

# Water Is Valuable Nantahala Resource

By W. J. GRAY, DISTRICT RANGER  
Should your milkman inform you that six gallons of water are used in producing each gallon of bottled milk delivered to your door, you would probably agree or disagree depending on the quality of the milk. It is a true figure, however, of the average amount of water used in the dairy, receiving station and bottling works to produce for you a clean, sanitary product.

This is only one example of the amount of water required in the processes which produce for us the many things necessary in our present day living. Canned foods require large amounts of water in processing. A case of No. 2 canned peaches requires 65 gallons of water. A ton of sulfite paper pulp requires 60,000 gallons or 30 million gallons a day for a 500 ton capacity pulpmill. A pulpmill of this daily capacity, which is not unusual, uses enough water to supply a city of 300,000 people. Such statistics could be continued for many pages, but they would only serve to emphasize what should already be clear. That is, water is our most vital resource. Like every other section of the country, the capacity of western North Carolina to maintain a growing population and an expanding industry and agriculture depends on our water resource. "Water or Your Life", the title of a recent book by Arthur Carhart, expresses the value of this resource.

In the management of the Nantahala National Forest, water values are given first priority. Adjustments of other resource uses will be made in favor of watershed protection should conflicts develop. Like other natural resources of the forest, water is subject to good and bad management. Because we have taken water for granted, it is probably the least understood of all forest resources. We associate water with climate. Because we cannot expect to greatly increase the amount of rainfall, we assume there is little we can do about influencing the amount of water in the streams. In watershed management, we direct our efforts toward efficiently handling the rainfall that does occur rather than in attempting to increase the amount of rainfall. The main consideration is that water resources are an essential part of forest management. In general, the objective of water management is to obtain the maximum quantity and quality of usable water for domestic and industrial uses, for maintaining favorable conditions for fish and wildlife, and for recreation.

Watershed management is accomplished through the control and manipulation of vegetation and the management of the soil. It is principally through the soil that we can influence infiltration and storage of water that ultimately reaches the stream as ground water flow. Generally speaking, the natural soil developed under undisturbed forest cover has about as favorable a structure for infiltration and storage of water as can be obtained for any locality. The standard of excellence for any locality is the undisturbed forest soil. When the natural forest cover is disturbed through cutting, fire, grazing by domestic stock or concentration of large game animals, there may be a change away from the original natural soil toward one less favorable for the control of water.

The extent to which land use has changed the soil from its original conditions is roughly a measure of the degree that watershed values have been disturbed. It is logical then that the aim of watershed management is to return to and maintain so far as it is possible the undisturbed natural forest soil of the locality.

From the watershed management point of view, vegetation is of value in developing a favorable soil structure through protecting and maintaining the extensive biological activities that characterize the upper layers of soil. The annual fall of leaves furnishes food for a whole manerie of rodents, worms, insects and all the micro-organisms on which favorable soil structure and soil fertility depend. The presence of organisms in the soil are needed to maintain the structure required for good watershed management. Rodent burrows, worm and insect holes, and the channels left after plant roots decay all contribute to making the soil porous, permit air to escape and favor infiltration and storage of water in the soil.

Forest fires, particularly on shallow rocky soil, are very unfavorable to the watershed. Effective fire control is, therefore, a basic job in protecting watershed values. When the organic matter accumulated on the forest floor is consumed by fire, the factor described above which create favorable conditions are removed. The roads and skidways created when forest products are cut and

## Funeral Is Held For Carl J. Simonds

Carl Jackson Simonds, 53, died at 2:45 p. m. Tuesday. Funeral services will be held at 2 p. m. today (Thursday) in Bear Paw Baptist Church with the Rev. Fred Stiles officiating.

Burial will be in the church cemetery, with Ivie Funeral Home in charge. Pallbearers will be Charlie, Bill and Willard Clonts, Jake and Sheridan Stiles, and Ralph Rogers. Surviving are: two brothers, A. Marion Simonds and E. L. Simonds of Cleveland, Tenn.; four sisters, Mrs. Elsie Atchley and Mrs. Bonnie Stiles of Gastonia, Mrs. W. C. Savage of Baton Rouge, La., and Mrs. Beulah Cash of Newport News, Va.

removed will create changes from favorable to unfavorable watershed conditions unless steps are taken to minimize these effects. By proper location of roads and skidways and by installing adequate erosion control barriers, the unfavorable effects of logging can be kept within tolerable limits.

