waters from 1 inch to 1 foot in depth. Plant them in the shallow waters of any lake, pond or stream.

How to Plant

Just step into your rubber boots and take a spade or spading fork and a quantity of plants to the place you intend planting. With the spade or fork lift a bit of soil, then place the roots of the plant into the opening after which replace the soil and step it in firmly with your boot.

Wampee Seed may be planted by mixing same with a good sticky clay and scattering small parts of the mixture here and there in the shallow waters. If it is your desire to plant this seed in a wet marshy place, simply make a hole with a stick, drop in several seeds and step the soil together closing the hole. We will furnish complete planting instructions with order. Five hundred plants or ten pounds seed will plant an Acre.

Sago Pondweed

Price \$15 per 100 plants, \$100 per 1000—\$1 per pound seed.

Wampee

Natural Foods are the *secret* of attracting large numbers of waterfowl, fish or game and holding them over an extended period. Make a liberal planting now.

Wapato Duck Potato

Rapid Growing Duck Coaxer

The Wapato Duck Potato is a very good all around Wild Duck Food. Canada Geese and Swan are also very fond of this plant. The species of Wild Ducks which will feed upon Wapato depends largely upon the water conditions under which it grows. If the waters remain nearly the same level the year around, Mallards and other shallow water ducks will feed upon the tender shoots, tubers and seeds which it produces. In places where there is an overflow or the water deepens during fall and winter, Canvasbacks and other divers will feed upon Wapato.

As a Muskrat food the Wapato is considered among those of the most importance and is often called Rat Potato.

Duck Potato

What and When to Plant

Wapato propagates largely by tubers which should be planted during April, May and June. Tubers planted in spring will produce fully matured plants the following fall.

Where to Plant

This plant is very hardy and will grow well in most any inland waters excepting those which are very strong of alkali or salts. It does the best in a fairly rich soil on damp lowlands, mud flats or in water from 1 inch to 1 foot in depth.

Black Duck

How to Plant

The tubers of the Wapato Duck Potato are very easily planted, all that is necessary is to step into your boots or waders and take a quantity of tubers to the place you wish to plant. Then push each tuber about one or two inches deep into the bottom soil, planting about three feet apart. More complete planting instructions sent with order. One thousand tubers plant one acre.

Price \$30 per 1,000 tubers;
\$3.20 per 100.

Wild Duck Millet

Attracts the Shallow Water Ducks

Wild Duck Millet
Seed Head

Also known as Goose Grass. Ranks almost as high as Wild Rice as a good Duck Coaxer in localities where Wild Rice cannot be grown. Wild Duck Millet grows to be 4 to 6 feet high and makes very good blinds as well as producing a large seed head with an abundance of food for the Wild Ducks.

Smartweed

A popular food with the Mallards. On the low-lands where Smartweed grows, from Canada to the Gulf, Mallards will surely stop during their fall flight. They are particularly fond of feeding upon Smartweed in places which overflow in fall, where they may dibble the seeds from the mud in shallow waters.

Important for Quail

Both the Wild Millet and Smartweed are considered as important food plants for upland game birds. They produce an abundance of seeds which Quail and Grouse are very fond of. In studying the habits of the game birds we find that twice daily they go to the nearby ponds or streams for water and like to linger there and feed.

What and When to Plant

Seeds of both Wild Duck Millet and Smartweed may be planted during months of May and June.

Where to Plant

The Wild Duck Millet and Smartweed grow under similar conditions on damp lowlands and mud flats. They have proven very good along the Illinois and Mississippi Rivers, also on old Rice fields and in such places as can be flooded during the duck season. They do best on a fairly rich soil.

How to Plant

It is well to break the soil where possible. One may use a drag, disc or grub hoe. Then sow the seed broadcast, after which drag or rake the planted area so as to cover the seed.

Forty pounds will plant one acre.

Wild Duck Millet or Smartweed
Seed

Price \$19 per 100 lbs.
per pound, 20c.

Ducksmeat or Duckweeds

Ducksmeat

Coontail

Elodea

How to Plant

Just drop a handful of plants into the waters about every two feet.

Five bushels of plants to the acre.

Price \$6.00 per bushel plants.

\$5.50 per bushel 10 bu. lots.

All kinds of Wild Ducks feed upon the Duckweeds. The shallow water feeders make up a larger percentage of their food of this plant than the divers, because it grows largely in shallow waters. It is also important for fish.

Surface Floating Duckweeds

This is a very small plant (less than $\frac{1}{4}$ inch in size) which floats in great clusters upon the surface of the waters.

Submerged Floating Duckweeds

Another very small plant (less than $\frac{1}{4}$ inch in size) which floats in great masses, submerged near the bottom.

Coontail Plants

Seeds of the Coontail Plant are eaten by many species of Wild Ducks, occasionally they will feed upon the foliage. This plant provides both food and cover for fish.

Elodea

The Elodea is of value as a food plant for marsh ducks. It has a greater value as a food and cover plant for fish. It is also a very good water purifier.

What, When and Where to Plant

All of the above plants grow under very similar conditions and are transplanted in the same manner during the months of June, July and August. These plants should be transplanted into fresh waters from 1 to 6 feet in depth on any kind of bottom in ponds or quiet sheltered bays and coves. The above plants are indestructible by Carp.

