A *Litterbug Seldom Let's You See The Stream For The Trash!

*A LITTERBUG IS THE GUY WHO LEAVES ONLY THE MARKS OF A HEEL IN THE FOOTPRINTS OF THE SANDS OF TIME.

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by La Mar Mumbar
Art by Bob Cypher

George W. Forrest, Editor
Variety is the spice of Life

and you can thank Mendel

By KEEN BUSS

BLOND; brunette, redhead; vivacious, quiet, and demure, pleasingly plump, enticingly slim; and “Brother, just feast your tired fly-tying eyes on that one”; these are the varieties which spiced the life of man since time immemorial. At least that is what we outdoor men thought until there came upon the scene the theories of a man named Mendel—Gregor Johann Mendel to be exact. It was he who jolted us from the esthetic to the practical and proved that variety could be the spice of life without the influence of fairer sex.

EGGS, greater number from individual females, means less brood trout need be maintained.
LARGER FRY from larger eggs. Larger fry shown are directly related to size of the egg, therefore plays an important part in selecting for faster starting, larger fish.

Variety was the spice of Mendel's life, and not varieties of gals, for he was a priest at the Augustinian Monastery in Brunn, Moravia. His avocations were the spice of his life. He studied meteorology, geology, and biology. Mendel's outstanding work was in the field of biology where he unlocked some of nature's secrets in breeding behavior. He discovered the basis for modern genetics when he selectively bred many different varieties of plants. His classic results with peas demonstrated a simple principle upon which the modern Mendelian theories are based. For example, Mendel crossed tall peas with short peas and found that all the resulting pea plants were tall, but when he crossed

LARGER EGGS means eggs more easily handled, cared for. Related sizes of the four eggs are here compared with an ordinary paper match-stick.

NATURAL COSMIC COSMETICS of trout have a wide range. Upper brook trout is almost colorless with little or no spotting. Middle and lower trout have heavy spotting but spots of different size and color.
TROUT ARE LIKE PEOPLE, everyone has different appearance. Note variation in these brown trout markings and shape.

NATURE PLAYS PRANKS or does some experimenting on her own sometimes. Note difference in normal large fish at top and other fish below. These cripples appear in very small percentage of the fry which are hatched.

THE RAINBOW can not always be found on rainbow trout. Top fish is practically colorless, while bottom trout is highly marked.
these plants of the first generation with each other he found that he obtained three tall plants for every short plant. As some people would say, "The short plants are throwbacks." These "throwbacks," however, weren't just accidents, but rather one of nature's calculated procedures. These procedures hold true in all living things whether man, mice, or molds; trees, truffles, or trout when simple heritable characters are crossed.

During all of his amazing discoveries, Mendel's life was diversified. First, he had leisure time for his hobbies, but little space was available. Then when space was available he had little time. In his later years when he had both space and time he became so obese that he couldn't climb the hills where his gardens were located. To lessen his weight, he smoked twenty cigars daily, but to little avail. With all of these frustrations, Mendel managed to lay the groundwork for the breeding principles which were destined to revolutionize plant and animal breeding.

Although Mendel's investigations in the 1860's were at the time in vain, they were rediscovered at the turn of the twentieth century. Scientific research uncovered new facts and progress proceeded in astronomical fashion. The study of genetics was to play an important part in the health of man.

The Augustinian priest must smile contentedly from his seat of honor in Paradise when he sees how his work benefited man in the field of medicine. Early in World War II, Fleming, an Englishman, discovered an antibiotic-producing mold, Penicillium. This antibiotic with all of its amazing healing properties could not be produced in large enough quantities to meet the demands. Something had to be done to produce this drug cheaper and in larger quantities. Toward this problem, scientists turned their attention and soon they discovered that by irradiating Penicillium with X-rays they could develop a strain which would produce 280,000 units instead of 90,000 units of Penicillium per pint of cultural fluid. This antibiotic soon took its place in every hospital, doctor's office, and medicine kit in the country. The drug was available to every one, thanks to Mendel's theories and Muller's subsequent investigations with X-rays and mutations.

Mendel's study of inheritance, begun so quietly at the Augustinian Monastery, was, appropriately enough, to play a role in the study of fish. Dr. Myron Gordon, a geneticist of the New York Zoological Society, while studying the inheritance of color patterns in tropical fish discovered that when he mated swordtails and platyfish some of the offspring developed melanomatous (cancerous) tumors. From this extensive research it was shown that the color cycle and the tumors were genetically controlled in fish. This discovery was recognized as one of the facets in the never ending search for cancer control and cure, and was given support by the National Advisory Cancer Council of the National Institute of Health. Mendel must have lit another Heaven's Havana at this turn of events.

These are but a few of the great discoveries attributed to the science of genetics. The necessary ingredients are knowledge, research, and above all—variation. As necessity is the mother of invention, thus is variety the mother of selection. Mendel's halo of cigar smoke must grow denser as he watches the work being done for man's greatest health building hobby—fishing. Biologists recognized in fish-cultural studies one of the prime requisites of selective breeding and that is variation. Trout of the same species vary greatly in rate of growth, color, body shape, vigor, egg number, egg size, disease resistance, etc. Why not utilize this variation and develop better fish for better fishing? That is exactly what the Pennsylvania Fish Commission is doing at the Benner Spring Research Station. The accompanying photographs describe better than words the variations which exist in trout. Selection from this variety will spice the new trout rearing program.

In future years, when you land that bigger fish remember to say a silent "thanks" to old Mendel, and remember that variety is the spice of life even on your favorite fishing stream.

There is no need to worry or be gloomy about how the next generation will carry on the work of conserving our natural resources in America. After all, the boy who wasn't good enough to marry the daughter turned out to be the father of the smartest grandchild in the world.

PENNSYLVANIA ANGLER
Are there sufficient public areas of native wilderness in your community where you can PICNIC? CAMP? RELAX? OBSERVE WILDLIFE ANTICS? If not, here are some suggestions . . .

By ALDEN E. SMITH
In The Nature Conservancy

Natural area parks for your community

PEOPLE have often said that there is "nothing new under the sun." At the rate our present civilization is traveling, the opposite will soon be true. There will be nothing old under the sun. This is particularly true of our heritage of wild nature. What we save today—what we set aside as wild parks and nature study areas—will be all that remains of primeval conditions to provide for the educational, scientific, and esthetic needs of future generations. There is an urgent need for action.

Our grandfathers worried very little about wild area recreation. It was not that they did not enjoy picnics, bird songs in the woods, and rambles along the banks of meadow brooks. They did appreciate these things. This is amply demonstrated by the awe-inspiring descriptions of the primeval wilderness found in the writings of our early authors. But they felt no need to preserve the wilderness—it was all around them, marching right up to the village limits. It was a short walk from any man's house to the nearest woodland grove. The need for relaxation through communion with nature was fulfilled by the ordinary tasks of the day. There was wood to be gathered in the woodlot; wild berries to be sought in the lane; the horse to be brought in from the pasture; and a myriad of other outdoor tasks to be taken care of. Nature was an integral part of life.

How times have changed! Our fathers have witnessed the conquering of the wilderness in the age of machines. The bird song in the woods became the chirping of the English sparrow in the city park. The brooks became eneased in concrete, their sparkle hidden beneath the city streets. The meadow became a tailored lawn, the woodland grove a row of street trees. And the city grew—and grew—and grew. It extended its boundaries as far that a
walk to the country became a hike, and even the continued existence of country to walk in seemed in doubt.

Our fathers thought they had found a solution to this problem. They invented the automobile, calculated to carry themselves and their families beyond the city limits in a shorter time than it took their ancestors to walk to the woodlot. With this accomplished, they sat back, mass-produced their automobiles, disregarded the march of the city, and considered the problem of wild area recreation solved. The explosive growth of populations in the last few years and the phenomenal concentration of people in cities have proven these policies to have been shortsighted. In our confidence in the machine age, we have overlooked the need for contact with nature.

We are fooling ourselves today in the name of recreation. We jam the highways in our cars, stopping only to buy food and drink and seeing little of the out-of-doors. At vacation time we jump in the car and take off at sixty miles an hour for some crowded beach many miles away. We try to "see" a whole series of the national parks during our two weeks vacation! With the auto we are building up more of the very tensions that we could be using the vehicle to escape. By sheer force of numbers it is losing much of its value.