Adverse effects are created by grazing livestock and big game animals. Soil compaction and reduction of low-growing vegetation accelerate runoff and erosion. Cattle grazing has practically disappeared from our open range forests, but is a serious factor in farm woodlands. Although big game hunters probably never give it a thought, they are depended upon to keep the game population under control. Over populations of deer or wild boar can become very destructive to water values. For this reason, managed hunting has become an important element in watershed protection on the Nantahala Forest.

The foregoing are some of the elements entering into watershed management. Exhaustive research into watershed problems has also been in the program.

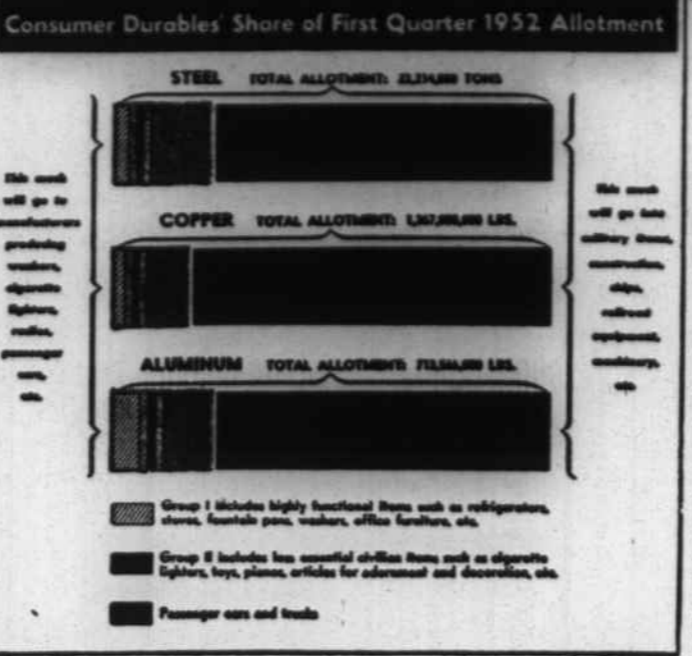
The Nantahala District watershed covers approximately 500 square miles within the coordinated protection boundary. No direct money revenue is derived from the water resource and paid into the National treasury. However, a reasonable monetary estimate of its value can be calculated. A good forested watershed in Western North Carolina will flow at an average annual rate of 1 1/2 cubic feet per second per square mile. One cubic foot flow per second is equal to 646,317 gallons per day. Thus a 10 square mile watershed yields 9,694,750 gallons per day. At a rate of 10 cents per thousand gallons, this amount of water is worth \$969,475 a day, or \$353,854 a year.

The Nantahala District, at the above rate will produce water worth \$17,692,700 per year. Assuming that only one tenth of this amount goes into industrial or domestic use within a radius of 25 miles of the District, this water is worth \$1,769,270 per year. Allowing a value of untreated water to be only one cent per thousand gallons and considering that only one-tenth of the water in the District has an immediate commodity value, it is still worth \$176,927 a year. This might be compared to revenues from wood products for 1951 of about \$20,000.

This use of water for industrial and domestic purposes from the Nantahala District is as yet largely a potential value. A few communities use the water and Andrews, Robbinsville, Fontana, Tapoco and Ayres Ferry obtain their supply from the forest watershed. By far the greatest use is for water power which is non-consumptive; however, good watershed management is essential to efficient hydroelectric power production.

Water must be considered as one of the natural resources of the Forest in the same category as timber products, fish and wildlife and recreation. The relative importance of these natural resources differs for different sections of the country. In the forests located in the Southern mountains the most important natural resource so far as the economy of the region is concerned is water.