Water Milfoil

An excellent plant for fish ponds. Water Milfoil supports numerous kinds of animal life which is food for the fish. It furnishes cover, also shades the under water and purifies it, thereby, keeping it cool and fresh during hot summer. It is also of value as a waterfowl food.

Water Milfoil

Widgeon Grass

Redheads, Bluebills and Canvasbacks feed upon the roots, seeds and leaves of Widgeon Grass. It is considered the best Wild Duck Attraction for brackish waters. Mallards and other marsh ducks feed upon Widgeon Grass during low tide where it grows in bays and streams which are affected by tides.

Widgeon

When and Where to Plant

Water Milfoil plants are transplanted during June and July. It produces most satisfactorily in fresh waters from 3 to 9 feet in depth on a mud bottom in slow running streams or sheltered bays and coves.

Widgeon Grass plants are also transplanted during June and is a brackish water plant. It grows in salt water but never in that of full ocean strength. It thrives in rivers affected by ocean tides. This plant grows in waters from 1 to 10 feet in depth on a mud bottom.

How to Plant

Both the Water Milfoil and Widgeon Grass plants are planted by simply pushing the roots of the plant down into the mud with an oar or a paddle in two to six feet of water.

Three bushels of plants to the acre.

Price Water Milfoil Plants

\$6.00 per Bushel.

\$5.50 per bu. in 10 bu. lots.

Widgeon Grass Plants

\$12.00 per Bushel.

\$10.00 per bu. in 10 bu. lots.

Redhead

Lotus Waterlily

Waterlilies

Spatterdock

Also known as Yellow Waterlily make a fine Wild Duck attraction when planted in addition to other natural foods. Marsh Ducks feed upon the seeds in early fall.

Spatterdock

Spatterdock is considered an excellent winter food for the Muskrat as it grows in waters at a depth beyond the freezing point.

White Waterlily

An excellent food and cover plant for fish. White Waterlilies are very ornamental and will add to the beauty of your waters.

American Lotus

Has some value as a food and cover plant for fish and is also of some value as a wild Waterfowl food. American Lotus is very ornamental having large cream color flowers.

When and Where to Plant

Tubers or rootstocks of Spatterdock and White Waterlilies are planted during May and June. Seed of the American Lotus may be planted at any time. All waterlilies do best on a mud bottom in waters from 1 to 4 feet in depth.

Pintail or Sprig

How to Plant

Tubers and rootstocks are very easily planted. Cut a fairly straight stick about 5 feet in length which is between 1 and 2 inches in thickness. Whittle off one side at end to make a flat surface, then drive two nails into this flat surface on a slant to make a sort of crotch. Place a tuber into this crotch and push it into the mud about 3 or 4 inches. Plant these about 3 feet apart. These tubers are usually planted from a boat.

Seven hundred fifty tubers will plant one acre.

American Lotus seed is simply broadcast using 10 lbs. to plant an acre.

PRICES

White Waterlily Tubers \$.15 each, \$10 per 100, \$75 per 1000.

Spatterdock Roots \$.20 each, \$15 per 100, \$125 per 1000.

American Lotus Waterlily Seed \$1 per pound.

Burreed

Cover Plants

Burreed

Is a valuable plant to have growing in your marsh. Seeds which resemble kernels of corn, shell from the large prickly burr during fall and are eagerly eaten by Marsh Ducks.

Reedgrass

Burreed grows from 3 to 5 feet in height and during early summer makes ideal nesting places for the Wild Ducks, also provides blinds for the hunter during fall.

Cattails

These plants grow to be 5 to 7 feet high and make good blinds. Cattail plants rank very high as a food, also cover plant for the Muskrats.

Reedgrass

Makes the very best blinds for hunters. It grows from 5 to 8 feet with numerous long narrow leaves, during late fall in the North, Wild Ducks will seek shelter from the cold winds among the Reedgrass. It is also of importance for the Muskrat.

Bulrush

The Bulrush will grow in waters having very sandy bottoms where other vegetation cannot be grown. It provides excellent blinds for the hunter and good shelter for the Ducks.

When and Where to Plant

The Burreed, Cattail and Reedgrass grow best on a fairly rich soil either on wet lowlands or in waters from 1 to 18 inches in depth. Bulrush will grow on any kind of bottom except stone, in waters from 1 inch to 3 feet in depth. The roots of these plants should be transplanted during May and June.

How to Plant

Slip on your boots, take a spade or digging shovel and a quantity of roots to the place you are going to plant. In the shallow waters about three feet apart, take up a shovel full of soil and place 1 root in each hole, then replace the soil and press it firmly into place with your boot. One Thousand Roots will plant one Acre.

PRICE

\$ 8.00 per 100 Roots.

\$75.00 per 1000 Roots.

Shoveler or Spoonbill

Muskgrass

Muskgrass

A few bushels of Muskgrass planted during late summer or fall will produce an excellent feeding place for the Wild Ducks the following season. They feed upon the foliage as well as the many small tubers which are produced. Both Marsh Ducks and Diving Ducks feed upon Muskgrass. One will also increase the sport with rod and reel, for Muskgrass is a valuable food and cover plant for fish.

