

Virginia's
renewable
natural
resource
Potential



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Situation Statement

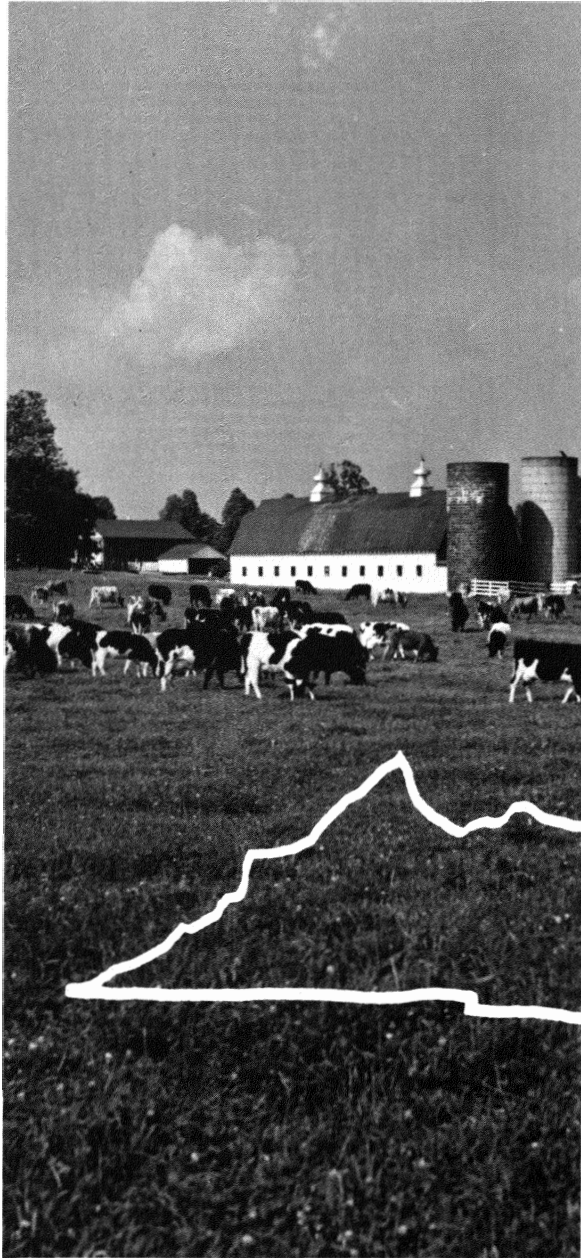
Forestry in many respects is Virginia's biggest business, being first in the number of establishments, first in the number employed, and second in total payroll. The value of the timber harvest is larger than that of any other agricultural crop in Virginia. And forestry is on the increase in Virginia.

Virginians are people who enjoy the out-of-doors, and are willing to spend hundreds of millions of dollars participating in hunting, sport fishing, and other forms of wildlife utilization and appreciation. Even more is spent by Virginians who just want to spend some time in outdoor recreation.

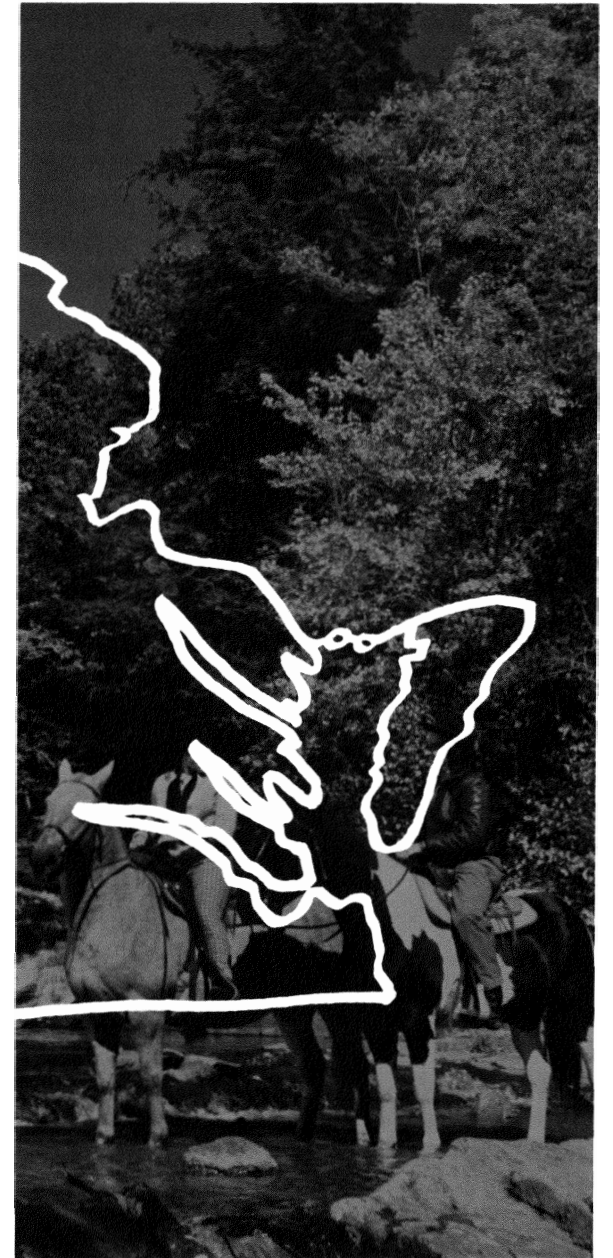
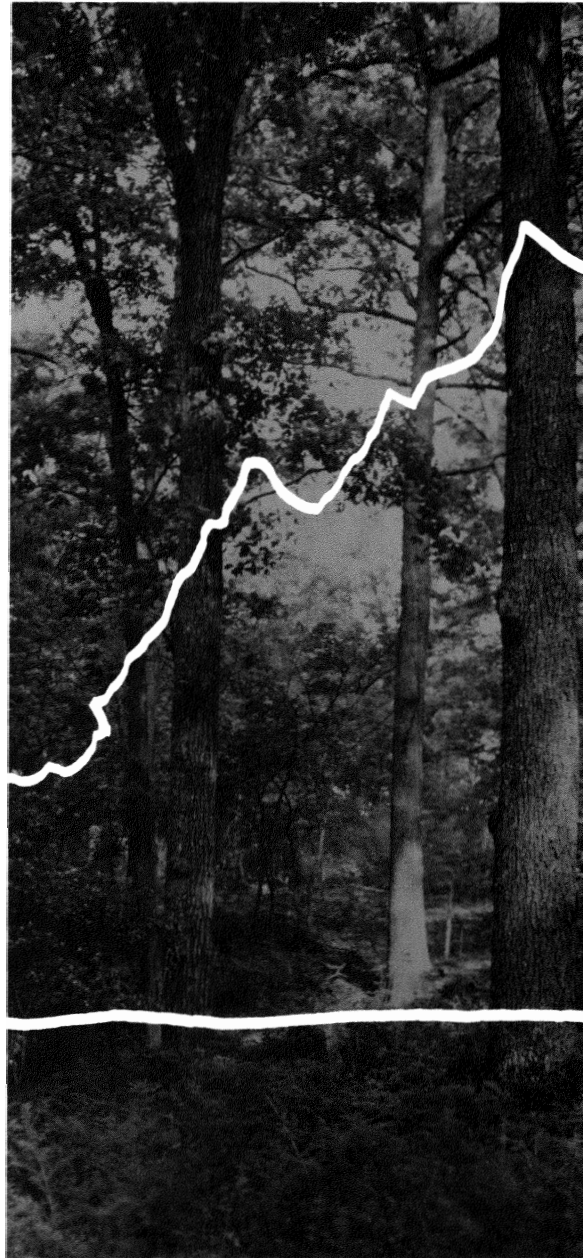
But Virginia, with her many parks, forests, beaches, and campgrounds, attracts more than Virginians. Each year millions of tourists enter the state. Their travel expenditures amount to a multi-million dollar industry.