There is something in all of us that requires a little contact with nature every so often—the quiet solitude of a walk along a forest path, the thrill of seeing small wings flashing from branch to branch, the feeling of well-being created by the sight of the first spring wild flower. A hard day at home, office or factory, beset with all the stresses and strains of our modern day pace of living, demands a daily interval of complete rest and relaxation. Such is the relaxation of the stream bank, the wooded trail and the shadowy glen. It is the escape from the noise, the crowd, the press of office and factory. It is the soothing coolness of a grove of green trees; the sunlight throwing back a flash of color from the hillside; the song of birds; the smell of wild flowers; the sight of the scurrying chipmunk. This is the relaxation of a visit to a park that has been kept as nature made it—wild, natural, free from disturbances—primitively beautiful.

It would be a sad world indeed if the only living things on the landscape were man and the plants and animals conquered by him. We need to save for our children a world of wild
nature, unexploited by man, so that they can marvel at the resources that made this country great. Other creatures have the right to live and we should provide them the opportunity as our civilization destroys habitat after habitat.

Wild areas provide valuable lessons in natural history for school children. Who does not remember those younger days of catching tadpoles in a small pond; gathering wild strawberries in the fields; and fishing lazily from a sunny bank in the spring? Given the opportunity youngsters can learn much from nature. A nearby natural area park will supplement your community's school system.

There are parks in most communities. But they are often no more than tailored lawns and clipped bushes affording little opportunity to relax from the press of modern living or escape the crowd. They are places where people walk their dogs and stop to rest before continuing on down the street. They are usually replete with concrete side walks, the trademark of civilization. Some, utterly devoid of trees, are used as baseball diamonds and offer the casual stroller no rest or relaxation.

Some city fathers were more farsighted than others and preserved areas of wild nature inside the city boundaries as they expanded. Maybe you live in a town fortunate enough to have picnic areas among forest trees and bushes. If not, there is still time and opportunity. Our cities are growing constantly, and the need for parks grows with them.

A piece of wild nature in the center of the city can be a source of great civic pride. All of us have admired such areas when we have come across them in other towns. You probably have envied the people whose homes were adjacent to the park. If you care to set these areas aside while there is still time, others will admire your town in the same manner.

There is another advantage of a natural park area. It gives the family a chance to get together in the open air. If the park is within the community, the advantage is obtained throughout the week. Such an area gives the family room to spread out in. The word "outing" expresses the idea very well. Without these areas being set aside, there would soon be no room for outings. And they must be preserved as we go along or their wild area value will be permanently lost.

There is a genuine need for wild parks for the educational, scientific and esthetic values they provide. In order to meet these needs satisfactorily the parks must be available to all of the people. It is clear that if we are to have natural areas in our communities we must set them aside now. If this is done the city will surround the areas and contain them—otherwise they will be systematically eradicated. It may be all right to postpone the building of a baseball diamond. It can be built on almost any site in the matter of a few days. But it has taken nature thousands of years to build a meadow, a swamp, or a forest. Fifty years from now we can knock down a slum area and build a tennis court. But once we cut down a woods, drain a swamp, or otherwise destroy a wild area, it is lost forever. Human hands cannot rebuild nature.

How well is your community meeting the needs of its citizens for wild park areas? Take a map of the region and study the existing parks and their locations in respect to populated areas. Do you have enough parks? Is their number growing as the population of your town grows? Are they located so as to be available to all of the people? The answers to these questions will show you how your town measures up with respect to natural area parks.

If you are dissatisfied with your park system there is much you can do. Look at your map again. If you were allowed to establish additional parks, where would you locate them? In most cases you will find the only places comparatively undisturbed and suitable for park areas are on the outskirts of town.

In rare cases an undeveloped estate may have remained untouched as the city grew around it. Sometimes the owner of this type of property would like to see it preserved as undisturbed as possible. Some excellent park areas have been established in this manner.

After studying the situation on your map mark off areas which seem to be unoccupied and go out and investigate them.

Don't be disappointed if you find no true remnants of the primeval wilderness in your community. The need for natural area parks would not be so imperative if there were many such areas. Look, instead, for areas in a fairly natural condition. Most such places can be fitted into a natural park system with a little careful planning.

Consider each area in the light of its own merits. By making a tentative plan for the use of each tract, you will lay the basis for a com-
comparison and appraisal of their respective values. You will be amazed at the possibilities you turn up in this manner during your inventory.

Valuable natural areas can be given additional protection by making sure that they will be surrounded by a small strip of adjoining land. The entire area may not need to be very large, but actual size should be determined by the type of area and the amount of anticipated use. Remember that it is always important to plan large enough for future needs.

When you have considered areas around the community and have selected one or more promising ones, you will want to initiate a movement to have them set aside. At this stage of planning, you are ready to organize a committee to help you start actively working for a better park system. You may be able to find an interested organization to sponsor the committee. At any rate you should see that organizations are invited to be active participants in the effort.

Choose your helpers carefully. Remember that you will need people who can do a variety of things—and people who get things done. You will soon encounter problems with finances, publicity, correspondence, legal matters, and many others with which you may need help. It will help to have civic leaders such as a lawyer, banker, newspaper editor, and radio commentator serving on the committee. You should also invite groups that would be particularly interested in the park plan to send representatives. Some, such as the Boy Scouts, Girl Scouts, nature study groups, and garden clubs certainly should be included.

After you have enlisted enough help, call an organization meeting. A good deal of discussion will probably be necessary before your group will be ready to adopt a specific plan of action. Don’t become discouraged if progress seems slow, remember that if you wait for someone else to do the work it may never be done. In the long run, the rewards in satisfaction and community accomplishment are well worth the effort.

One of the first duties of the newly formed committee will be to decide on the area or areas to be preserved. Much information on all of them will be required before any decision can be reached.

Contacting the owners of the properties will be necessary. It is essential that this be done before they hear rumors of what is going on. Nothing is so likely to antagonize an owner as hearing indirectly that someone has designs on his property. It is desirable, also, to approach an owner through someone who is his personal friend. At least, one should find out something about the owner’s background and attempt to approach him in a way that will produce a favorable response on his part.

Many people who own property adequate for use as a natural park would like to see it preserved. In some cases the area has remained in a natural condition because the owners were lovers of nature themselves. Prosperous persons may be willing to donate this type of land for such uses.

Most land, however, represents an important financial investment of the owner and he must secure a fair return on it. Ordinarily funds will have to be raised to purchase likely properties.

The final choice of an area will depend a great deal on the terms under which an owner will sell. You may obtain special consideration from him when he understands the anticipated use of the property. Offering the owner a place on the committee or other honor in connection with the park plan may also serve to enliven his interest in the project.

Remember that the price should be only one of several considerations in the final choice of a natural area. A tract which is comparatively expensive can be well worth the price.

It will be well to consider the possible agen—
cies that might manage parks and preserves in your state and locality. You should become acquainted with your state park setup and with state laws governing the establishment of city or county parks or forest preserve districts. If there is such a district already established in your territory, you should be able to work closely with it to achieve your objectives. If there is not, you may want to promote the organization of one. Other possible custodians for wild preserves include schools, colleges, museums, and nonprofit associations having an interest in nature preservation. Often it is possible to work out a cooperative arrangement between several agencies to provide for holding title and managing areas. The Nature Conservancy will participate in such endeavors under proper circumstances.

There are three principal ways in which acquisition of an area can be financed. These include 1) purchase by an agency of government with public funds, 2) purchase with funds contributed by one or a few large donors or donation of the tract by the owner, and 3) purchase with funds raised by public subscription. There are, of course, many modifications of each of these. Sometimes, for instance, a large donation will be pledged on the condition that it be matched by other gifts. Support of this sort is a great help in starting out a fund drive. In other cases, an agency of government may be in a position to lend partial support providing the other part is raised by public subscription.

You should not overlook the value of philanthropic efforts in establishing wild parks. Just as in other phases of social welfare and charity, the greatest progress comes when voluntary efforts play a leading part.