Broadcast bits of the plants containing (oogonia) seed spores upon the waters anytime from July to December. Muskgrass grows in fresh or alkaline waters from 2 to 12 feet in depth on almost any kind of bottom. One requirement is that the waters contain some lime which will be indicated by shells or shell bearing creatures such as snails or clams in the waters. Four Bushels will plant an Acre.

Water Cress

The Water Cress is used largely by breeders of Wild Ducks, who consider it very valuable as a food plant for their Duck Farms. It grows very rapidly.

When, Where and How to Plant

Water Cress may be started either by planting seed or transplanting plants from April to July. It grows in cool waters, usually where there is a slight current, like in springs, brooks, small streams or shallow ponds. In transplanting plants simply set them out by hand in shallow waters 1 foot or less in depth. Seed is best planted by mixing it with mud and dropping bits of the mixture here and there in the waters. One Thousand plants or 3 pounds of seed for one Acre.

Watercress

Chufa, Nutgrass

A very good all round duck food for places which are very dry in summer and flood during the duck season. Chufa does particularly well in the South and may be planted anytime from March to July. One bushel of the nut-like tubers will plant an acre. In planting break the soil, then broadcast the tubers and rake or drag planted area to cover tubers.

PRICES

Muskgrass Seed Spores \$5 per bushel.

Water Cress Plants \$5 per 100.

Water Cress Seed \$9 per pound.

Chufa Tubers \$15 per bushel.

Salt Waters

Eel Grass

The Eel Grass is the only important Wild Duck food plant which we supply that will grow in waters which are salty. All kinds of Wild Ducks will feed upon the seeds and foliage.

When, Where and How to Plant

Plants of the Eel Grass are transplanted during June in quiet, shallow salt waters covered at low tide. In transplanting these simply set them out in shallow waters during low tide by making a hole in the soil and placing the roots in it; then replace the soil pressing it firmly about the plant.

Price \$20 per bushel.

\$15 per bu. 5 bu. lots.

Eel Grass

For Wild Ducks, Quail or Grouse

Duck Wheat

Or Goose Buckwheat is a very rapid growing plant. It produces an abundance of seed which Wild Ducks and Geese are fond of. Most favorable results are obtained when seed is planted in June or July on places which go dry or can be drained during summer and flooded during the duck season.

Milo Maize

This plant is used in the same manner as Duck Wheat and is planted about the same time under similar conditions. Both Quail and Grouse are very fond of the Wild Buckwheat and Milo Maize, plant a little space here and there in the waste places.

Chufa

How to Plant

Break the soil with a plow, disc or drag, then broadcast the seed using about 50 pounds to the acre and drag or rake the planted area to cover seed.

Price \$20 per 100 pounds.

Baiting Ducks

Sportsmen wishing to enjoy some good sport while allowing the natural food plants time to become established will often find it very helpful to bait the ducks by placing a mixture of corn, barley, wheat, buckwheat, or other grains in shallow waters where the bottom is fairly hard. This is a very bothersome and expensive method of permanently attracting Wild Ducks, as it necessitates the replacing of grain every few days during the entire hunting season.

Sweet Flag Seed \$2.00 per lb.

Water Iris Seed \$2.00 per lb.

Both the Sweet Flag and Water Iris are important food and cover plants for Muskrats. They are also important cover for waterfowl and provide excellent nesting places. Seed may be planted during spring in wet low lands or marshy places.

Naias Plants with Seed . . . \$10.00 per bu.

The Naias is an important Wild Duck Food. It grows in waters ranging in depth from 1 ft. to 5 ft. on a sand, clay or mud bottom in fresh waters. Should be planted during August or September.

Lespedeza Clover Seed \$50.00 per 100 lbs.

Hairy Vetch Seed \$35.00 per 100 lbs.

The Lespedeza Clover is a hardy perennial and important as a food for Upland Game Birds. Hairy Vetch is also important for Quail, Grouse and Pheasants. Seed should be sown during May.

Important for Upland Game Birds and Animals

TREES

Hackberry (1-1½ inch base).....	\$12.00 each
Hawthorn (3-5 feet high).....	2.80 "
Wild Crab (3-4 feet high).....	2.00 "
Mulberry (2-3 feet high).....	7.50 "
English Oak (6-8 feet high).....	8.00 "
Pussy Willow (4-5 feet high).....	1.20 "
Red Cedar (2-3 feet high).....	8.00 "
Scotch Pine (2-3 feet high).....	5.00 "
Douglas Fir (2-3 feet high).....	13.00 "

SHRUBS

Hazelnut (18-24 inches).....	1.00 "
Honeysuckle (3-4 feet).....	1.20 "
Chokecherry (3-4 feet).....	1.60 "
Smooth Sumac (3-4 feet).....	1.00 "
Mountain Currant (18-24 inches).....	1.10 "
Wild Rose (18-24 inches).....	1.50 "
Swamp Rose (2-3 feet).....	1.30 "
American Elder (3-4 feet).....	1.40 "
Buffalo Berry (2-3 feet).....	1.20 "
Snow Berry (2-3 feet).....	1.00 "
Nanny Berry (3-4 feet).....	1.60 "

VINES

Bittersweet (2 years).....	1.00 "
Wild Grape (2 years).....	1.00 "
Raspberry Plants.....	2.50 doz.

