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RECREATION USE WITHIN THE HARVARD BLACK ROCK FOREST

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HARVARD BLACK ROCK FOREST

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1 Numbers in parenthesis refer to references cited.

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The Black Rock Forest (1) is one of two forest research facilities owned and operated by Harvard University. The University acquired the Forest in 1950 by bequest from the late Dr. Ernest Stillman who had operated it as a privately owned research and demonstration forest. The Forest consists of over 3,600 acres of land in one parcel situated atop the Hudson Highlands, fifty-five miles north of New York City and about five miles south of Newburgh, New York. Located immediately to the south is the United States Military Academy at West Point. In general, the acreage could be described as rough, mountainous and non-agricultural. Only a small proportion of the land was ever cleared for farming. The remainder has always been retained as forest but cut over repeatedly. At the present time, the Forest is completely tree covered, mostly with indigenous species. Also, it is completely uninhabited.

Slightly more than twelve hundred acres, or one-third of the entire tract, has been cut, studied or manipulated during the last thirty-five years. Cutting intensity has ranged from very light salvage operations all the way to clear cutting blocks and strips. During the last decade, several experimental heavy thinnings were created in mixed oak stands in order to test their response to abnormally wide spacing.

Over a period of years, a road network has been built which provides access to all sectors of the property. Fourteen and a half miles of roads now exist which will accommodate passenger cars. Entry to the Forest via public roads is possible at five separate points. The public is not able to drive into the property since locked gates block entry by car. Two of the five gates are left unlocked for the duration of the deer hunting season which lasts about three and a half weeks during the Fall of each year. Heavy use by hunters during this period necessitates relaxing the locked gate policy. Hikers can enter the Forest via ten separate well defined trails as well as the above-mentioned gravel roads. Within the Forest, foot trails link roads with all major scenic attractions such as mountain summits, ponds, swamps and principal water courses.

Oak-hickory type of timber predominates in this area. Northern red oak is the species most in evidence followed by chestnut and white oaks, red maple and associated species. (2) There are seven ponds of varying sizes located within the Forest. All, save one, are man-made impoundments. The natural pond is not used for a water supply; consequently it provides for limited recreation activity for local residents. The six artificial ponds serve for a portion of the water supply to the communities of Cornwall and of Highland Falls.

For over twenty years, hunting and fishing rights within the Forest have been granted primarily to a large local sportsmen's club. Membership in this organization in recent years has varied between five hundred fifty and seven hundred members - mostly local residents. A large percentage of the male residents of nearby villages with an interest in hunting and fishing belong to the organization. Harvard does not extract any money revenue from the club for the rights it provides. There exists an understanding between these parties that if manpower is ever needed for fire fighting or rescue work, the members of the club would respond. Past experience has proven that this mutually agreeable arrangement provides benefits to both landowner and user of the tract. Conflicting interests have always been ironed out amicably. Seldom has there been a need to impose petty regulations upon these Forest visitors.

Table 1. Estimated number of Black Rock Fish and Game Club members who use the Forest for recreation

<u>YEAR</u>	<u>TOTAL MEMBERSHIP</u>	<u>NUMBER USERS</u>	<u>PERCENT USERS</u>
1960 & 1961	690	480	70
1962 & 1963	570	360	63
1964 & 1965	630	430	68

In addition to club members, any adult resident of the towns of Cornwall or Highlands may apply in person to the forest manager and obtain a written permit to hunt or fish. Such permits are issued only for the duration of the open season on the game to be pursued. Permits are not granted to an applicant for two consecutive seasons. The rationale of this policy is to encourage young men to join the fish and game club rather than to provide a means to bypass that organization. Approximately thirty or forty special permits are issued annually.

Goodly numbers of uncounted local residents hike through the Forest whenever the urge hits them. Hiking is not only permitted, it is actively encouraged. Unfortunately, this element- the casual tramper- is the most difficult to study or to enumerate. We know they exist in sizable numbers but find it impossible to measure their combined activity over time. There are two other classes of recreationists who deserve mention here. First, there are the organized hiking clubs from New York city and environs. A number of organizations devoted to hiking and nature study are affiliated with the N.Y.-N.J. Trail Conference. Groups of varying sizes maintain and use certain trails which traverse the Harvard Black Rock Forest.