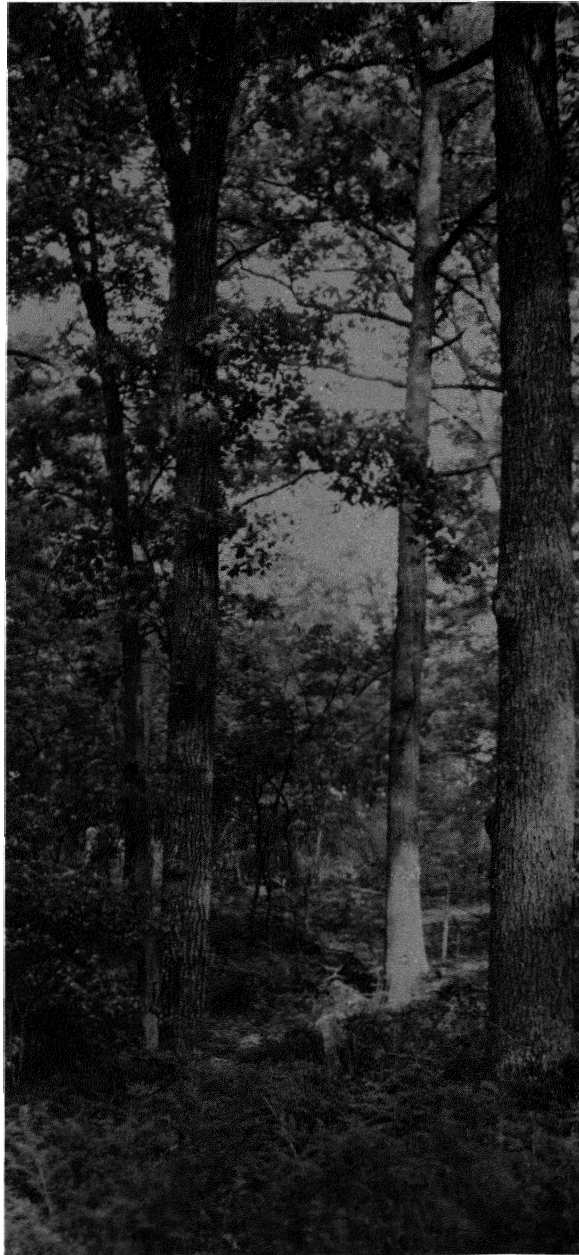
Currently, renewable natural resources are more than a \$2-billion industry. Even more important, they have a potential of over \$4-billion in 1975. If this potential is to be reached, then extensive promotion, education, planning, and development are essential.

Land Resource



Two Thirds of Virginia is Forest Land



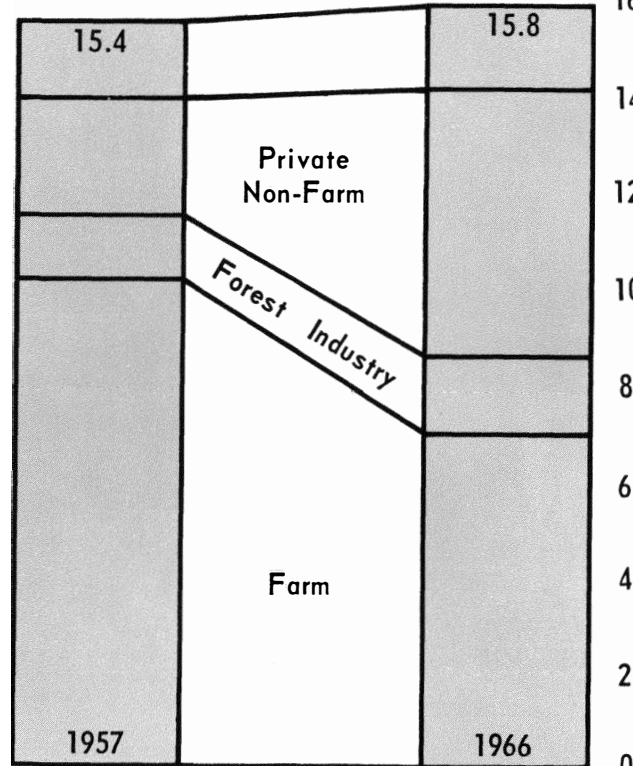


Forest Ownership

The forest land ownership is changing; since 1957:

- Total land ownership has increased slightly.
- Public ownership and ownership by industry is up slightly.
- A major shift in land from farm ownership to private non-farm ownership (business and professional people, landholding companies, wage earners, and housewives, many of which are absentee owners) has taken place.

Land Ownership in Millions of Acres



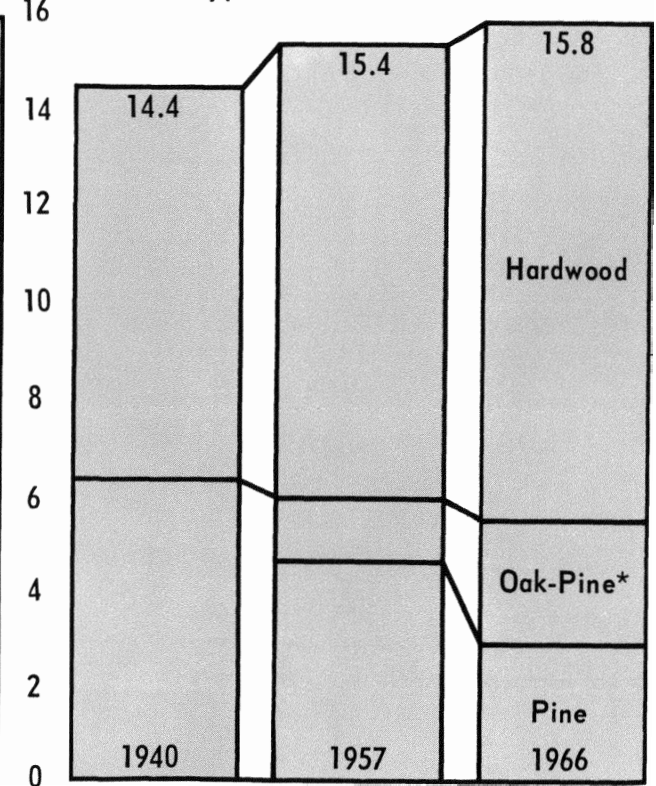
Forest Type

The forest land type is changing:

- Acres of pine type land are decreasing.
- Hardwood and Oak-Pine* types are increasing.