You may have many matters of organization, publicity, etc. to handle before your program is successful. We will not attempt to cover the details concerning methods of fund raising, or of campaigning for adoption of a program by an agency of government. Information on these subjects, or suggestions of where such information can be obtained, will be supplied on request to Nature Conservancy.

Natural area preservation projects are now in progress in many parts of the country and Nature Conservancy serves as an agency for exchange of information on this work.

However your project is carried out, you will be amazed at the way people respond once they are told of the need and given specific information on what they can do to help. When you realize that a single painting in an art gallery may cost more than a natural area park, you can see that you should have little difficulty convincing others that their parks are bargains! You will have a real job ahead if you decide to start a natural area preservation project. But the reward of knowing you are helping to build a better America will more than repay your effort.

The Keystone State

If you're off to Pennsylvania this morning
And wish to prove the truth of what I say
I pledge my word you'll find the pleasant land behind
Unaltered since Red Jacket rode that way.

Still the pine woods scent the moon, still the catbird
Sings his tune,
Still autumn sets the maple forest blazing.
Still the grapevine through the dusk flings her soul-compelling musk,
Still the fireflies in the corn make night amazing.

They are there, there, there with earth immortal
(Citizens, I give you friendly warning),
The things that truly last when men and times
have passed,
They're all in Pennsylvania this morning!

—Rudyard Kipling
By ART CLARK

Bronzebacks of the Schuylkill!!

Our early stay-at-home fishing habits around metropolitan Philadelphia and southeastern Pennsylvania led us to a great discovery. Back in 1953 we discovered the fishing potential of that much maligned waterway, the Schuylkill River. Thank heaven an aroused public and the sportsmen had discovered its deplorable condition years before. It is our prediction that the Schuylkill will, in the very near future, become Pennsylvania's best bass stream. Its present condition is a tribute to the Fish Commission and the Pure Stream Laws. It continues to flow deep and clean as an everlasting monument to a fighting public and their determination to keep our streams clean.

We approached the mighty Schuylkill via George Washington's Valley Forge. Complete with fishing paraphernalia we surprised one of the park's guards. "Most people come out here to catch up on their history . . . seems odd to come across a fisherman in George's domain" . . . he remarked as he stroked his chin. We replied; "George Washington did a heap of fishing in his time and what was good enough for 'George' is certainly good enough for us."

We now have a private parking lot formerly used by the passengers of the Railroad at the Valley Forge station. Our many trips to the river bring a friendly wave from the kindly guard as we struggle by with fishing gear. Many tussles with Mr. Bronzeback has strengthened our conviction that it pays to fish in your own backyard.

September 1955 we motored past Port Kennedy across the river via Route 363 to begin exploration of the upstream right bank. After crossing the bridge we continued on 363 to the first black-top road where we turned left and continued to a single track railroad. We plowed through the mass of tangled vines down a steep hillside and river bank until we reached the water's edge. Several hundred yards downstream we saw an old retaining wall and some fishy looking water. Since our trip was exploratory we hastened back to the car for the fishing tackle.

We returned to the river by way of a small stream that led us through a man-sized tunnel back to the river. This return trip was easier since we took advantage of Mother Nature's approach. Here we found that a small branch of the river flowed around a tree-laden island and blunted its force against the old stone retaining wall.

We watched several twelve inch bass break water, and then returned to the car. This trip was successful, for we had found another easy approach to the Schuylkill. We returned to our first love, the railroad station platform at Valley Forge. Here we enjoyed a welcome lunch while watching activity in the River.

We could see where one of our favorite trout streams entered the Schuylkill just above the RR Station. Colder currents from Valley Creek hug the rocky, high banks along the tracks and here the frisky smallmouths came to cool-off and partake of the crayfish that frequent the rocky bank. Our advice to smallmouth bass anglers would be to find a crayfish colony and there you will find Daddy Smallmouth.

Damage from Hazel's high-jinks reminds us of the nightmarish havoc that angry waters and high winds can accomplish. Mother Nature still makes man's greatest efforts puny by comparison. The River is dotted with deep, scooped out pockets between huge boulders. These huge boulders line the near shore, some of them too big to be disturbed by Hazel's mightiest efforts. Sheltered between the large rocks can be found many tiny stone studded pockets, and crevices. It is here that minnows and crayfish seek shelter from hungry fish. It is also the place to seek the marauding bronzeback. Look for Mr. Bass near the food laden pockets.

The flood has also swept this part of the river clean of green vegetation, harbinger of fish food. Last year the river was bristling with weed beds and noticeably alive with minnows. Except for temporary absence of vegetation, this section of the Schuylkill is excellent smallmouth water.

Another trip to the reincarnated waters of the Schuylkill just opposite the Valley Forge RR Station last year during October, found the river high and roily. The water was stirring from recent rainstorms and we were forced to wade at a safe distance from the main

(Pen to page 14)
BLUE CATFISH (Ictalurus furcatus)

Largest catfish in the country often mistaken for the Channel Catfish. Many anglers say eating qualities not far below that of the Walleye.

RANGE: Southern Canada and Great Lakes region to Gulf States and from the Appalachians west through the Mississippi Valley but most plentiful in the Mississippi and tributaries.

CHARACTERISTICS: Dark bluish-gray on back fading into a slate gray on sides. Silver white on belly. Has no dark spots characteristic of the Channel Catfish. Head is smaller in comparison with size of body than other catfishes. Its uniform blue color and absence of spots distinguish it from the Channel catfish but it also has a deeply forked tail.

HABITS: Prefers slow moving waters but will inhabit fast waters. Mostly a bottom feeder.

FOOD: Like other catfishes, feeds mostly at night on practically anything that fits its mouth.

LURES: Rarely strikes artificial lures but will mouth anything in the bait line that attracts its appetite, which generally has an odor.

BROWN BULLHEAD (Ameiurus nebulosus)

Largest member of the bullhead tribe, also known as a Horn Pout. Quite acceptable to small boys.

RANGE: From southern Canada to Gulf of Mexico, and east of the Mississippi Valley. Ease of transplanting has made it abundant in most states.

CHARACTERISTICS: Color varies from light brownish yellow to a black-brown, but it is generally a dark brown with mottled markings of a darker shade. Coloring of sides and belly becomes lighter. Like the catfishes, the Bullhead has no scales, and the forward spines of the dorsal and pectoral fins are extremely sharp, have sawtooth edge. Barbels are dark in color.

HABITS: Can live in stagnant, polluted waters in which other fish could not survive. Lives out of water an extremely long time. While not a school fish it teams up with its relatives... where you catch one you doubt will get others, prefers stagnant muddy streams and soft muddy bottoms. They spawn in late spring and early summer. Extreme care is spent preparing the nest built by both male and female. If natural nest is not available they will dig one of their own, using the stiff spines as picks and their mouths as shovels to carry away the mud or dirt. The eggs are then deposited in the nest and cared for by both parents. After the eggs hatch, the young are carefully guarded by the parents who keep them rounded up in a compact school.

FOOD: Worms, minnows or crawfish but like other members of the family, draw the line at nothing including a piece of stinky cheese, so long as they can get the food into their mouths.

LURES: Rarely taken on artificial lures, stink baits made out of anything from chicken blood to nitrcrawlers on the ripe side.
CHANNEL CATFISH (*Ictalurus lacustris*)

Anglers hold this fish to be the sportiest member of the huge catfish family with more than 1,000 odd species.

**RANGE:** Greater range than any other of the family in this country, found in Canada from Ontario to Manitoba, thence south to Florida and the Gulf States, also in northern Mexico.

**CHARACTERISTICS:** Usually slate gray along back, shading to silvery gray along sides with belly lighter than sides. Irregularly shaped black spots are liberally sprinkled over entire body along sides from head to tail. Single spine of dorsal and pectoral fins extremely tough and sharp. Care must be used in handling or painful wounds may result. Barbs or whiskers on the channel catfish are quite long, adipose fin, near tail, smaller than on other catfishes. Like all members of the family it has no scales. Tail is forked to greater degree than other members of the family.

**HABITS:** Found in slow moving, mud-bottomed waters but actually prefers clear, clean, swift-moving streams. They spawn in the spring, usually in flowing waters, of rivers and smaller streams. There is a definite upstream migration at this time of the year.