Another group of users consists of members of the Black Rock Fish and Game Club who are residents of New York city and use club membership primarily to provide themselves with a nearby area in which to hunt. The club cooperates with these non-resident sportsmen because of the obvious enrichment it provides its treasury.

The eastern whitetail deer exerts by far the greatest single attraction to those who hunt in the Forest. Good populations of this wary and always elusive animal keep hunter interest relatively high. Annually a three and a half week season for deer late in November and for about a week in December gives our hunting fraternity ample opportunity to pursue its sport.

In the small game category, the ruffed grouse is king of our forests. In recent years this challenging bird has consistently maintained high populations much to the delight of the gunners in this region. Gray squirrels, cottontail rabbits, racoons and opossum are native species which are hunted to a lesser extent. A limited amount of trapping is permitted during the late winter for beaver, muskrat and mink.

Fishing is allowed only in the one pond which is not used for drinking water. Pickerel, yellow perch, sunfish and bullheads are caught in fair numbers from this rather out-of-the-way body of water. Ice fishing is popular when snow accumulations do not render the pond inaccessible by road or trail. Hardy individuals who fish through the ice are frequently rewarded with good catches of pickerel.

Although hunting is probably the most popular single recreational activity within the Black Rock Forest, wild land scenery attracts a great many visitors. Perhaps the greatest attribute of this Forest is its emptiness. This managed wilderness provides a temporary sanctuary for nature lovers who wish to escape the turmoil of urban living.

At this point one might ask, "What does this particular piece of real estate have that is so unique?" A brief answer would be that it consists of a large primitive area of the Hudson Highlands, well provided with gravel roads and trails as a result of active experiments with growth and harvest of trees. Within this lonely realm, a transient visitor finds freedom and an opportunity to look at, touch or ignore all that surrounds him. The hunter seeks game; fortunately he always succeeds in recharging his tired batteries even if he returns emptyhanded. The hiker gains exercise but he too retains conscious and unconscious rewards from each tree, each rock outcropping and every eye-catching vista.

Mass recreation is not everyone's cup of tea. Easily accessible wild lands, such as Black Rock Forest, should be preserved for those who periodically feel the need to escape from the teeming cities. (As for who should provide and maintain such facilities, may well be the subject of another treatise.) My main object is to describe the physical resources of the Forest, the nature of its users and to provide a summary of recreation inputs over a span of six years. From the data already accumulated, some patterns may emerge which could possibly help in formulating policy in the future.

The graphical data summarized in the appendix represent information gathered from three different post card surveys. Members of the Black Rock Fish and Game Club and special permit holders were individually surveyed. An estimate of hiker use by affiliated clubs of the N.Y. - N.J. Trail Conference was provided by the latter organization. Their recreation activity per annum was summarized after each participating club submitted its estimate of number of outings to the Forest multiplied by the average attendance per hike. The chairman of the trails committee- the best qualified person within the Conference- provided all summary figures.

One might question the reliability of a card type survey since commonly returns are small and thus subject to considerable error. On the three occasions when cards were mailed to club members and permit holders, the percentage returning cards with usable data varied between forty-three and forty-six percent. This return provides not only a large sample of opinion, but also suggests that interest in the Forest is widespread. A simple blowup factor was used for estimating club participation from sample returns. The survey cards covering the years 1964 and 1965 were modified slightly to ascertain the place of residence of those being enumerated. Returns indicate that an overwhelming majority of visitors to the Forest reside within an eight mile radius. About eighty percent fall into this category. The remaining twenty percent is split evenly between recreationists living slightly beyond the eight mile local area and those who travel about fifty miles or more from the metropolitan districts around New York City.