*Areas in which 50% of stand is Hardwood with 25 years Pine. Not separated from Pine stands in 1940 statistics.

Forest Type in Millions of Acres

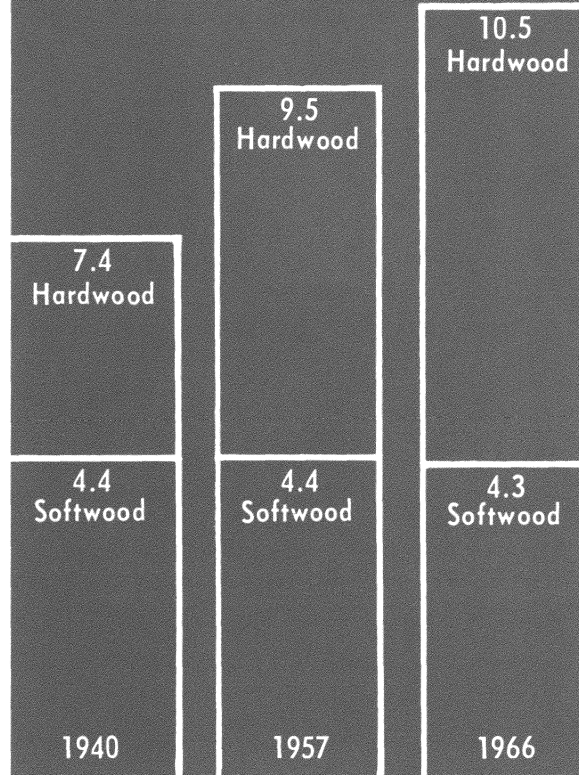


Trees

Volume of Timber is Increasing.

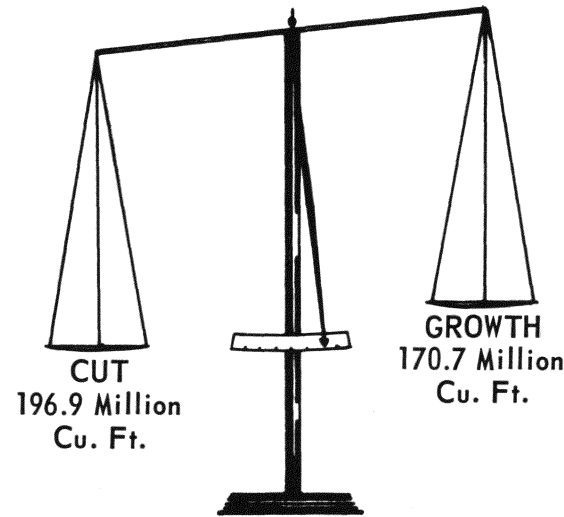
The total volume of timber growing stock (merchantable timber 5" in diameter and over) has increased steadily over the past 26 years. This increase has been entirely in hardwoods, much of it in low grade hardwoods. Softwoods have decreased slightly.

Volume of Timber Growing Stock
Billion Cubic Feet

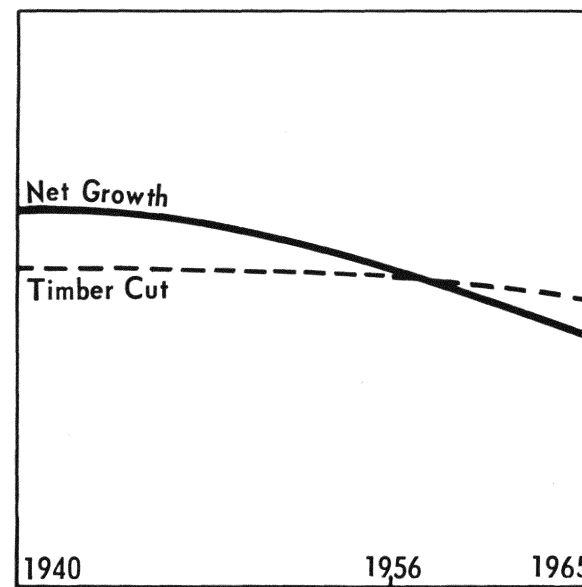
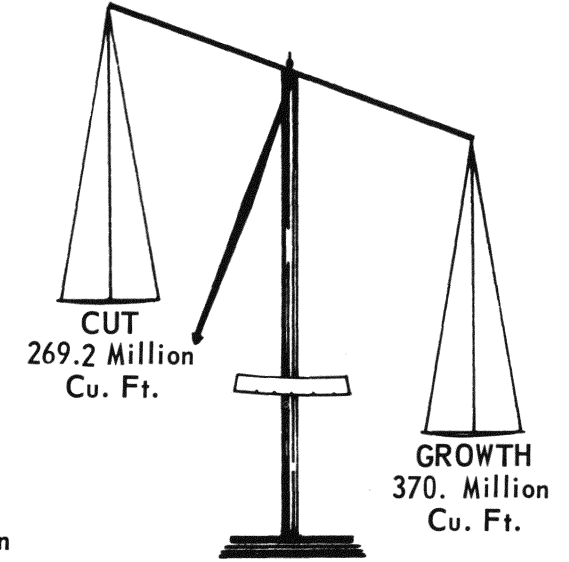