NOTE—Trees, Shrubs and Vines listed above are important as food producers and cover plants for Upland Game Birds and Animals. Prices are F. O. B. Nurseries. No orders accepted for any quantity or assortment amounting to less than \$10.00. Delivery of stock will be made at the proper time for transplanting and is guaranteed to grow in accordance with our liberal guarantee printed on page 24 of this booklet. On orders of 12 pieces of one kind we offer a 10% discount or on quantities of 30 or more of one kind a 20% discount off above prices.

We have over fifty other trees, shrubs and vines and will be glad to quote on any particular kind in which you are interested.

Aquatic Plants and Percentage of Each Eaten by the Best Known Varieties of Wild Waterfowl

This list compiled by us from data obtained from bulletins published by the U. S. Department of Agriculture, Bureau of Biological Survey, Washington, combined with knowledge gained by the examination of the contents of stomachs of wild waterfowl, taken from different sections of U. S. and Canada.

MALLARD 10% of Food Animal 90% of Food Vegetation	PINTAIL Known as Sprig 13% of Food Animal 87% of Food Vegetation	BLUEBILL 15% of Food Animal 85% of Food Vegetation	REDHEAD 14% of Food Animal 86% of Food Vegetation
22% Sedges Cyperus Rushes Burreed Chufa Wampee 14% Grasses Wild Rice Wild Millet 9% Smartweeds Duck Wheat Pondweeds Sago Pond Plant Naiaa Redhead Grass Brownleaf Eel Grass Widgeon Grass 6% Duckweeds Duck Meat 6% Coontail 5% Wild Celery 4% Hackberries 4% Wapato and Delta Duck Potatoes 3% Acorns 4% Waterlily Banana " Yellow " American Lotus 3% Water Milfoil 1% Muskgrass	28% Pondweeds Brownleaf Redhead Grass Sago Pond Plant Eel Grass Widgeon Grass Naiaa 22% Sedges Bulrush Three Square Rush Chufa Wampee 11% Grasses Wild Rice Wild Millet 7% Smartweeds Duck Wheat 5% Muskgrass 4% Delta and Wapato Duck Potato 3% Waterlily Banana " Yellow " Wokas American Lotus 1% Duckweeds 1% Milfoil 1% Wild Celery 4% Unidentified and Miscellaneous	31% Wild Celery 15% Pondweeds Sago Pond Plant Naiaa Redhead Grass Brownleaf Eel Grass Widgeon Grass 9% Muskgrass 7% Wapato and Delta Duck Potato 5% Duckweeds 4% Coontail 4% Grasses Wild Rice Wild Millet 4% Sedges Cyperus Rushes Burreed Chufa Wampee 2% Waterlily Banana " Yellow " Wokas American Lotus 1% Water Milfoil 3% Unidentified and Miscellaneous	30% Wild Celery 17% Pondweeds Sago Pond Plant Naiaa Redhead Grass Brownleaf Eel Grass Widgeon Grass 9% Wapato and Delta Duck Potato 5% Duckweeds 5% Muskgrass 6% Grasses Wild Rice Wild Millet 6% Sedges Cyperus Rushes Burreed Wampee 4% Waterlily Banana " Yellow " Wokas American Lotus 1% Water Milfoil 1% Coontail Unidentified and Miscellaneous
TEAL Blue-Winged 27% of Food Animal 73% of Food Vegetation	BLACK DUCK 24% of Food Animal 76% of Food Vegetation	CANADA GEESE 3% of Food Animal 97% of Food Vegetation	CANVASBACK 8% of Food Animal 92% of Food Vegetation
22% Sedges Cyperus Rushes Chufa Wampee 16% Pondweeds Sago Pond Plant Naiaa Redhead Grass Brownleaf Eel Grass Widgeon Grass 14% Grasses Wild Rice Wild Millet 9% Smartweeds Duck Wheat 4% Muskgrass 2% Waterlily Banana " Yellow " Wokas American Lotus 1% Water Milfoil 1% Burreed 4% Unidentified and Miscellaneous	33% Pondweeds Sago Pond Plant Naiaa Redhead Grass Brownleaf Eel Grass Widgeon Grass 11% Grasses Wild Rice Wild Millet 9% Sedges Bulrush Burreed Cyperus 6% Smartweeds Duck Wheat 5% Waterlily Banana " Yellow " Wokas American Lotus 2% Coontail 4% Wapato and Delta Duck Potato 3% Wild Celery 1% Muskgrass 2% Miscellaneous	29% Grasses Wild Rice Wild Millet 24% Sedges Cyperus Rushes Burreed Chufa 12% Wapato Some Delta 8% Smartweeds Goose Buckwheat 5% Wild Celery 4% Pondweeds Sago Pond Plant Naiaa Redhead Grass Brownleaf Eel Grass Widgeon Grass 2% Coontail 1% Water Milfoil 1% Wampee 1% Elodea 8% Upland Plants and Grains 2% Miscellaneous	38% Wild Celery 18% Pondweeds Sago Pond Plant Naiaa Redhead Grass Brownleaf Eel Grass Widgeon Grass 8% Wapato and Delta Duck Potato 6% Waterlily Banana " Yellow " American Lotus 6% Muskgrass 5% Grasses Wild Rice Wild Millet 5% Sedges Cyperus Rushes Wampee 1% Coontail 1% Water Milfoil 1% Duckweeds 3% Unidentified and Miscellaneous

This is the average percentage of foods covering a large territory and wide range of growing conditions, which may vary in different localities where some plants grow more abundantly than others.