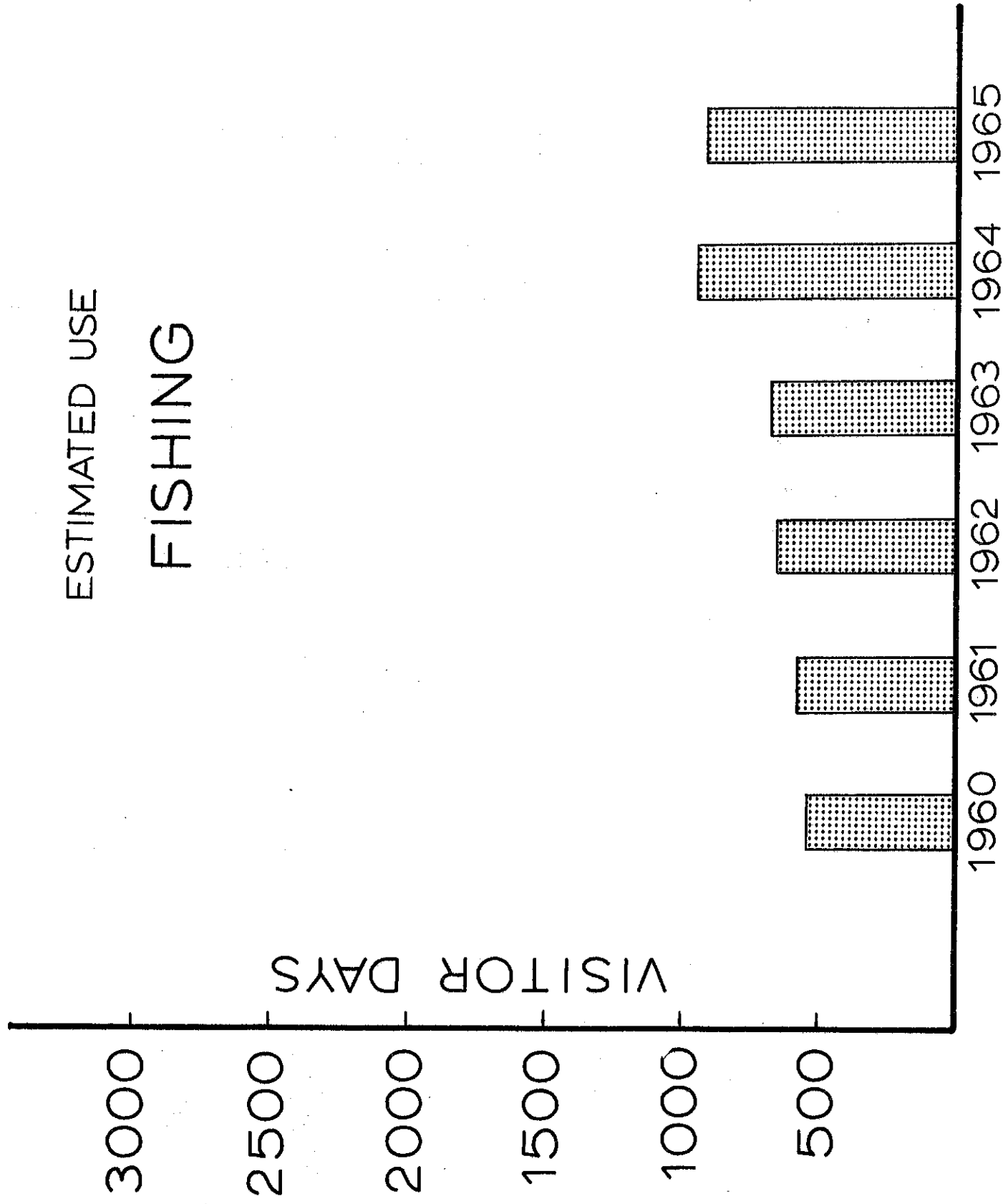
SUMMARY

1. Harvard Black Rock Forest attracts four more or less distinct populations or classes of recreationists as revealed by this study. These include: members of the Black Rock Fish and Game Club, special permit holders, organized hikers from Metropolitan New York and uncounted local visitors residing adjacent to the Forest.
2. Hunting (45%) and hiking (42%) appear to be almost equally popular among the reported activities of recreationists. However, any allowance for unrecorded local visitors would probably tip the scales heavily toward hiking.
3. In contrast to public recreation sites, Harvard Black Rock Forest has not created facilities for recreationists nor has it actively promoted this use. Still, the intensity of public use has averaged about six thousand visitor days each year and is surprisingly high and remarkably constant in spite of locked gates which effectively prevent access by motor vehicle except during the hunting season.