**FOOD:** Usually feed at night and it would be less complicated to list foods a catfish WILL NOT EAT!

**LURES:** Anything with an obnoxious odor... shrimp, old ripe meat, nightcrawlers, etc. Channel catfish also strike lures meant for bass and other game fish, plugs, flies, streamers.

WHITE BASS (*Lepibema chrysops*)

Restricted in range the White Bass is not widely known but is one of the largest of the panfishes.

**RANGE:** From southern Ontario and New York State, westward through the Great Lakes region to Minnesota, thence south through the Mississippi Valley to eastern Texas and Louisiana.

**CHARACTERISTICS:** Over-all color is silver with a golden cast on lower sides. From the head to tail along each side, narrow dark lateral lines run the entire length of the fish. Four or five of these lines usually appear above the lateral line and three to five below it. Distinguished by the dark lateral lines mentioned above which indicates a close relationship with the salt-water Striped Bass which is similarly marked. Some authorities believe the salt-water Striped Bass became landlocked and that the White Bass is a small edition of its original forebears. The White Bass has two distinct dorsal fins which are separated and it has teeth on the base of its tongue.

**HABITS:** Equally at home in streams, rivers or lakes but prefers clean water. They are school fish, located in deep holes in rivers and lakes and apt to be found cruising on the surface. It spawns in the spring close to shore. No nest is prepared but the eggs, together with the milt are deposited in shoal water, then deserted by the parents.

**FOOD:** Favorite food is small fresh-water minnows but will feed on small worms, insects, larvae, mollusks, crawfish and other crustaceans.

**LURES:** Fly lures, small spinners, spoons, bucktails and pork rind, also small surface flies, worms, minnows and crawfish.
current. A long cast placed the plug on the far side of the main current. We give a free line and let the plug drift about twenty feet then we hold and retrieve about five turns of the reel handle. Again we give a free line...stop...then retrieve. This free line, hold and retrieve is used primarily to determine when the plug becomes snagged and stops drifting.

Continuing our fishing method a step further; we let the plug drift to about the middle of the current and then start a very slow retrieve, pausing occasionally with one minute stops. Our plan paid off. Two plump two-pound smallmouths landed into our creel via the slow retrieve and one minute stops accompanied by our favorite 350 Heddon Redhead Flutter and the Black (XWB).

Some of our best spin plugging for smallmouths has occurred in high roily waters. A 4½ pounder was taken from Octorora Creek last August 20, 1955. He fell victim to the Heddon 350 Yellow Perch Scale.

Our observations lead us to believe that the coal silt that formerly filled the waters of the Schuylkill has been ground into the rock pores through the years. This black coloration eliminates light reflection from the river bottom. With this in mind we selected an orange colored plug for better visibility one gloomy October 1955 day. We had also noticed numbers of orange bodied sunnies and reasoned their gaudy coats must surely attract Mr. Bronzeback.

We hooked and lost three heavy smallmouths because the hook had not penetrated the hard bony mouths. One of these was the largest we had ever snagged in the mighty Schuylkill. We lost this monster while trying to beach him.

This orange colored Heddon 340 OS might be a wee bit too heavy to handle adequately on our light spinning tackle, it was necessary to jerk hard about three times on the strike. Perhaps a slight forward movement, permitting a little slack line, and then the backward motion would be more adequate. This slack line...hard jerk is usually sufficient to drive the hook into the mouth burying the barb.

Wading the shoreline again in November 1955, we landed two 18 inch smallmouths on this orange bodied plug. Examination of their stomachs showed them loaded with pink-shell crayfish. The intestinal tracts were packed with undigested pieces of these same shells.

We are convinced that fishermen can best fish the broad Schuylkill from the many wading vantage points along its shores, particularly those spots that are studded with overhanging bushes and large rocks. Numerous insects fall from the bushes into the water and attract the small fish upon which the larger bass feed. It is here that the old lunkers can be found, and in these hot spots the retrieve should be very close and parallel to the shoreline.

While we discovered the beautiful Schuylkill a lot later than George Washington you can bet your bottom dollar we are going to make up for lost time. The Schuylkill is now flowing clean again and all of us owe a vote of thanks to the combined efforts of the Schuylkill Valley Restoration Society, Honorable Grover Ladner, the sportsmen of our Commonwealth and an aroused public. Let's hope that all people will continue a constant vigil that the mighty waters of the Schuylkill will continue to flow clean.

the Dobson-fly

By A. M. ANTHONY

Bass fishermen, especially, should recognize one of their favored baits in these photos of the dobson-fly (Corydalus cornutus).

If you haven't already guessed it, you should see the close resemblance the hellgrammite (commonly called hoojacks) you find under rocks along streams. The dobson-fly is the adult of the hellgrammite.

The male, pictured here, appears rather vicious, but the jaws are used merely to embrace the female in the act of mating.

The larvae are aquatic, but pupation occurs after the larvac crawl out of the water and seek earth, preferably under a stone. Eggs are deposited on leaves or branches overhanging water. The complete cycle from egg to adult is presumably three years.

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Among other things, Superior is the name of a bass bug. Its brief history is not only interesting but spectacular. The conception of the finest bass bug several of us ever employed was the result of a special prescription for a very large trout.

The big brown would gobble up grasshoppers that were sent to him via his line of drift. On one occasion sixteen were consumed in short order, most of them big ones before the limit of capacity was reached; and after a rest of an hour he was good for six more. There was nothing gentle or dainty about his feeding activity. With each snatch of a natural, water was tossed in the air and it actually saturated the grassy overhang of his summer domain. Quite a spectacular sight!

Vince Marinaro and I developed something of an affection for the old boy. One of the reasons was the way in which he magnificently eluded our best efforts; yet he moved with regularity to seize the real McCoy. Here was a gourmet as well as a gourmet. We had concluded that the only sporting way to cope with such a noble fish—a big surface feeder—was to deceive him with a dry fly. Here was the possibility of a record trout on a dry—he was that big. One of us would fish over him while the other watched and now and again tossed in another hopper to determine if he was still in business or whether he had been put down. Assorted subterfuge was employed: curve casts, long light leader, Michigan hopper, clipped deer hair hopper, plastic hopper, Neversink Skater Fly, etc., but he could not be fooled, this in spite of the fact that a large surface feeding trout is rarely ultra selective.

At this stage Bill Bennett entered the picture. He volunteered to create a "superior hopper," and Bill can really tie the highly specialized stuff. (He is the one who gave the fly tyer the wing-cutter). In a day or two he handed to each Vince and me a handsome, light, quill job hand-dyed and complete to the degree that it had legs, bulging eyes, a blunt face and hair antennae. Here was his answer to the critical fish.

I still have my fly. Vince lost his. He left it sticking in the jaw of the fish. On the day it happened, much less casting time was involved in the hooking of the big trout than in playing it. For over an hour Vince stuck with him, run for run and lunge for lunge, and the 5x gut-point was still intact. It became my assignment to net the fish, which was no longer capable of making a bona fide run. The wide square tail feebly broke the surface while some 30 inches away the mouth gulped for additional oxygen and groped for the stream-bed.

The natural place for the landing was in a little bay beside some high grass where I could conceal myself and prop the net on a bed of water cress.

Vince moved back a couple of steps, lowered the rod tip and started to slowly and steadily draw the fish within my reach. Each of us was to take his time and under no circumstances was I to go for him tail first. The head came up and the point on the end of the jaw could be seen. The hopper was in the corner of the mouth—the far corner. Never again do I ever expect to see such a wide back on a trout.

Suddenly there was a little snap and the leader bounced back at Vince and mockingly rested in a snaky coil at his feet. Broadback was gone—so was one of Bill's 'hoppers. We never again located the big trout. It is mere speculation that a brown caught the following season half a mile upstream which weighed 10 lb. 2 oz. was he.

Upon inspection of the leader it was obvious that it had been frayed and sawed by the tips of the big sharp teeth after it crossed the interior of the mouth. If the fly had been in the other side of the jaw—but hold on, this story is about Bill's "superior hopper," premier bass bug. Early each fall I make what to me is a most important vacation trip. The attraction is Atlantic salmon in a New Brunswick river. The tackle is the same as that utilized for bass bugging—8' 6" foot 5 ½ ounce rod, G B F floating line, 9 foot 7 pound leader and single action reel with backing. One does not make a trip to which he attaches such great significance without first checking tackle, and the perfect check is to take it bass bugging before packing prior to departure.