Poor Balance Between Growth and Cut

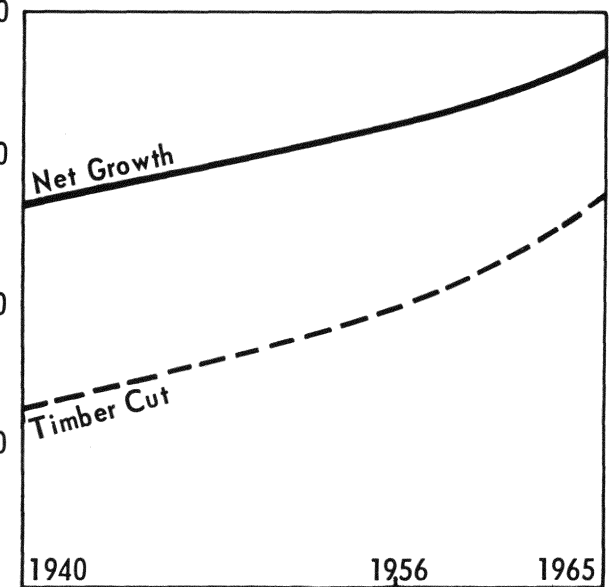
SOFTWOOD



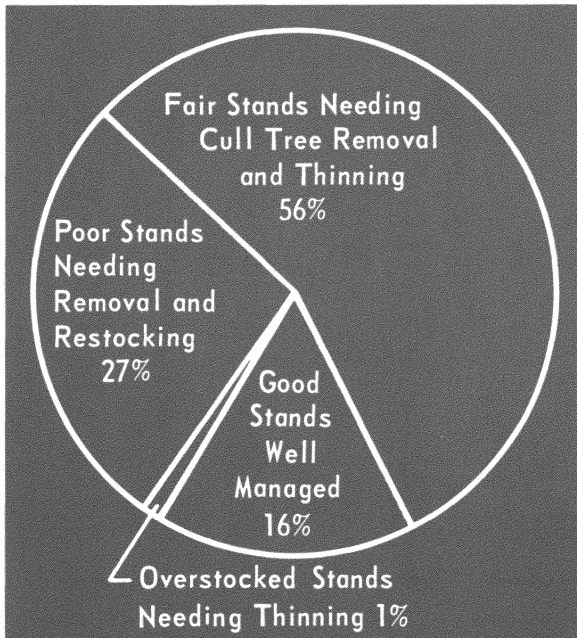
HARDWOOD



Million
Cubic
Feet

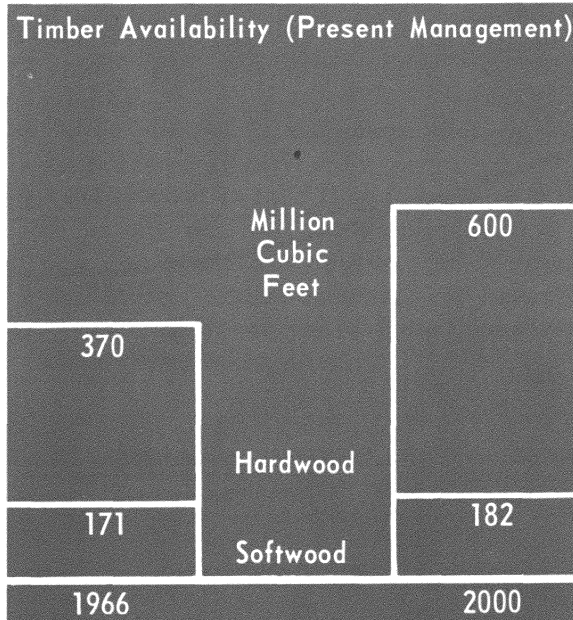


Stand Condition



The potential timber growth is not being fully realized. Only a small portion of the commercial timber lands is being managed to provide its full potential.

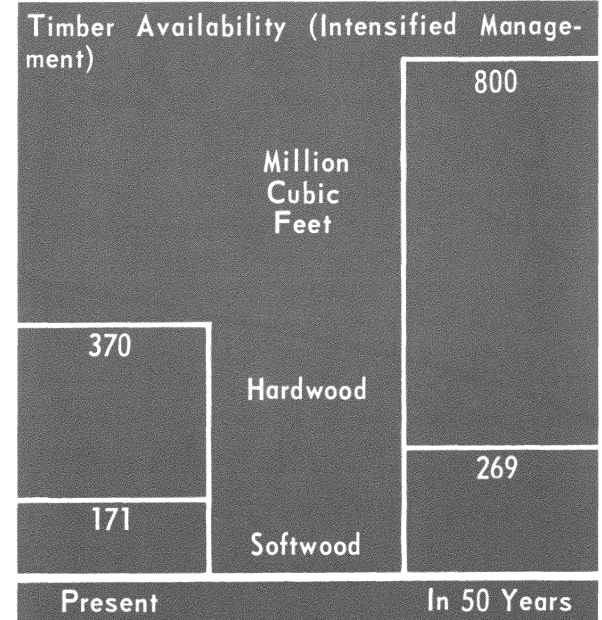
Future



If the present management trend continues and assuming cut decreases to equal growth in softwoods, the U. S. Forest Service has projected that in the year 2000:

- Softwood availability will increase only 1%.
- Hardwood availability will increase 56%.

Potential



The forest lands of Virginia with proper management can provide a much larger supply of timber. A second U. S. Forest Service projection estimated the timber availability in 50 years with intensified forest management:

- Softwood availability will increase 37%.
- Hardwood availability will increase 200%.

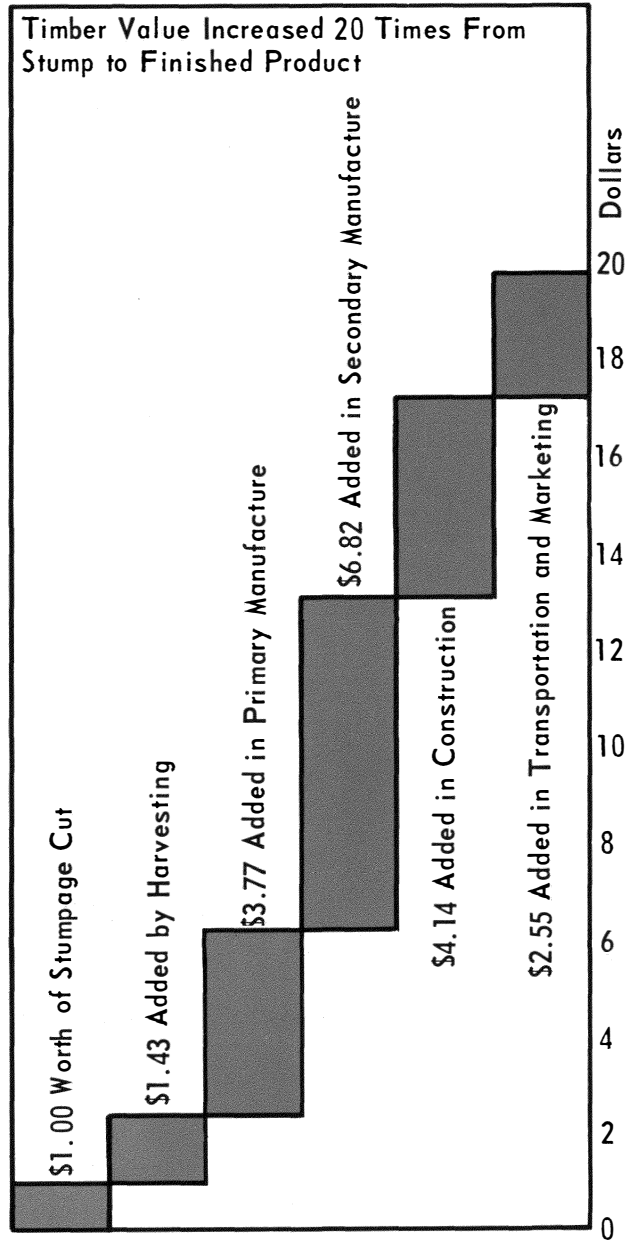
Highlights of the Wood Products Industry