How To Get More Ducks

If Jack Miner, with nothing but a brick yard pond, a few live decoys, plenty of food and a lot of perseverance can bring thousands of geese from all points of the compass, surely the great State of Pennsylvania, and all the other states, can materially increase the waterfowl supply within their boundaries.

Because a state is not in the beaten path of the large regular waterfowl flyways is no excuse for hesitancy. Mr. Miner's experience shows that the ducks and geese will go many miles out of their way to get a good meal at a cafeteria that is properly safeguarded against intruders.

Many States have been planting duck foods in suitable waters, and I am informed the results have been good in many places. If the duck hunters want more of this work done they must not only make their wants known, but they must also get busy and do a lot of duck food planting, lake building, creating refuges, etc. —Courtesy of Outdoor America.

Facts About Duck Marshes

Nice Pair of Mallards

There are millions of acres in this country that have been drained to make farming lands. Much of it would be worth more today if in its original state. There is more money in one hundred acres of good duck marsh than there is in an equal acreage of corn. The duck marsh properly handled will exceed the profit of the average farm land.

To attract wild fowl to your marsh lands you must take means to conserve a sufficient amount of water, plant the food on which they thrive, provide suitable cover and protect them from their natural enemies. This will attract the birds and you can hold them if the food holds out and you do not shoot too heavily.

The investments that are made in this direction will be well repaid.

—Courtesy Forest and Stream.

Don't cheat. The man who illegally takes game or fish robs his fellow man and defrauds his state. He robs posterity of its rightful heritage. It is the duty of every good citizen to report violations of fish and game laws and to endeavor to cause the erring brother to see the error of his ways.—*Montana Wild Life Magazine.*

A case where eyes are bigger than stomach

—Courtesy Field and Stream.

Sunlight Found Harmful to Fish and Fish Eggs

—Courtesy Alabama Sportsman.

As a result of experiments at its Holden, Va., hatchery, the Bureau of Fisheries, Department of Commerce, has found that exposure to sunlight is detrimental to eggs, fry and fingerlings.

The experiments, it was stated orally on November 4, were designed to determine whether the remarkable curative results ascribed to ultra-violet rays and sunlight were actual. The bureau found that the doubts of fish culturists on this score were well founded, continuous exposure to direct sunlight being found as not only of no benefit but definitely harmful to eggs and young fish.

Necessity of Aquatic Vegetation for Fish

Many of the plants which are important food plants for waterfowl are also important food and cover plants for fish. Therefore, one will improve both hunting and fishing by establishing a growth of aquatic vegetation in their waters.

Plant life takes a very important part in the purification of waters by taking up the poisonous gases and sending forth oxygen into the waters which is essential to fish life. These plants also support countless numbers of minute animal life upon which the young fry feed. They also provide excellent shelter and hiding places for younger fish to hide and escape the larger ones which are of a cannibalistic nature, feeding upon one another.

Aquatic vegetation assists in the clarification of the waters and shades the under waters keeping them cool which is very helpful and healthful to the fish life.

In order that there be a plentiful supply of fish in any waters it is first necessary to protect the small fry. They cannot feed upon the larger insect life or upon one another as the larger fish do and as a result in waters barren of aquatics, millions and millions of the fry perish.

Information for the Muskrat Farmer

Man has been engaged in the trapping of fur-bearing animals since the early ages. The women of the stone age wore furs as clothing, the modern women wear furs, not alone because of the warmth, but for the beauty and their personal adornment. Trappers, spurred by high prices, have ruthlessly depleted the wild supply. The drainage and reclamation of swamp lands have destroyed the breeding grounds of millions of muskrats. So, if we are to have a dependable supply of fur, they must be raised. Statistics compiled by Frank G. Ashbrock of the U. S. Biological Survey, show that the muskrat is the most important of all fur bearers. More than fifty per cent of all fur used today is muskrat. His glossy pelt is not only used in its natural state, but when dyed is sold as Hudson seal, river mink, southern beaver, neutria, otter, sable and many other popular furs. For the past few years the demand for muskrat pelts has exceeded the supply by from fifteen to twenty million pelts. The result of this demand has prompted the commercial raising of this little fur bearer, by some of our largest manufacturing furriers and far-sighted individuals. Muskrat farming is a business, the same as banking, manufacturing or mining. It is as practical as the raising of sheep, cattle or hogs, the difference being that it is ten times as profitable.