The slow flowing, flat, rich Conodoguinet Creek was the testing ground, a big wadable stream which lends itself to bugging. This may be the longest and widest creek in the world, for in any section of the land but Pennsylvania, it would be a full fledged river—65 miles long and 200 feet wide in the lower reaches.

By CHARLES K. FOX
From a loose assortment of bass bugs in a small box I chose a clipped deer hair job with glass eyes and a tail. When it did not produce I substituted a cork popper with tent-shaped wiggles. This fared no better, so out came a hair frog. After wobbling it around for some time without results it was decided to make another change. What to try next was the question. As I pushed around the contents of the box, Bill's 'hopper came into view. Actually it had been stored in the container with the bass bugs by accident—or by destiny. So "Superior" was given a new baptism of fire.

It cast well, landed on the water with a little smack; it floated in the surface, not on it; and when given a dainty twitch, the blunt head moved a little water. A tiny sinew of the current turned it sideways. Another twitch made it reverse ends. If there is anything I like in a surface lure, it is to get it swimming and turning—almost rotating—and the 'hopper could be made to do just that.

Due to the floating line and greased leader it picked off the water cleanly, without submerging, and with the aid of one false cast it was placed in the center of a ledge depression, right where it belonged. The little rings widened from its flat spot; then it was impelled with a sort of 'hopper kick, just as Vince had made his operate a yard or two above the nose of Broadback.

That did it. Amid a ball too big to fit into a washtub, the 'hopper disappeared and when the rod tip was lifted, everything was tant. Of all the sounds in the world which have registered on these eardrums, the most satisfying is the assurey scream of a reel, followed by the crashing return of a leaping fish. In salmon fishing it is superb; bass do a creditable job, most satisfying is the assuring scream of a reel, following the moment when the bug has been hooked. Of all the sounds in the world, this one tops them all.

Again the setting sun gleamed on the flat side of a bass bug. From that time on, encompassing five seasons, Bill's 'hopper has held a prime place. The second outing with the new bass bug was even better, so out came a hair frog. After wobbling it around for some time without results it was decided to make another change. What to try next was the question. As I pushed around the contents of the box, Bill's 'hopper came into view. Actually it had been stored in the container with the bass bugs by accident—or by destiny. So "Superior" was given a new baptism of fire.

Suppose that this bug is just half as good as I think it is. That still means that it will create a big hit. Bass waters can't hold up under great killing. It is possible to accurately estimate the number of legal sized bass a pair of brood fish produce in any water, and you can be well above 90% correct in your estimate—close guessing, this. Here is the way to appraise it. The supply of bass varies but little year after year in any given water. There may be plenty of them or a few of them depending upon the water and its accessibility to fishermen. Either there is a reasonable number of really big fish or none at all. Obviously then, one pair produces two bass—one for one of legal size. A pair of big ones has the potential to produce a pair of big ones. What happens then if anglers become more efficient? Something has to give and it will be the supply of bass or the anglers. It should be the anglers.

Let's make an agreement, just you and I. If you could produce the potent little 'hopper for your private use or induce some patient friend, to do so, would you in return for the lure, release most of the bass it catches? After all, you may want to return to the same place again and again. Then you would like to catch more fish from the stream or lake. The chances that you will ever be able to buy this bug are very slim, simply because a meticulous hand job of cutting, tying and painting is involved, which for practical purposes will make commercialization prohibitive. But for the hobbiest fly tyer it is different. Now, isn't that a fair bargain?

Well, here are Bill's directions to make his bug which he appropriately calls "the pontoon 'hopper" although it will always be the "Superior" to Vince Marinaro and me:

**Tools needed, other than standard fly tying equipment:**
- Jeweler's saw for cutting body quills
- Long needle (crochet hook filed to a sharp hook)
- Quill cutting block (miniature miter box)

**Materials needed:**
- Turkey quills for large hoppers—1\% to 2\% inches
- Goose quills for medium sized hoppers—1\% to 1\% inches
- Duck flights or ringneck feathers (metallic blue tipped) for use in making bugs (pontoon bugs)
- Teasers quick drying lacquer in the following colors:
  - Green, Yellow, Brown, Black and White
- Clear hard top coat lacquer
- Mouse mane for feelers
- XX white tying silk
- Wide gap hooks—sizes 8 to 12
- Bullet-shaped corks—\% x \% inches

**Preparation of materials:**
After selecting the quills to be used, cut off feather portion to within three inches of butt with a large pair of scissors. Cutting the quill to actual tying size with scissors is not recommended for the reason that the larger quills will split under compression, making them useless. After the quills are rough-cut, the next step is

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to cut them to tying lengths. This is accomplished by the use of a cutting or miter block which assures uniformity in length. A sketch of the miter block which I made for this purpose is shown below.

After the quills are cut to tying length, the insides should be cleaned of all pith. This may be accomplished more quickly if a hooked wire or needle is employed. The following is a sketch of a crochet needle filed to the desired hook shape which I use for this purpose.

The body color of the natural grasshopper ranges from a bluish light green to greenish yellow. Variations of greens and yellows may be obtained with a little experimentation in dying time. I have experimented with various shades of yellow and green and find that the Tintex Maize Yellow and Nile Green dyes will produce the desired shades for use on the green or yellow bodied hopper.

Assuming that the tyer has completed all the preliminary steps associated with the construction of the hopper, including the cutting and dyeing of quill and that he has on hand sufficient bullet shaped corks (which may be obtained from your fly tying supplier), lacquers, and other materials hereinbefore listed, I now present the following step-by-step description of the tying technique for the hopper:

Cut off approximately 2/8 inches from the cork and insert the cut, flat end of the remaining bullet shaped portion in open end of quill about ½ of an inch. Since quill openings will vary in size, the ½ inch cork may appear oversize. This is a distinct advantage since the cork may be squeezed or compressed while being forced into the open end of the quill, thereby achieving a more secure fit. Corks may be cemented after compression but is not absolutely necessary. The final painting seals cork and quill permanently.

After quill is plugged, place quill on top of size 14 or 16 hook previously prepared with heavily waxed thread and wrap closely as shown in the following sketch:

The hopper is completed with a few strokes of green and yellow lacquer at the head and by the addition of two black spots for eyes made with the head of a pen or brad. Your completed hopper should then look something like this:

NOTE: Bill Bennett is a member of the Fly Fisher’s Club of Harrisburg. The above specifications were prepared for and distributed to club members. The delivery of a paper or a talk has been a part of the regular Monday luncheon program.
R. Stanley Smith Re-elected President

of Fish Commission

R. Stanley Smith, Attorney-Sportsman, of Waynesburg, was re-elected President of the Pennsylvania Fish Commission in its annual meeting today in Harrisburg. Albert R. Hinkle, Jr., of Clearfield, was named to succeed himself in the vice presidency. The meeting was then recessed until July 30, at which time the regular business session was convened. In accordance with Pennsylvania fish laws, Smith and Hinkle will serve in their capacities for another year.

The full 8-man board was present for this morning's session, all but one of whom were named to the Commission by Governor George Leader. Wallace Dean of Meadville, is the only carryover from the previous board. Appointed subsequent to June 1, 1955 were Gerard J. Adams of Hawley, Stanley Smith, Albert Hinkle, Charles C. Bauer of Allentown, Joseph Critchfield, Confluence; John Grenoble, New Bloomfield; and Maynard Beassert of Danville.

What . . . No Dear?

The Northern York County Game & Fish Association reports it has on its membership roles the following . . . Bair, Fish, Fox, Trout, Wolf, Hare, Martin, Hunter and Fisher. The club is still rooting around trying to round up guys with handles like: Bird, Hawk, Coon, Dove, Pike, Rivers, etc., although anybody by any name is welcome to help with the work of the club.

Record Number of Anglers Fished
the Paradise in '56

A record of 46,637 anglers was set at "Fishermen's Paradise," when the State Fish Commission's conservation demonstration project on Spring Creek near Bellefonte in Centre County closed its 24th season last Saturday. During the nine week special season which opened on May 11, a total of 71,119 brook, brown and rainbow trout were caught. Of the latter number, 9,928 were killed by the anglers.