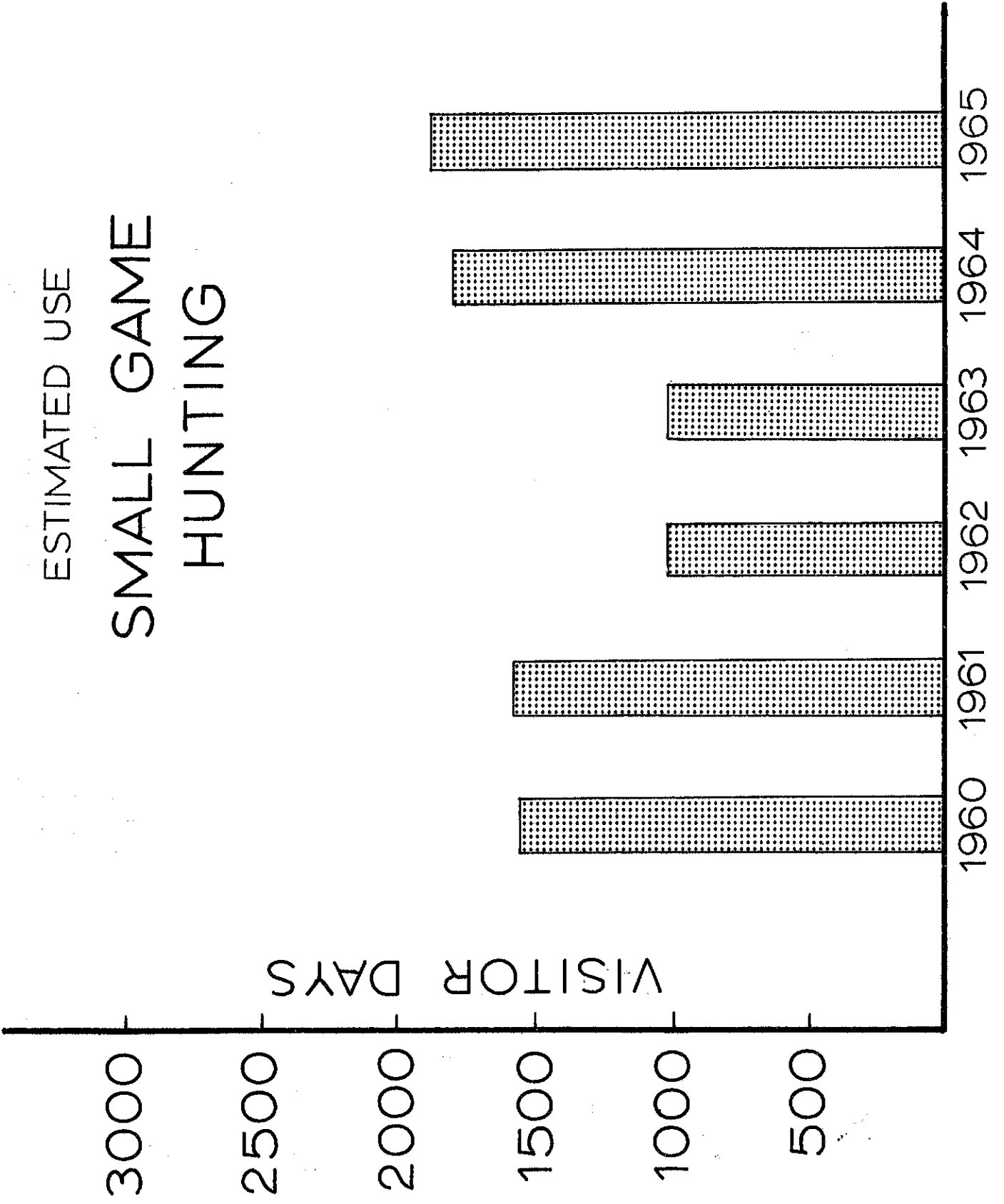
REFERENCES:

1. THE BLACK ROCK FOREST, H.H. Tryon, Black Rock Forest Bulletin #1, 1930 (out of print).
2. BOTANICAL STUDIES IN THE BLACK ROCK FOREST, H.M. Raup, Black Rock Forest Bulletin #7, 1938.