To successfully raise muskrats one must have a spring-fed marshy swamp with an outlet which can be dammed, so that a uniform water level may be maintained. The depth of the water and musk, or floating bog, must be sufficient so that it will not freeze to the bottom in the most severe Winter, the result of which would be cutting off of the food supply and the starvation of the animals, unless artificially fed. The swamp lands must abound in the natural foods of the muskrat, such as cat-tails, bulrushes, duck millet, three-blade grass, wild rice, wapato and wild celery. The location must also have high dry ground surrounding the swamp on which fences are built. Proper fencing is of importance. A crop of root vegetables, such as carrots, parsnips and sugar beets, should be planted, stored in root cellars and fed during the Winter months, by using feeding houses. On ranches where the muskrats are in the habit of using the feeding houses, the rancher has the opportunity of scientifically feeding during the breeding season, which results in a larger number of young litters. Another decided advantage of feeding houses is the ability to easily catch the animals. Trap doors are over the entrances; by closing them when one wishes to make a catch the muskrat cannot escape. This enables the rancher to market only prime pelts, which command the highest prices.

If a muskrat farm is ideally located, properly fenced and well planted with natural foods, it is bound to be a money-maker. It is a never-failing crop, unaffected by hot, cold, wet or dry weather.

Muskrats are hardy and immune from diseases. They multiply rapidly, being the most prolific of fur bearers. U. S. Government Bulletin 869 states that from actual observation one female produced thirty-three young in one breeding season. An interesting experiment has recently been concluded in Manitoba. A pair of muskrats were put into a pen and in nine months they and their progeny increased to the astounding total of 138.

It has conclusively been proved that the young female born in the Spring will produce the same Fall. We have had increases of a second litter in the Fall from a female born in the Spring; this, however, is unusual. The next Spring she has the average litter, which is eight or ten young.

—Courtesy American Field.

What Constitutes a Good Game Refuge

It is a common error that national, state and municipal forests are per se good game refuges. President John B. Burnham of the American Game Protective Association points out that this is not necessarily true. In order to serve any good purpose as game refuges forests must be attractive to wild animal and bird life. They must contain food as well as shelter.

The tendency in management of public forests is to plant and promote the growth only of such trees as will in time make merchantable timber, with no thought

of such other free growth, shrubbery and other plant life as is necessary to an attractive home for birds and animals.

Game cannot live without food. "The reason," says Mr. Burnham, "why many game refuges are absolutely worthless (aside from the question of vermin control) is that, to put it figuratively, they provide only a safe house, with no kitchen and no order in the grocery store. You cannot expect wild animals and birds to flock to foodless refuges just because they are planted with commercially attractive trees. Of the conifers, hemlock, white cedar and balsam, when small, furnish food for deer and hares in the Winter season. Pine has practically no food value and spruce none whatever. In Summer even deer and rabbits will find nothing they can eat in a typically planted forest."

Mr. Burnham points out that for every coniferous tree planted there should be a number of deciduous trees—including fruit and nut-bearing trees. Game wants sunlight, too, and plenty of it. So openings and gaps in the forest must be left which will encourage undergrowth. At least half of the forest area should be left unoccupied by commercial trees if it is to be a good game refuge.

Quoting again from Mr. Burnham: "We should let Mother Nature have something to say as to what happens on this 50 per cent of so-called wasteland. There is nothing more valuable for our primary object than weeds and berry briars, sumachs, wild apples and grapes, barberries and thorn apples, and where Nature

leaves the ground bare give her the benefit of the doubt and believe that she may know something after all. Partridges need places to dust and wild grasses and plants are important in the game's dietary. Some refuges should have no forest at all. We must not forget the wild grass swamps for pheasants and the duck sloughs and woodcock swales. Also some fishing lakes and streams may have good enough shores as they are naturally and do not require 'improvement.' Shores have a way of their own and are not

to be held too strictly to account for natural perversity."

TERMS

Prices listed herein effective January 1st, 1929, this list cancels all previous lists and quotations. These prices the F. O. B. Oshkosh or other shipping points unless otherwise stated and subject to change without notice.

10% discount off prices listed on all orders placed before May first. **2%** additional discount if payment accompanies order.

We urge you to order early and be sure of your supply. Cash or satisfactory reference with order, if purchaser has no credit established with us. Shipments will be sent C. O. D. if so desired. Those ordering during January and February for later spring delivery we offer the courtesy of an open account shipment payment due 10 days after date of shipment.

Accounts not paid when due are subject to sight draft also interest charged at the rate of **6%** per annum.

These aquatic seeds and other planting materials are perishable and must reach their destination in the shortest possible time and should be shipped by express. If you wish shipment by Parcel Post or Prepaid Express please send sufficient money to cover same otherwise we will ship charges collect.

Freight shipments can be made on dry seeds, shrubs and trees as listed. Wild Duck Millet, Smartweed, Chufa, Duck Wheat, Milo Maize and all items listed on page 18 under trees, shrubs and vines.

For our reference write New American Bank, Oshkosh, Wis.; Stanley C. Arthur, Department of Conservation, New Orleans, La.; American Game Protective Assn., Woolworth Bldg., New York City; American Wildfowlers Assn., Washington, D. C.; I. T. Quinn, Commissioner of Conservation, Montgomery, Ala.; Peter S. Twitty, Commissioner of Conservation, Atlanta, Ga.; any outdoor sportsmen's magazine such as Field and Stream, Outdoor Life, Outdoor America, etc.