Unofficial honor for the biggest fish taken this year was corralled by Sherwood Hoy of Millersburg with a 27 inch, 7 pounds, 13 ounce rainbow. The top catch among the 8,273 ladies registered was a 26 inch, 7 pound, 14 ounce rainbow caught by Bernice Moneski of Williamsport. To Joseph Stevens, age 14, of Minersville went the laurels for brown trout with a 26 inch, 3 pound specimen.

Lyle Elliott of Lewistown was runner-up in the brown trout division with a 26 1/4 inch, 8 pounder. The measurements of the largest brown trout caught by a woman were 24 inches, 6 pounds, 5 ounces. It graced the creel of Helen Wargo of Iselin, Pa. Merle E. Givler of Tyrone accounted for the largest brook trout at 19 5/8 inches, 3 pounds, 10 ounces.

The number of anglers registered this year exceeded last year's total by 1,895. However, the 1955 catch and kill records of 71,221 and 8,522 respectively still stand.

By way of comment when announcing these totals, William Voigt, executive director of the commission said, "This was not a good year at the Paradise from the standpoint of stream conditions. Heavier than average rainfall in the Spring Creek watershed and extensive farming without proper regard for soil conservation practices combined to present a high and muddy flow through most of the season. Considering that, added Voigt, we had a pretty good season."

Fish Commission Financial Statement
to Appear in ANGLER September Issue

The annual financial statement of the Pennsylvania Fish Commission which was published formerly in March on a calendar year basis, will this year be contained in the September issue of the PENNSYLVANIA ANGLER on a fiscal year basis. The change has been made to coincide with the inauguration of a new accounting system effected for all State agencies by the present Administration in Harrisburg, early this year. The new system was in the process of development for several years.

The statement to be published next month will be accompanied by a supporting article by Joseph J. Micco, comptroller of the Fish Commission.
Fish Commission-Power Company Talks
May Give Fishermen Better Access
to Dam Waters via Boats

The Pennsylvania Fish Commission announced it had begun exploratory talks with officials of the companies operating Safe Harbor, Holtwood and Conowingo reservoirs and power plants in the lower Susquehanna River, looking to possible increases in, and improvements of, access points for day use by boat fishermen.

A statement by William Voigt, Jr., Executive Director of the Commission said:

"In a very friendly and cooperative atmosphere, officials of the three power concerns met at Safe Harbor village, July 11 with Cyril Regan, chief of land acquisition for the Commission, and myself, to explore what, if anything, might be done to provide additional and improved public fishing access to the reservoirs.

"This was a preliminary consultation in every respect, and no commitments were made by any of the parties concerned.

"When explorations have reached the appropriate stage, if they do, results are expected to be laid before the Fish Commission and the proper officials of the power companies for approval, modification or disapproval.

"The Commission representatives told the power company officials that the outlook pertains increased pressure upon all Pennsylvania's public fishing waters, as time goes by. Also pointed out was the likelihood that safety and sanity in the utilization of these waters may be enhanced by provision for adequate places where fishermen may launch their boats, park their cars out of the way of other users, and then take their boats out of the water at the end of the day's sport.

"Costs of adding access sites were not discussed, but the Commission staff is hopeful that such a program, if adopted, may qualify for federal aid under the so-called Dingell-Johnson act.

"The power company officials expressed positive interest in the objectives outlined, and designated three officials to consult with Commission personnel in future discussions and investigations of specific locations. These were Messrs. Paul M. Hess of the Safe Harbor Water Power Company, Conestaoga; Earl S. Mathers of the Pennsylvania Power and Light Company, Holtwood; and Paul M. Lefever of the Susquehanna Electric Company, Conowingo, Maryland."

Fish Commission Restocks Delaware Canal
to Restore Hurricane "Diane" Damage

The completion of the fish restocking program by the Pennsylvania Fish Commission marks the total restoration of the "Diane" ravaged portion of the Delaware Canal, which earlier was repaired from Easton to near Bristol by the Department of Forests and Waters at an approximate cost of $315,000.

As breached banks and damaged locks were repaired and water again channeled into the various stretches of the canal, they were repopulated with fish. According to Dewey Sorenson, Superintendent of Hatcheries for the Fish Commission, a total of 15,290 fish was consigned in the process. The species represented were: catfish, 7,750 between 7 and 14 inches; sunfish, 500 between 2 and 3 inches; yellow perch, 2,000 between 2½ and 3½ inches; bass, 4,980 between 3 and 4 inches and 60 between 15 and 16 inches.

The canal was just one of the waterways of eastern Pennsylvania that suffered severe damages when the backwash of hurricane "Diane" poured an unprecedented deluge on the mid portion of the Delaware River watershed. Since that time, the Forests and Waters Department has had crews at work both in the Pocono area and along the canal. And as areas were declared again capable of supporting fishlife, stocking trucks of the Fish Commission moved in and planted their cargo.

Gouldsboro Lake Now Open for
Public Fishing and Recreation

Perpetual fishing rights for the public were assured on Gouldsboro Lake, sometimes referred to as North Jersey Lake, on the Pike-Monroe County Line near the town of Gouldsboro, with the recent acquisition of the lake and most of its shoreline by the Pennsylvania Fish Commission.

Fuller recreational use of the area is now also assured upon the announcement by William Voigt, Jr., Executive Director of the Commission, that the legal formalities of transferring control over a portion of the shoreline holdings to the Department of Forests and Waters are in the process of completion. The latter department earlier acquired title to adjoining lands which were a part of the Tobyhanna Military Reservation, when the Department of Military Affairs declared them surplus.

Under the provisions of Pennsylvania fish laws, the Fish Commission may only concern itself with fisheries management. The scope of the Forests and Waters Department includes the creation and maintenance of additional types of recreational facilities. The pending co-management of the area was entered into to make possible added uses of Gouldsboro Lake and its environs, including bathing and picnicking.

Incuded in the plans is a public access road along the west shore of the lake off U. S. Route 611, that will course by the proposed bathing beach, picnic area, public docks and boat launching site. Sanitary facilities are also contemplated. All of these are to be constructed by Forests and Waters.

The tract, comprising 325 acres, according to Cyril Regan, Commission land acquisition chief, was acquired by the Fish Commission with the aid of federal excise tax funds on fishing tackle under the provision of the Dingell-Johnson Act. Of the total area, 378 acres is water running to a depth of 18 feet and populated by pickerel, bass, walleye, sunfish, perch, catfish, suckers and eel. The lake is fed by springs and a small brook, and is drained by a small tributary of the Lehigh River.
Conservation Across the Nation

Fish Commission-U. S. Soil Conservation Service to Coordinate Watershed Protection, Flood Control of Penna. Waters

In a series of meetings yesterday in Harrisburg, staff members of the Pennsylvania Fish Commission and its six regional fisheries managers, conferred with representatives of the U. S. Soil Conservation service and the State Sanitary Water Board to effect a closer coordination on matters concerning the waters of the Commonwealth.

In a morning session held in the Dauphin Building, Ivan McKeever, state conservationist of the USSCS, outlined the opportunity provided in Public Law 566, the "Watershed Protection and Flood Prevention Act" passed by the 83rd Congress, to make better fishing a part of each small watershed project that may be undertaken in the State. The act provides for Federal participation, on a matching basis, in the costs of such projects initiated by local groups. Also participating in the discussions that followed were representatives of the State Soil Conservation Commission, Department of Agriculture, and the Department of Forests and Waters.

Riparian Rights Triumph

Perhaps strangely to many people, there is much debate among those whose responsibility it is to frame rules and regulations for legislative action concerning the status of fishing (and other recreational uses) as a beneficial use of water. An opinion of far-reaching implication in this matter has recently been delivered by the Arkansas Supreme Court. In effect, the opinion sets forth a four-point set of "general rules and principles" which specifically recognizes fishing and recreational purposes as beneficial uses equal to all other uses except those for strictly domestic purposes.