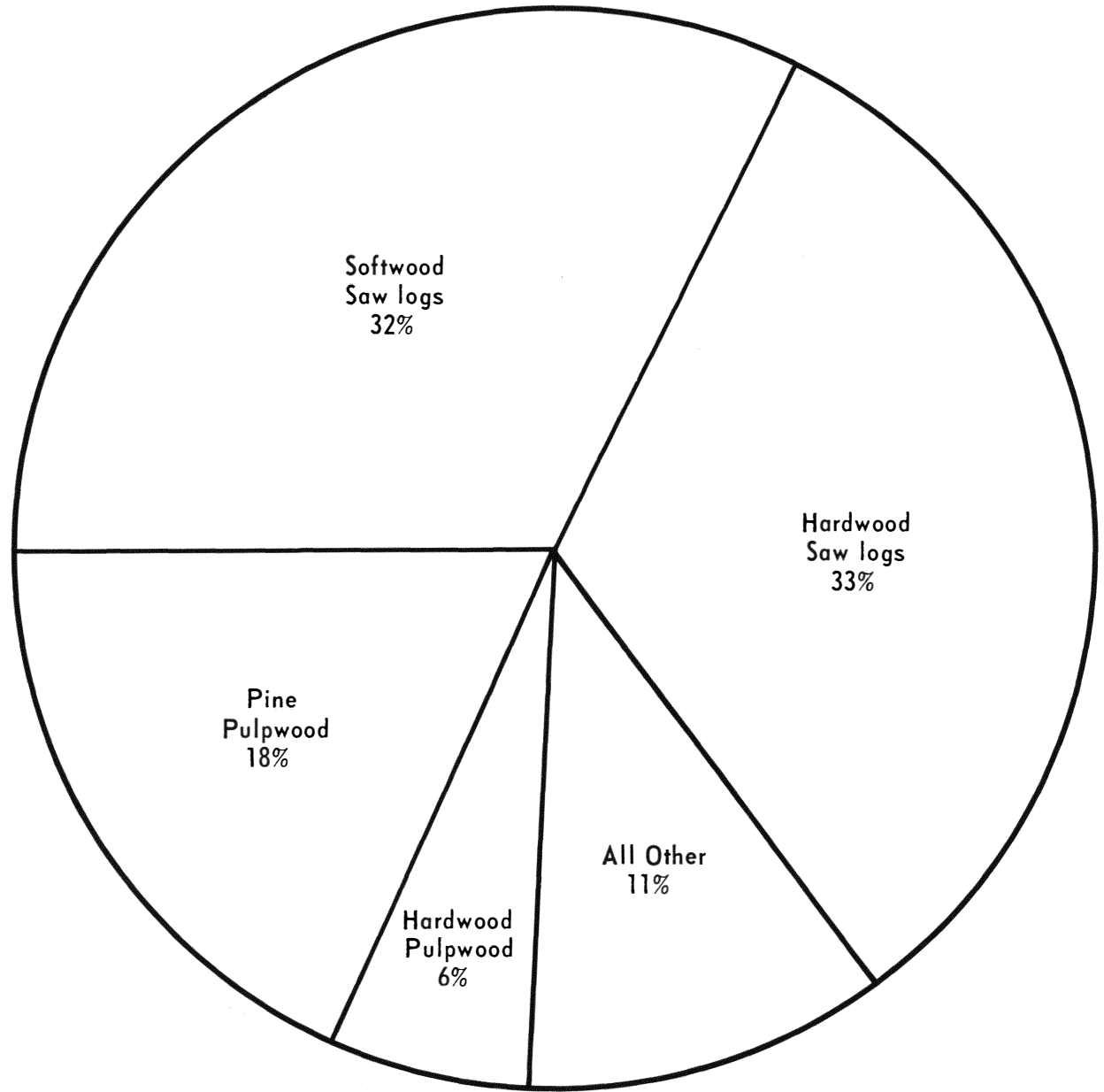
	1958	1965
Total Wood Used (Million Cu. Ft.)	412	466
Employment (Thousand Workers)	49	58
Wages (Million Dollars)	158	267
Value Added By Manufacture (Million Dollars)	280	516
Capital Expenditures (Million Dollars)	28	51

Virginia's wood using industry represents 41% of all manufacturing plants in the state. They account for 16% of the manufacturing payroll and 18% of the employees. The value of the timber cut is approximately \$47 million per year. This increases to \$114 million by the time it reaches the primary processor. The total value after primary manufacture into finished products is estimated to be about \$1 billion.

Timber Value Increase

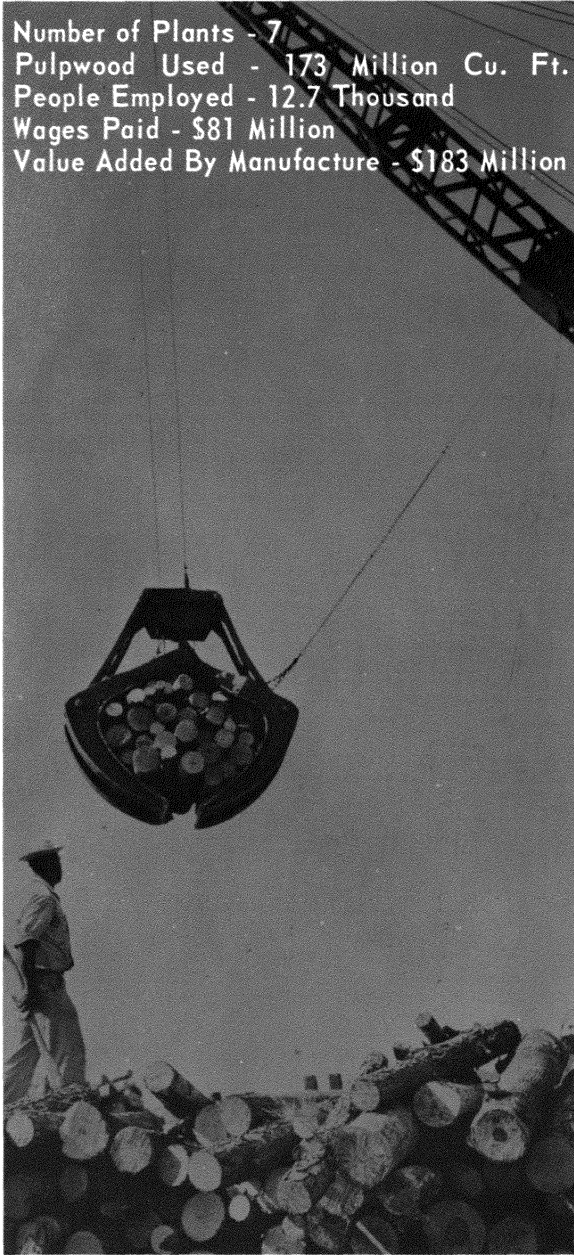


Distribution of Timber by Value



Pulp and Paper

Number of Plants - 7
Pulpwood Used - 173 Million Cu. Ft.
People Employed - 12.7 Thousand
Wages Paid - \$81 Million
Value Added By Manufacture - \$183 Million



Lumber and Wood

Number of Plants - Over 1000
Timber Used - 208.2 Million Cu. Ft.
People Employed - 23.1 Thousand
Wages Paid - \$76.3 Million
Value Added By Manufacture - \$127.4 Million



Furniture

Number of Plants - 50
People Employed - 22.7 Thousand
Wages Paid - \$108.8 Million
Value Added By Manufacture - \$205.9 Million