GUARANTEE

We guarantee our seeds, roots, tubers and other nursery stock to grow and produce satisfactory results. If a complete planting or any portion fails to produce what you consider a satisfactory growth after allowing a sufficient time to grow and mature, we will agree to furnish an equal quantity to that which fails at one-half the list price.

You are the judge as to whether or not your planting has proven a success. If dissatisfied with the results, tell us about it and we will replace the order at half-price, or an equal value of any other planting materials you wish to select from our list at one-half list price.

Failures with good germinating seed and hardy plants, tubers, shrubs, etc., such as we supply are few and far between. Marsh and water plants are very hardy and sure to grow.

Where to Find the Various Food Plants

<i>Duck Foods</i>	<i>Fish Foods</i>	<i>Muskrat Foods</i>	<i>Upland Game Bird Foods</i>
Pages			
4- 5- 6	6- 7	6- 7	11-15
7- 8- 9	8-12	8-10	17-18
10-11-12	13-14	11-14	
13-14-15	16	15-16	
16-17			

Complete Planting Instructions Sent with Each Order

WISCONSIN AQUATIC NURSERIES (Box 331) OSHKOSH, WIS., U.S.A.

STATE OF LOUISIANA
DEPARTMENT OF CONSERVATION
NEW ORLEANS

J. EVERETT
COMMISSIONER

July 10, 1925.

Mr. Wm. O. Coon, President,
Wisconsin's Aquatic Nurseries,
Oshkosh, Wis.

My dear Mr. Coon:

You will find herewith checks from the department covering the duck foods purchased from your nurseries for the planting campaign carried on in 1925 for the Russell Sage tract (Marsh Island), the State Wild Life Refuge, the Rockefeller Foundation Sanctuary and the Pass à la Loure Public Hunting grounds under your personal supervision.

At this time may I not be permitted to thank you and your concern for the manner in which this planting was done and the excellent condition of the wild celery tubers, Elodea, wampee, coon-tail, spatterdock, ducks-meat, sago pondweeds, pickerel plants, wild duck's millet, widgeon grass, etc., on their arrival here in the South. I know you join with us in trusting that this planting, which, as you say, is the largest and most extensive of its kind ever undertaken by any state or private concern, will prove all we hope for it.

The Louisiana wild waterfowl refuges are sanctary every winter for hosts of migratory wild ducks and geese of this nation and Canada and, in the circumstances, are of utmost importance to the sportsmen and conservationists of the entire North American continent, and I believe that you must be gratified that your aquatic nurseries secured this epochal contract which, I may add, was carried out to the very letter.

Commissioner Everett joins me in thanking you for your personal services in directing the planting and for many other valuable acts of coöperation rendered during your stay in Louisiana.

Very truly yours,

Stanley C. Arthur

Director, Division of Wild Life,
DEPARTMENT OF CONSERVATION.

SCA-EF

The following is an excerpt from a Bulletin of the "American Game Protective Association".

MANY DUCK RESORTS ARE BARREN

Commenting on the wild duck situation in certain portions of the country last fall, a very competent observer writes as follows:

"It is true that the supply of waterfowl was abundant last fall where good feeding grounds are found, but I believe on the whole the number of ducks in the aggregate is 'on the toboggan.' Enormous flocks invaded the good feeding waters, but there are thousands of lakes and marshes which formerly served as stopping places for them that were last fall without birds.

"In Minnesota, for example, Lake Christina, one of the best canvasback lakes in the state, was actually cleaned of aquatic growth the previous fall by myriads of ducks; but this year, being practically barren of food, had no ducks. The birds formerly resorting to this feeding place went to other lakes, and this accounts for apparent increases there. The result of this congestion will be the cleaning out of more lakes and marshes to the last seed and tuber, leaving practically nothing to replenish the growth.

"The famous Lamprey Pass Club of Forest Lake, near St. Paul, did not even open its club-house. There were no ducks there at all. Heron Lake, also in Minnesota, a most wonderful duck resort, was but a shadow of its former self—though this was in part due to the ravages of carp.

"The number of ducks per acre of good feeding grounds is too great. If some action is not taken to replenish and establish more feeding grounds within the next decade, there is certainly going to be a very marked decrease in the total number of wild ducks.

"We are certainly confronted with a great problem, not only of stopping indiscriminate drainage but in restocking millions of acres of water with natural food. Worthless lands must be flooded to create more marshes, and these must be stocked with food. Most important of all, plenty of large refuges, well stocked with foods, must be provided to preserve a sufficient number of birds to maintain the stock and supply the increasing number of hunters."

The solution of the problem so vividly described lies in federal and state refuge legislation, with adequate provision for financing.

COPY OF LETTERS WRITTEN BY TWO OF OUR SATISFIED CUSTOMERS

New Orleans, La., May 21, 1926

Mr. Hy. C. Morrison,
112 8th Street,
Campbell Building,
Augusta, Ga.

Dear Sir:

Due to my absence from the city on field surveys your letter of May 3rd, relative to the Wisconsin Aquatic Nurseries has remained unanswered.

I am very glad indeed to state that we had most successful results from what planting we did with seeds and plants secured from the Wisconsin Aquatic Nurseries and from the way that a large number of the plants combatted the unprecedented water influx. I am sure that the planting you plan to do in South Carolina will prove satisfactory.