The Supreme Court's precedent-setting action reversed a decision by a lower court in a case involving use of narrow, 3-mile long Horse shoe Lake, near Augusta, for fishing and recreation on the one hand and for rice irrigation on the other. The lower court had refused to issue an injunction to stop the pumping of water from the lake for rice irrigation upon the complaint of a fishing boat concessionaire. He charged that the water level had been reduced to an unsatisfactory level for fishing and recreation. The Supreme Court held that the lower court should have enjoined the pumping of water when the level falls to a certain elevation above sea level (189.67 feet) because the rights of appellants would be unreasonably interfered with at lower levels.

From where we sit this looks like a major triumph for the doctrine of the rights of riparian proprietary use on non-navigable streams and lakes.

This doctrine now emerges as the great guardian of the sportsmen's interests in the principle of multiple use of water areas. It is a decided contrast to the treatment that sportmen may expect their interests to receive in states which adopt the recently promoted idea of the rights of prior appropriation of water (first-come, first-served, devil-take-the-hindmost attitude toward competing water-use interests so rampant in the West). Under this latter principle sportmen will get little consideration except on public land areas. Fortunately for Westerners, where this principle is long established, there are vast public land areas on which to hunt and fish. In the East, the reverse is true. If the principle of riparian rights is abandoned in this region, public fishing and hunting will all but disappear!

The action of the Arkansas Supreme Court is a vital one for eastern sportmen in view of the current agitation in many southeastern states to adopt the fallacious principle of prior appropriation of water rights. Propponents would change this for the more democratic and equitable water-use principle of riparian rights. The opinion states, in part: "When one lawful use of water is destroyed by another lawful use the latter must yield, or it may be enjoined." The opinion holds further that: "Other than [use of water for strictly domestic purposes—which is held superior to other uses] all other lawful uses of water are equal. Some of the lawful uses of water recognized by this state are: fishing, swimming, recreation, and irrigation."

Serious Defects

In an article in Soil Conservation for February, C. E. Busby, a water rights specialist for the U. S. Soil Conservation Service, summarizes the main objections that many conservation leaders have against the western system of prior appropriation of water rights. These
are: (1) the system is too rigid, (2) too much emphasis is placed on security of investment and statewide control of development and use, and (3) the system is too inflexible to permit reservation of supplies to meet future needs, especially for non-depleting uses of fish, wildlife, and recreation. (Italics ours)

Sportsmen in eastern states that are developing water policy or changing their water laws should watch out for these evils if they want to enjoy outdoor sport in the future. The system of riparian rights, now established in eastern states laws, offers genuine safeguards along these lines. Let's not look a gift horse in the mouth—or there may be no gifts in the future!

Michigan Pinched, Recommends

License Fee Increases

Michigan, like many other states of a progressive bent in the management of its game and fisheries resources, is experiencing a financial pinch. And to resolve the problem, the Wolverine state has heard its Conservation Commission recommend license fees increases in all categories. In Michigan, all facets of the outdoors sports are headed up by the single agency. Percentage-wise, increases range from 12 1/2% on the non-resident fishing license to tripling the trout stamp fee.

Among the hunting fees which include separate permits for resident and non-resident small game, big game and archery and trapping, are increase ranging from 14% to 150%. Camping permits would rise from $3.50 to $10.00.

In addition, the Conservation Commission renewed its recommendation for a fishing license requirement for Great Lakes waters, and further recommended a license for its anglerettes over 17 years of age at half the regular fee. Presently, the wives of licensed anglers may fish on the husbands license at no extra charge, while non-wives pay a full fee.

Legal Precedents in Recreation

Two recent court decisions involving the right of the public to utilize non-navigable waters for outdoor recreation such as fishing, boating, swimming, etc., provide significant legal precedents in litigation over these matters.

In the so-called “Angle Lake Case” the Washington State Supreme Court held that all persons who legally enter upon a non-navigable lake have a right to commonly use all waters of the lake. John A. Biers, State Director of Game, indicates that the decision has the effect of guaranteeing the right of the public to fish on the several thousand lakes of the state, provided their entry thereon is lawful, as by means of the several hundred access areas owned by the Department of Game on waters of the state.

In a Michigan case, a court decision establishing the right of the public to boat and fish on Lake Ann in Presque Isle county is the first involving a relatively small stream. It is expected to set an important pattern for decisions in other cases involving public use of inland waters. In this instance Judge Phillip J. Glennie ruled that both Lake Ann and the unnanmed stream connecting it with the Ocqueoc River had been used by the public for upwards of 65 years for boating and fishing and ordered removal of a barricade erected to exclude the public.

Tension

According to an item in Newsweek for May 14, Dr. Kenneth E. Appel, president of The National Commission on Mental Health, reported in a forum held in New York on anxiety and tension, that nervous tension is “a prime mover in all the principal causes of death.” It was noted that coronary attacks, high blood pressure, ulcers, arthritis, and alcoholism, all diseases associated with tension, are increasing rapidly. Many doctors are reported to believe that emotional factors can even cause cancer.

Sport fishing, as a near-perfect antidote for excessive nervous tension, is rapidly assuming stature as a key factor in the national welfare.

Opening Day

One of the best of the many opening day comments, this one from a column by Red Smith in the New York Herald Tribune for May 1:

... It is an article of faith that fish are by no means essential to fishing, but evidence of their presence does add something to a sport that is almost perfect without them. ... 

Free-Loaders

The laws of Mississippi permits about 43 fishermen out of every hundred to use the fishery resources of that state without contributing to its maintenance and improvement.

Too many sportsmen mistake looking for seeing, listening for hearing, observation for understanding, and opinions for thinking.
Litterbug Contest—What an Idea!

I would like to report on a Litterbug Contest the Warren Field and Stream Club sponsored at my suggestion recently. It was for the 5th, 6th, 7th and 8th grades of the Warren Schools.

The results were so excellent both from a “message” standpoint, as well as an artistic achievement, that I wish there were some way of displaying the posters to more people.

The winners and several runners up were displayed in local store windows, and the public was so impressed, I have been hearing about it from many sources. The work was really outstanding.

First prize winner was both an eye catcher, and thought provoking, being a drawing of a kangaroo, with her young in her pouch, and a simple but potent . . . “Keep Your Litter in A BAG!” Prizes were a $25 War Bond, $10, $5, and several of $1.

—Warden Kenneth G. Corey
Warren County

Ketcha Me—Ketcha Him Too!

Fish Warden Tony Lech still gets a chuckle from a story, which he takes pride in telling, to illustrate that all is not work. A few years ago he was traveling in the neighborhood of Frackville, near the Little Mud Run creek. As he approached a fisherman . . . the old gent turned around and said, “Better watch out, maybe a warden comes.”

“Why,” said Tony, “does he come this way?”

“No can tell,” said fisherman. “He no good, he come from Shenadoor. Him just made two Mahanoy City men pay fines yesterday.”

“What’s the matter with that?” said Tony, laughing to himself.

“Why, me no got license,” said the fellow, speaking in broken English.

“That’s fine,” answered Tony Lech, “I’m the warden.”

“Cripes,” shouted the frightened man, “someone pointed out wrong warden to me. Vait a minute, I got buddy. Hey Joe, come here.” His buddy came from behind a bush and was he surprised to hear his partner say, “Ketcha me—Ketcha him too.” Both were fined $25.00 each and costs.

—Edward O. Pond
Crawford County

“Nothing To Get Excited About”

The walleye fishing at Pymatuning Lake was poor the first two weeks of the season. After the weather warmed up, many fine catches were made and they are running good for size and are exceptionally fat this year. The May 30th opening on the other waters did not bring out very many fishermen. Checked two tagged fish from Conneaut Lake where the opening day for bass and other game fish was poor. Most of the fishermen were pluging for bass while a few were still fishing with minnows. There were 57 boats on the lake at 3 A.M.

—Clifton E. Inman
Butler and Beaver Counties

Pennsylvania Angler
"The Golden Hook"

I was shown the results of an experiment by a Warren County farmer this month, which is very interesting. He is raising trout bait in the form of Golden meal worms. He started them in ordinary wheat, then when they are large enough to see with the naked eye, he transplants them into oatmeal.

He does this during the winter months as a hobby. Not being a fisherman himself, he gives them to his friends.