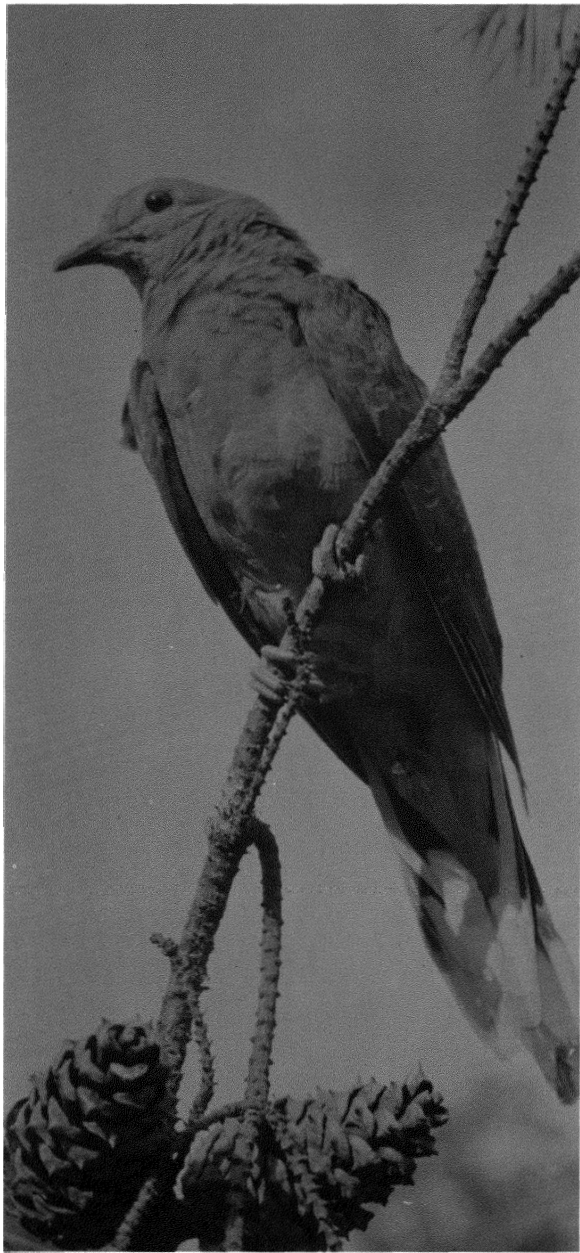
Wildlife Resource



In 1964, 373,730 hunters in Virginia spent an average of \$233 apiece for a total expenditure of approximately \$87 million. Although expenditures of inland sport fishermen have not been estimated in Virginia, the national average expenditure of sport fishermen was slightly larger than that of hunters. This trend also holds true for most states. Therefore, the 337,324 sport fishermen in Virginia in 1964 probably spent in excess of \$70 million. Consequently, the total expenditures by Virginians for inland sport fishing and hunting exceeds \$150 million per year.

An estimated 381,396 salt-water sport fishermen spent an estimated \$36 million in 1965. The catch value of commercial salt-water fishermen in 1964 totaled approximately \$26 million and was increased by \$7 million by further processing. Thus marine wildlife resources contribute \$34 million to Virginia's economy and result in the expenditure of \$36 million for sporting purposes.

Yet Virginia's wildlife resources have a value apart from the monetary worth derived from their utilization. This as yet unestimated esthetic value results from the desire of Virginians to see wildlife or to know that it is present. Undoubtedly, part of the expenditures made by Virginians on outdoor recreation are made with the hope of seeing wildlife. Some Virginians, such as amateur ornithologists for example, spend considerable sums solely for the purpose of observing wildlife, while other Virginians maintain small tracts of land primarily for wildlife or are willing to make improve-



ments for wildlife on land devoted primarily to other uses.

Virginia wildlife also has a negative effect on the state's economy. Rats and mice destroy unestimated millions of dollars worth of crops and goods as well as carry and spread disease. Birds destroy several million dollars worth of crops each year. Other forms of wildlife such as deer, rabbit, fox and bear cause extensive damage to crops and livestock.

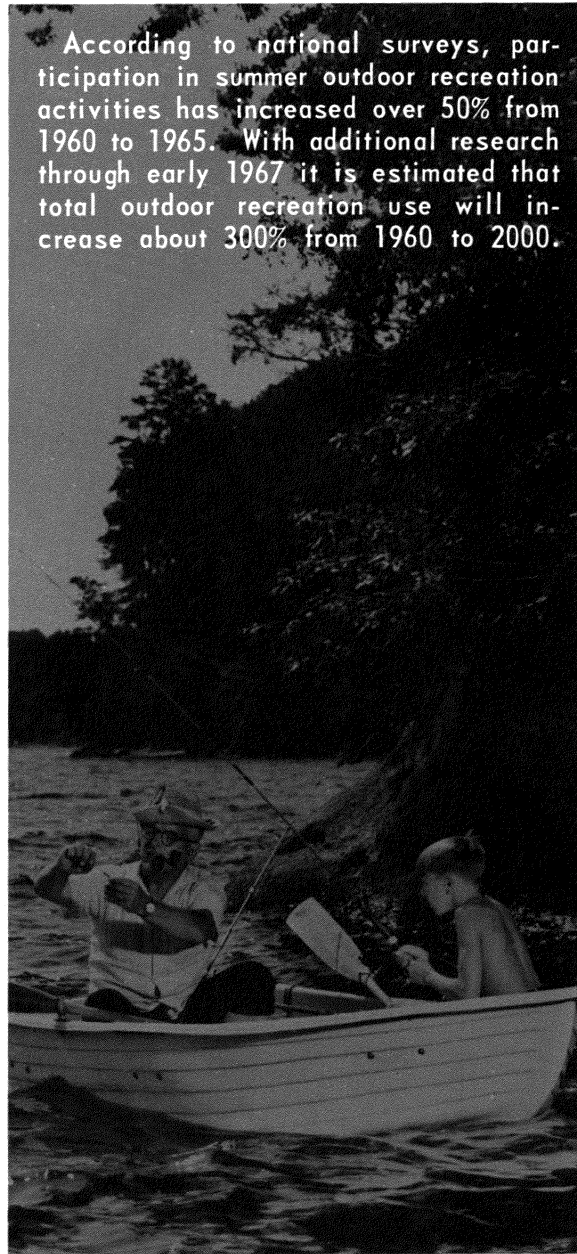
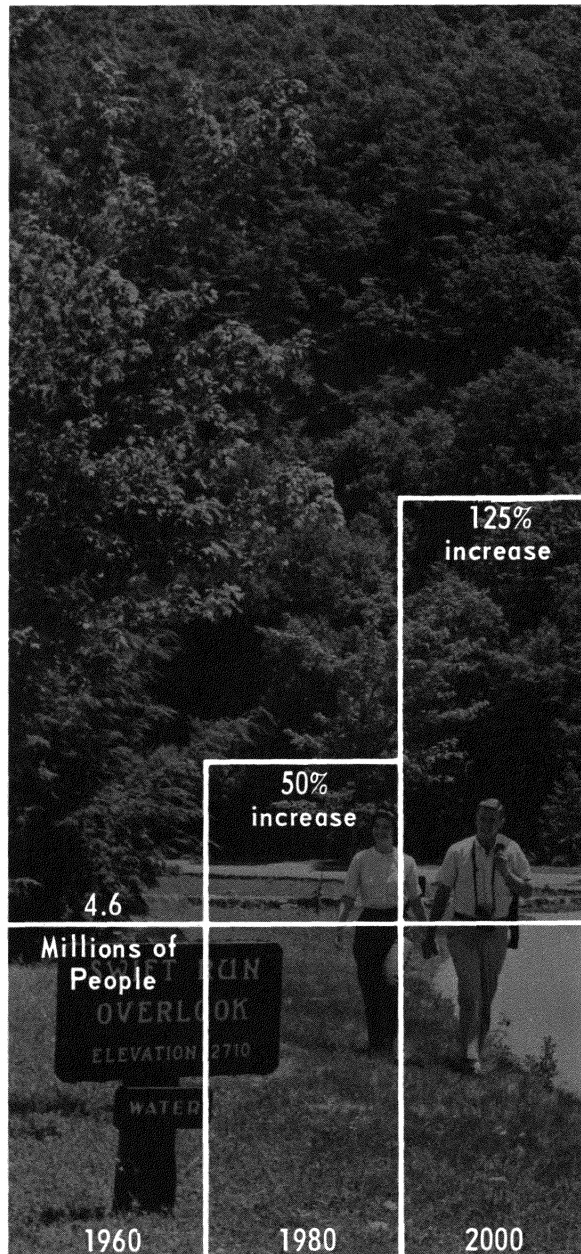
Thus it can be seen that Virginia's wildlife resources have a large impact upon the state's economy. Yet as a whole, the full value of these resources is relatively untapped. Most Virginians do not know enough about their wildlife to fully enjoy it, either as consumers or non-consumers. Many are not fully aware of the disastrous effects of poor land management and pollution upon wildlife. Few farmers realize the value of the wildlife crop on their farms. Even fewer Virginians know how to deal with wildlife problems when they occur. If our precious wildlife resources are to be conserved and their value fully realized, extensive wildlife education of our people is an absolute necessity.