I will be very glad to send you a copy of our biennial report, which will contain a review of what was done in the planting campaign.

I cannot recommend too highly the efficiency of the Wisconsin Aquatic Nurseries.

Very truly yours,
Stanley C. Arthur
Director, Division of Wild Life,
Department of Conservation

Montgomery, Alabama, Dec. 1, 1927.

Wisconsin Aquatic Nurseries

Oshkosh, Wisconsin

Attention Mr. Coon

Dear Sir:

Your letter has just reached me. Would have been glad to meet you while in Montgomery. Would have been delighted to have had you inspect our lake. The greatest trouble with planting anything in this lake is the various growth. The soil is very rich, grows all kinds of moss and other water plants. The moss is the great trouble, it is so dense it is hard to get any kind of seed down to the soil. However our WILD RICE grew fine, our SPATTERDOCK and LOTUS WATER LILY are well set, made a fine crop this year.

To show what NATURAL FOOD will do, we have ten Wild Ducks now to every one last year. If we can just get some other plants well set, we will have the greatest duck lake in the country.

We have so many ducks now I believe they would destroy the tubers if we were to plant more. I know they would get most of them. How about spring planting? How late can Muskgrass and Sago Pond Weed be planted successfully? Will give you an order for some of both at the right time.

JFY:S

Very truly yours,

(Signed) J. F. YARBROUGH

WISCONSIN AQUATIC NURSERIES

P. O. BOX 331
OSHKOSH, WIS., U. S. A.

ORDERED BY _____

ADDRESS _____

SHIP TO _____

ADDRESS _____

SHIP ON _____ EXPRESS _____ PARCEL POST _____

DATE _____

GUARANTEE

WE GUARANTEE ALL PLANTING MATERIAL TO PRODUCE A SATISFACTORY GROWTH. YOU ARE THE JUDGE. IF THE ENTIRE PLANTING OR ANY PORTION FAILS TO PRODUCE; FOR THAT WHICH FAILS, WE WILL FURNISH AN EQUAL VALUE OF ANY PLANTING MATERIAL YOU WISH TO SELECT FROM OUR LIST, AT HALF PRICE.

QUANTITY	MATERIAL	PRICE
	LB. GIANT WILD RICE SEED	\$
	WILD CELERY TUBERS	
	SAGO PONDWEED TUBERS	
	LB. WAMPEE SEED OR PLANTS	
	WAPATO DUCK POTATO TUBERS	
	LB. WILD DUCK MILLET SEED	
	LB. SMARTWEED SEED	
	BUSHELS DUCKSMEAT PLANTS	
	TOTAL	
	LESS 10% DISCOUNT	
	AMOUNT OF ORDER	\$

FOR PRICES REFER TO BOOKLET. IF YOU WISH US TO PREPAY TRANSPORTATION CHARGES, SEND SUFFICIENT MONEY TO COVER SAME; OTHERWISE WE WILL SHIP COLLECT. ALL PRICES F. O. B. OSHKOSH. WE WILL SEND SHIPMENTS OUT ON OPEN ACCOUNT IF YOU SO DESIRE, BILLING YOU FOR SAME, PAYMENT DUE WITHIN TEN DAYS AFTER SHIPMENT.

(SEE TESTIMONIAL LETTERS ON REVERSE SIDE OF THIS BLANK)

Waters, Marshes and Upland Properties

Examined, Planned, Planted and Made Attractive to Wild Ducks, Fish, Muskrats or Upland Game Birds

The best method of procedure in developing an attractive feeding ground for either waterfowl, fish, or game is to employ the services of one of our specialists to come and make a personal examination of the property and supervise the planting thereof. Where Leagues or Associations plan to develop several lakes or properties, Clubs or private individuals controlling large areas plan to make plantings to the extent of \$500 or more we recommend this service for best and quickest results.

Perhaps you now have some natural foods growing in your waters or about the shores unbeknown to you, this service will eliminate the danger of duplicating in planting. It will insure the planting of the proper plants adapted to those particular water or soil conditions. Experimental planting on a large scale is often very costly. Often one experienced in planting these materials can make the same quantity cover twice the area and with better results than the inexperienced. Proper planting is very important; it is the hinge upon which good results hang, also correct places for planting.

By having this service you will learn what grows there, its value, what we recommend planting, quantity, price and where as well as when to plant. During Spring we are able to make investigations of properties and waters and supervise the planting work in one trip by telegraphing for materials after survey is completed and awaiting their express arrival. We often have several such contracts in a community and work from one preserve to another.

Our charge for this service is \$20 per day plus all hotel bills and traveling expenses incurred in making the trip to the property and return. When we are able to obtain several contracts in one state it enables us to quote a special low price, making this service very inexpensive. Write us for quotation on this service.

Wisconsin Aquatic Nurseries

LARGE GAME PRESERVE FOR SALE

Airy hall plantation and game preserve comprising according to recent survey 9,186.4 acres of land, 25 miles of water frontage. Quail, Wild Duck, Wild Turkey and Deer shooting, excellent fishing. If interested write our agent, Ed. T. Cole, Oshkosh, Wis., for further data. Price for quick sale \$125,000.00.