—Kenneth G. Corey, Warren County

"The Bat Hung Low" and "The Snake Struck Twice"

On June 5 I stocked First Fork Sinnemahoning Creek. While patrolling stocked waters, I noticed something hanging from the limb of a butternut tree. When I got close enough to determine that someone had lost a string of wet flies on a limb of the butternut. The end fly hanging from the tree and on this fly was a bat. No doubt the bat had seen the fly hanging in the air and thought it was the real McCoy. The bat had been dead about 24 hours.

While fishing in vicinity of Costello, Pa., on Sunday, June 24, Wade C. Strickland, 16½ Euclid Ave., Bradford, Pa., was digging worms along the stream with his hands. While in the process of getting worms he was struck twice on the same hand by a rattlesnake. At last report, Mr. Strickland was a pretty sick man.

—Kenneth Aley, Potter County

"Bowmen Having Field Day"

The present day trend to liberalize fishing regulations in Pennsylvania has taken another step forward, and is receiving popular support. With the enactment of the bow fishing law, an entirely new sport has been created in the state. In addition to the enjoyable sport furnished by this type of fishing, many carp are being removed from our waters, which in turn will be beneficial to our streams.

Previous to the enactment of this law, many persons were doubtful if the bow would prove an efficient device for the taking of carp. But the bowmen have lost no time in proving it to be effective with a little practice. To date, catches of seven carp per day have been recorded, with the largest weighing 32 pounds. With success such as this, this type fishing will continue to grow.

—Harold Corbin, South Central Division Supervisor

"Trout Secondary"

There has been less trout fishing in the northwest division than I have ever seen during the month of June. Walleye fishing has been excellent at Pymatuning Lake, and it seems that the majority of fishermen would rather catch walleyes and panfish than trout.

—S. Carlyle Sheldon, Northwest Division Supervisor

"Walleyes at Home in Gordon"

June 2, 1956, at Gordon Lake, Bedford County, 21 fishermen were fishing for walleyes. They fished 86½ hours, caught 46 legal walleyes, largest was 27 inches long. The fish were all taken from one section of the lake. I feel that this is the largest catch of walleyes ever taken in this amount of hours fished.

June 23, 1956, I counted 11 walleyes caught and released that were less than 12 inches long. This I feel is very good, for it shows that the walleyed pike do reproduce in this body of water, the Gordon Lake.

—William E. McIlroy, Bedford County

"Room For Improvement"

Motorboat activity in this district, especially in the Raystown Dam area, continues to increase. One collision this month has brought into very sharp focus, the need for rigid control of boating activities.

—Richard Owens, Huntingdon and Mifflin Counties

"Fishermen Approve"

In my district there have been many comments on the stocking program, all in favor of the system used this in-season. On Shermans Creek, the last stream to be stocked with trout, I received a lot of favorable comments, surprisingly too, many of them came from fellows who were wearing patches on their britches. Have only received three real gripes.

—Joseph S. Dick, Somerset County

"Fishermen 'Bats' 1,000"

While talking with a fisherman recently, he told me while fly fishing one evening, a bat grabbed the fly as it settled to the water. But and fly were both retrieved.

—Joseph S. Dick, Somerset County
Abettors,

RANDALL TEAF

Newtown Square, R. D. 1, Penna.

Mr. C. Robert Glover, Chief
Conservation Education Division
Pennsylvania Fish Commission
Harrisburg, Penna.

Dear Sir:

I am sorry I did not get this letter off to you sooner. I just got back from George School last week and I had to go to camp to set up a Conservation program which I will have charge of this year, at Camp Delmont, Green Lane, Penna., for Explorer Scouts from Delaware and Montgomery Counties. This program was started there last year after I returned from the Junior Conservation Course at Penn State and it was quite successful.

I think the enclosed program will give you some idea of the Conservation material covered. This is a combination of the information I received from three main sources, although in addition I have read all the pamphlets from state and government sources that I could get hold of.

The three main sources were:

1. From the 36 day Junior Leadership Training Course conducted by the Boy Scouts of America at their Philmont Scout Ranch, Cimarron, New Mexico, which I took in 1954.
2. In June, 1955, I took the two weeks Junior Conservation Course given at Penn State. This was an experience I will never forget, because the material was presented in such an interesting way by an enthusiastic and well-trained Staff.
3. To this was added the information I gained from the Third National Conference of Young Outdoor Americans this past spring, and which I will summarize below:

Under the general heading of "Building a Better Outdoor America," 96 representatives from the Boy Scouts of America, 4-H Clubs and Future Farmers of America met at Sioux City, Iowa, April 17-20, to participate in a series of youth-conducted sessions and conferences planned "to develop youth leadership in the resource conservation field." Victor Capucci, a F.F.A., and I, represented Pennsylvania.

Four principal subjects were assigned for discussion by the delegates who were divided into four equal groups. Two hours were allotted to each group for the discussion of each major topic, then the groups were rotated, allowing each delegate to participate in all four groups.

Adult "specialists" were on hand to answer questions but did not otherwise participate in the meetings. This kept the discussions on a "youth" level.

Soil conditions, problems and needs, received special attention this year, with the following men as technical advisors; under the leadership of:

Dr. B. K. Barton, Conference Manager, and Coordinator of Conservation Education for the State of Illinois.
Roland F. Eisenbeis, Supt. of Conservation, Cook County Forest Preserve District.
Paul Bolton, Senior Sanitary Engineer, Kansas City Water Supply and Water Pollution Control Program.
Professor L. E. Clapp, Extension Soil Conservationist, Iowa State College.
George W. Worley, State Conservation Commission, Des Moines, Iowa.
C. N. Mattison, Forestry educational consultant, div. of inform. and education, forest service, USDA.

In connection with soil conservation, a field trip was made to the Little Sioux Falls Experimental Basin to show the work being done to control flash floods with resulting erosion. We also visited a meat packing plant.

Other topics discussed were:

1. The situation in the U. S. and the world, regarding the present balance between food supply and demand.
2. The needs for recreational land. Are the present national and state parks, public hunting and fishing areas adequate? How can national, state and local policies plan a proper balance between demands for land use and recreational needs?
3. How does zoning affect the problems of conflicting interests in land use?

I was most impressed with the frank exchange of problems and ideas among the delegates, coupled with
the realization that conservation of our natural resources whether they be land, forests, streams or wildlife, is a challenge and a source of deep concern to all America. Some of the Future Farmers at the Conference, were really Farmers of Today, married, and with their own farms—in some cases very large farms in comparison with our own Chester County acreage, but their problems of water runoff, gully control, soil erosion, stream pollution and lowered water tables are the same as those we face in the Brandywine Conservation Area.

We are fortunate though in having so many sources of available help. Through our State Conservation Commissions, State University Extension Schools, Federal and State agencies, Sportsmen's Clubs, such as the Izaak Walton League, and local conservation groups, such as the Brandywine Valley Association, expert advice is available to all who are sincerely concerned with building a better outdoor America.

I certainly am grateful to the Izaak Walton League of America and the Studebaker-Packard Corporation for setting up this Conference and for making it possible for me to attend as a representative of the Boy Scouts of America.

I will be seventeen years old in August, and am a Junior at George School, George School, Penna. where I am taking the Science Course hoping to go to Penn State University and take Forestry there.

I was left fullback on the Varsity Soccer Team, and was on the Varsity Basketball and Track squads. Soccer is my favorite sport. Last Christmas vacation I was invited to attend the Soccer Forum conducted by Glenn Warner, Coach of the Navy Soccer Team, at St. Petersburg, Florida, and was chosen to play in the North-South Sunshine Soccer Bowl same there.

I have been in Scouting six years and am Junior Asst. Scoutmaster of Media, Troop 2, Valley Forge Council, and am an Eagle Scout with Silver Palm. I was a representative of our Scout Region at the World Jamboree in Canada last August.

Stamp collecting and model railroading are my hobbies, but soccer, scouting and conservation are my main interests.

My grandfather, H. Morris Teaf, was my first inspiration along conservation lines. For many years he supervised the stocking of fish in the Wissahickon and one of my earliest memories was of helping him empty "cans" of large and small fish in that stream, and listening to him tell the need for conserving all our resources.

Sincerely,

Randall Teaf

Mehoopany, Pa.