A volume of 100 gallons per capita per day is often used as a rough estimate of the amount of water a city will use. Finding this 100 gallons per day for each person has become a serious problem in many places. Water scarcity has been making news from too many sections of our country recently. It is comforting to know that in the forests of Western North Carolina there exists a water supply of high quality, virtually untapped, to take care of our future. It will be there when needed and certainly is worth our care and protection



## Mrs. Minda Lewis Dies At Brasstown

Mrs. Minda Lewis, 81, of Brasstown died Tuesday at 2 p. m. in a Murphy hospital after an illness of three weeks. Funeral services were held at 4 p. m. Wednesday in Green Cove Baptist Church, with the Rev. Ham Coffey officiating. Burial was in the church cemetery with Township Funeral Home in charge. There were no survivors.

## Infant Dies

Graveside rites for Dale Lovings, good, infant son of Mr. and Mrs. Don Lovings, Route 3, Murphy, who died Sunday, were held Monday at 11 a. m. in White Church Cemetery. Surviving, besides the parents, are one brother, Donald Robert and both the maternal and paternal grandparents.

## Stiles Child Is Taken By Death

Jeannette Stiles, eight-month-old daughter of Mr. and Mrs. William E. Stiles of Oak Park, died Tuesday in the home after a few days' illness of pneumonia. Funeral services were held Wednesday.

## NOTICE OF SALE

The Cherokee County Board of Education will sell at Public Auction at the Courthouse door in Murphy February 16, 1952, at 11 o'clock A. M. to the highest bidder for cash the following described school property: Beginning on a Spanish oak near the north side of the public road leading from Murphy, N. C. to Unaka, N. C. on a conditional line between C. Radford and William Allen, and runs with the road 11 poles on a marked line to a chestnut stake; thence a westerly course with a marked line 4 poles to a stake; thence a south course with a marked line 15 poles to a Spanish oak; thence an east course with a marked line 13 poles to a stake; thence a north course with a marked line 16 poles to the beginning, containing one acre and 93 poles; also free ingress and egress to the spring of Curtis Radford on the North side of the road leading from Murphy to Unaka, which spring is about 50 yards more or less from the public road, this being the land sold to the Cherokee County Board of Education by Curtis Radford and wife, Catherine Radford, recorded in Book No. 19 page 263 in the office of the Register of Deeds of Cherokee County, and known as the Upper Beavertown School property. The Board of Education reserves the right to reject any and all bids.

**Johns - Manville Bldg. Materials**  
Asphalt Shingles-Roll Roofing  
Asbestos Siding  
GIBBS HDW. & AUTO SUPPLY

## CATTLE-HOGS WE BUY

Also, chickens of any kind. Will come anywhere after them. Write or call Phone 682-J Box 571 Carl Crawford & Sons Copperhill, Tenn.

## EMILY POST MODERNIZES GOOD MANNERS

What is correct procedure when unexpected guests drop in during your favorite TV show? Should a man leave his before a lady? Emily Post says you may be following etiquette rules that you really don't have to follow. See guide to modern manners in January 27th issue of

THE AMERICAN WEEKLY  
Nation's popular Magazine with the BALTIMORE SUNDAY AMERICAN  
Order from Your Local Newsdealer

# USE THE CLASSIFIED

ALL CLASSIFIED ADS PAYABLE IN ADVANCE. LOCAL RATES: Minimum, 50c for one insertion of ad with not more than 25 words; three insertions, \$1. Additional words, 2c per word. FOREIGN RATES: one time, 3c per word. All rates net. Classified ads accepted up until 12 noon Wednesday. ALL "KEYED" CLASSIFIED ADS ARE 3c PER WORD AND A MINIMUM OF 75c. CARD OF THANKS 50c. MEMORIALS, RESOLUTIONS OF RESPECT, AND OBITUARIES 2c PER WORD.