Our Forest and Outdoor Recreation

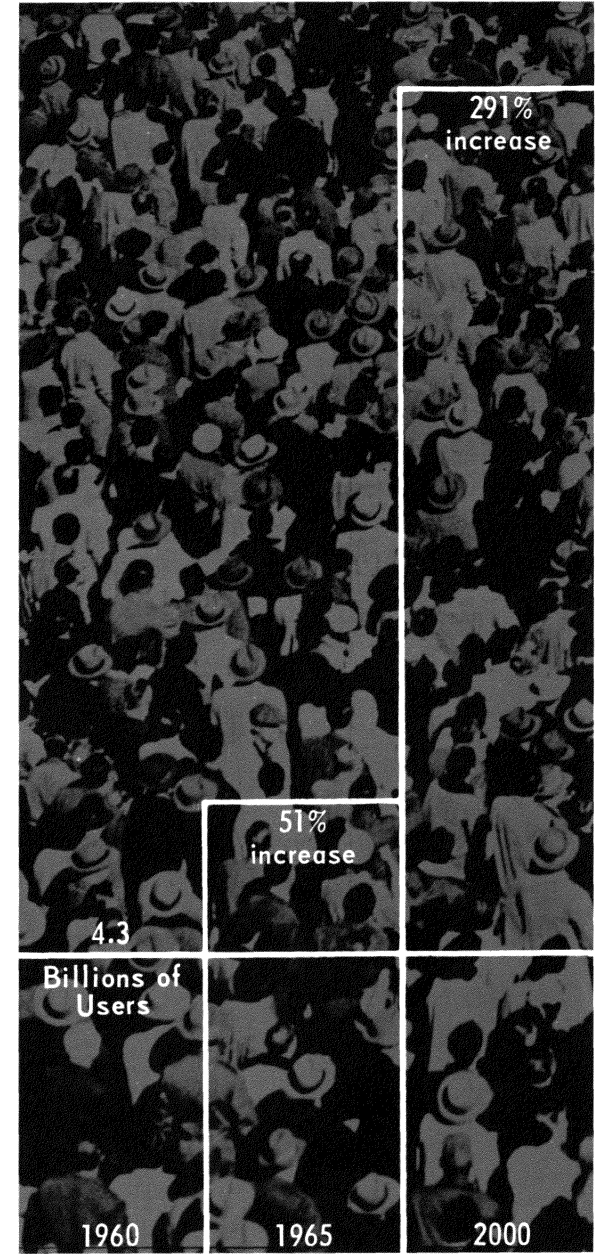
With almost two-thirds of Virginia forested, the woodlands play an important role in outdoor recreation. The wildland cover is the home and food for wildlife which supports a \$150 million industry. It forms a pleasing backdrop both winter and summer for tourism which brings \$370 million from out-of-state travelers, and an additional \$180 million redistributed over the state by our own residents. Fishermen and water enthusiasts spend several hundred million for boats, fishing gear, and other equipment to use on Virginia's forest-supplied and forest-bounded lakes and streams.



U.S. Recreation Growth



Population of Virginia





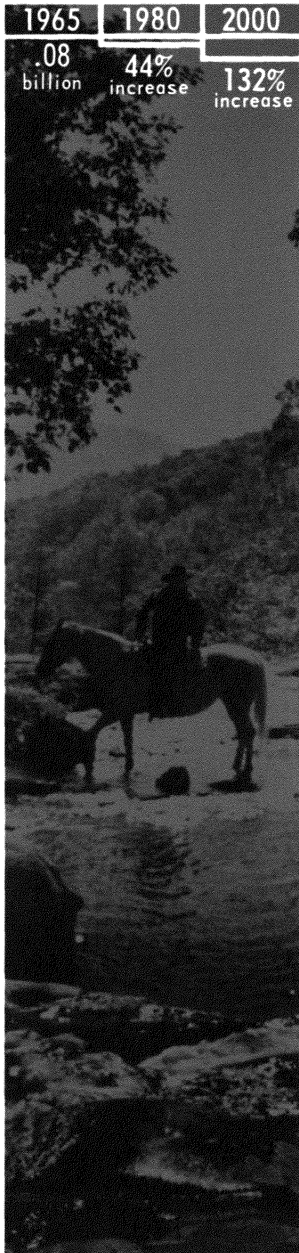
Natural Resources for the Human Resource

Recreation use in Virginia follows and could surpass the national recreation participation trends in the six categories depicted below since the state is within a day's driving time for over 2/5 of the total U. S. population.

The recreation industry is growing faster than data can be compiled in the six equally important use-categories of vacation cabins, shooting preserves, vacation farms, hunting areas, winter sports, and golf.

Data that are available in these 12 use-categories show that existing outdoor recreation facilities are already strained and they must be increased and expanded to meet future demands.