WANTED: Two waitresses, with or without experience. Part or full time. Murphy Cafe, Murphy, N. C. J-S-25-3tc

ELECTRIC RANGE for sale, \$65. Addie Mae Cooke, Phone 20 or 97-W. 27-1f

WANTED: RELIABLE MAN, 25-50, assist in local branch operations. Must have car. Opportunities of \$60 a week or better to start. See Mr. Pressley on Saturday morning, January 12. Electrolux Corp., Tennessee St. Murphy, N. C. 25-3tc

LOST: The writing part of a black and white Sheaffer fountain pen, Friday evening, somewhere on the streets of Murphy. Finder please return to Scout Office and receive a reward. 26-1c

WANTED: Woman Cook to assist cook in kitchen. Must be able to read and write. New Regal Hotel, Murphy, N. C. 27-3tc

Hay for Sale, \$1.25 per Bale. W. E. Brendle, Brasstown, N. C. 26-3tp

Buying Black Walnuts, Hulled and Dried. Farmers Federation. 26-3tc

I hereby offer a \$25 reward to any person who will give sufficient evidence of any person stealing material from my building on Fairmount Mountain. Gay Hawkins, Suit, N. C. 26-3tp

Hay for Sale, By Bale or Ton. C. H. Townson, Marble, N. C. Phone 553-M-4. 26-3tp

FOR RENT: 2-bedroom house. Phone 75 Murphy, N. C. 27-3tc

FOR SALE: 30-acre farm with 5-room house. See Spencer Crane, 12 miles east of Murphy on Highway 64. 27-4tp

FOR SALE: Stove and heater wood. See Bill King, Phone 364, Murphy, N. C. 26-3tp

HOT PLATES for sale. One with two units, \$5.00; and one with one unit \$1.75. Addie Mae Cooke, Phone 20 or 97-W.

GROW YOUR OWN FRUIT. Complete line of Fruit trees, Nut Trees, Berry Plants, Grape Vines, and Ornamental Plant Material offered by Virginia's Largest Growers. Write for Free Copy 56-page Planting Guide in Color. Salespeople W a n t e d. Waynesboro Nurseries, Waynesboro Virginia. 22-8tc

STOVE WOOD for sale. Delivered. W. D. Townson Lumber Co., Phone 334. 22-1tc

WANTED TO BUY for cash high tread repairable and slick recappable carcasses. Any amount, any size. Graves Tires Co. Phone 300, Murphy. 2-1tc

MEN WANTED: I want a man who cares for his family, wants the finer things of life. Is not content with \$50 or \$75 per week, wants his own business. Can be his own boss. Must have a car. Phone 545, Murphy, N. C. 23-1tc

FOR RENT: 2 or 3-room furnished apartment adjacent to school. Gas heat, hot water, private bath. Youngstown sink, electric stove and refrigerator. Mrs. Edwin Hagaman, 305 Valley River Avenue, Phone 250. 25-3tc

FOR SALE: One slightly used electric Frigidaire, electric range and three-piece living room suite. See Frank Hembree on Highway 294 near Mort Hamby's store. 25-3tp

FOR SALE: A 6-room house, lights and water, about 3 acres of land, small orchard, good location near Marble. See Lee Hughes at Marble. 23-3p

## C. E. HYDE

### GENERAL INSURANCE

Phone 145      Murphy, N. C.

# LOW DOWN-PAYMENT! LONG, EASY TERMS!



## NEW '52 1 1/2-ton and 2-ton DODGE "Job-Rated" TRUCKS

IMMEDIATE DELIVERY

NO CREDIT RESTRICTIONS

**Big, Powerful, High-compression Engine** WITH CHROME-PLATED TOP PISTON RINGS  
**Heavy, Rugged Frame** PLUS LONG, STRONG SPRINGS AND BIG-CAPACITY AXLES  
**Molded, Tapered, Cyclebond Brake Linings** EXTRA-QUIET AND LONGER LASTING  
**Better Weight Distribution** FOR BIGGER PAYLOADS WITHOUT OVERLOADING

**PLUS SCORES OF OTHER GREAT EXTRA VALUES...COME IN TODAY**

**E. C. Moore**  
107 Valley River Ave. Phone 37 Murphy, N. C.

MOVING? Call... **AMERICAN RED BALL** TRANSIT COMPANY, INC.

SAFE • DEPENDABLE • ECONOMICAL  
NATION-WIDE MOVING SERVICE  
AUTHORIZED AGENT

**Palmer Bros. Trucking Co. Inc.**  
Phone 202      Murphy, N. C.