HORSEBACK RIDING



VISITS TO CAMP GROUNDS AND PACK CAMPING



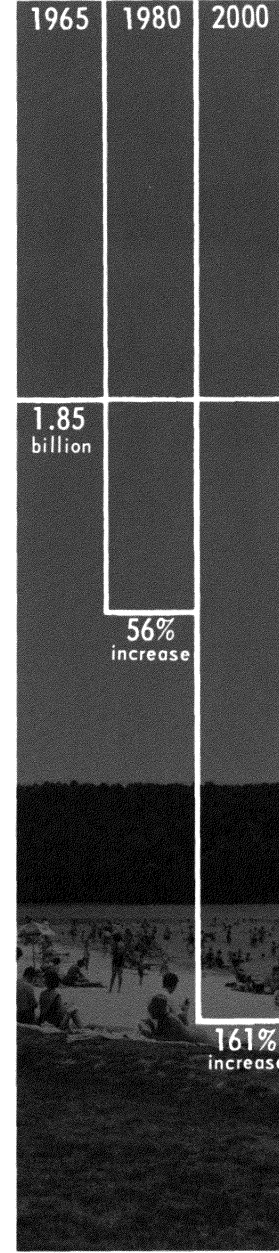
SUMMER FISHING



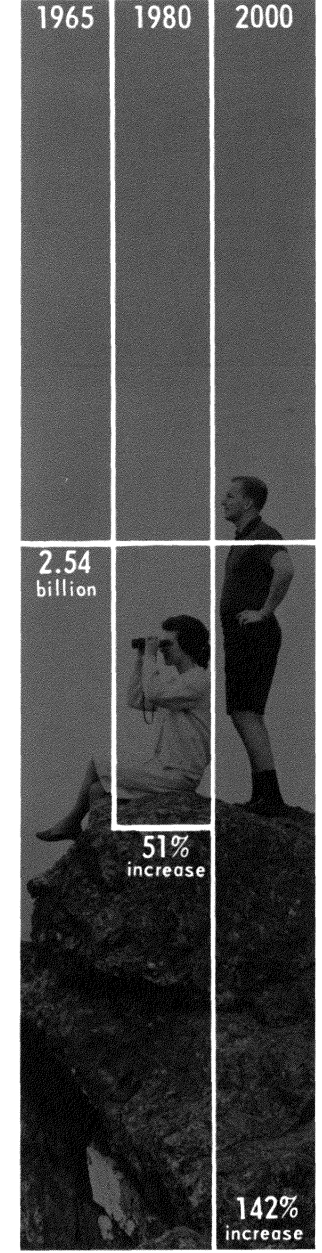
POWER BOATING AND WATER SKIING

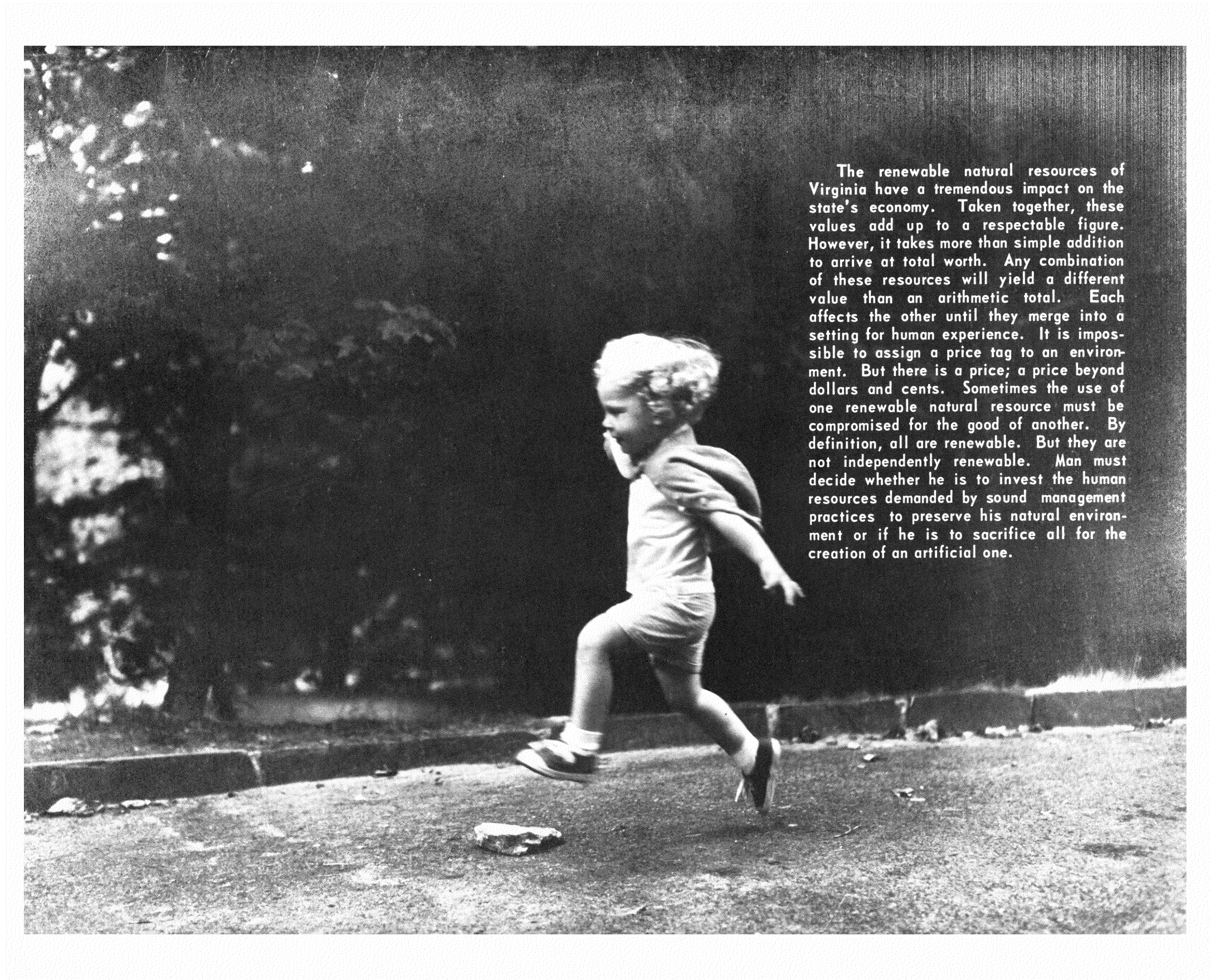


USERS OF PICNIC AND OUTDOOR PLAY AREAS



VISITS TO NATURAL, SCENIC AND HISTORIC AREAS





The renewable natural resources of Virginia have a tremendous impact on the state's economy. Taken together, these values add up to a respectable figure. However, it takes more than simple addition to arrive at total worth. Any combination of these resources will yield a different value than an arithmetic total. Each affects the other until they merge into a setting for human experience. It is impossible to assign a price tag to an environment. But there is a price; a price beyond dollars and cents. Sometimes the use of one renewable natural resource must be compromised for the good of another. By definition, all are renewable. But they are not independently renewable. Man must decide whether he is to invest the human resources demanded by sound management practices to preserve his natural environment or if he is to sacrifice all for the creation of an artificial one.