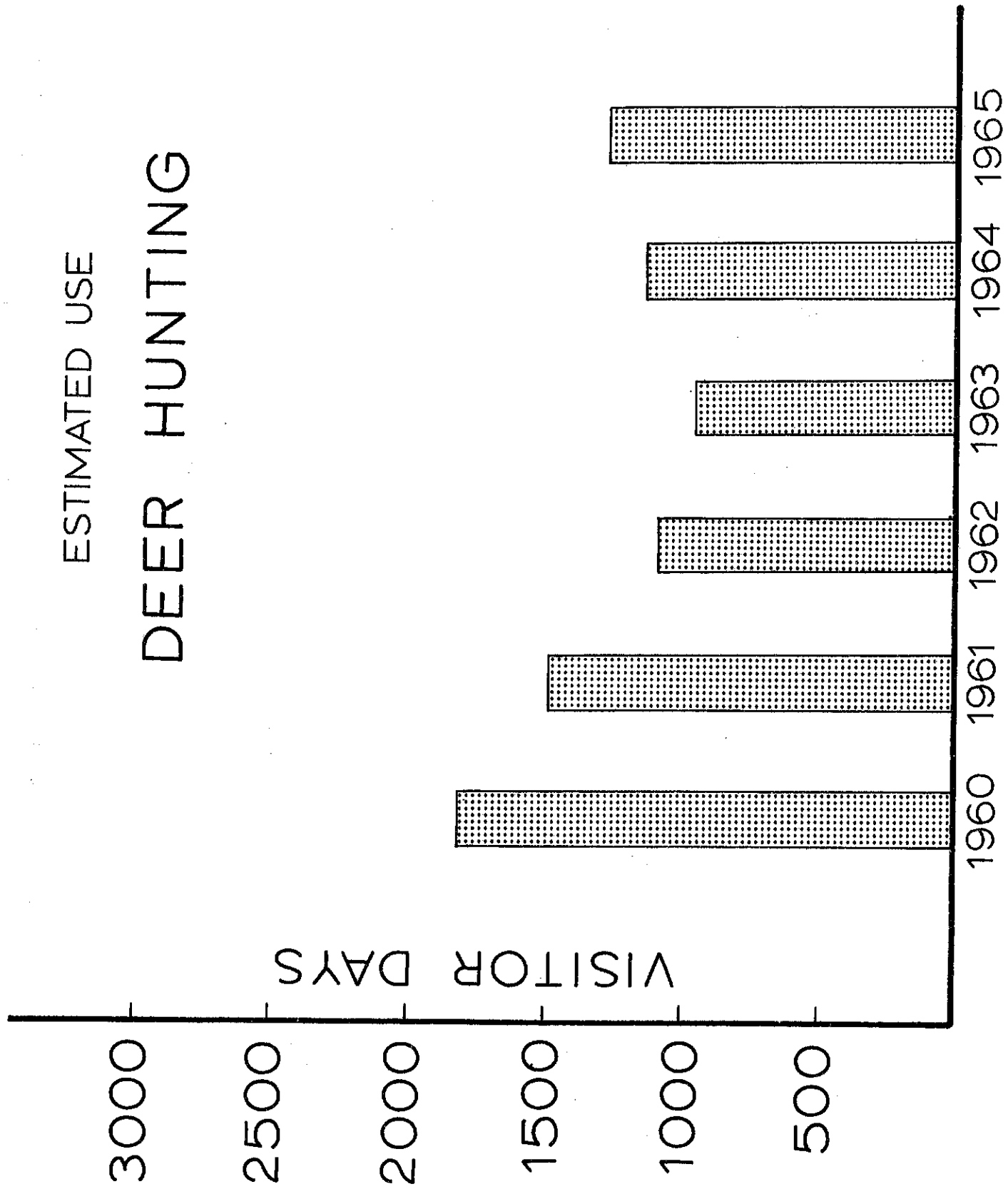
ESTIMATED USE FISHING



ESTIMATED USE
SMALL GAME
HUNTING

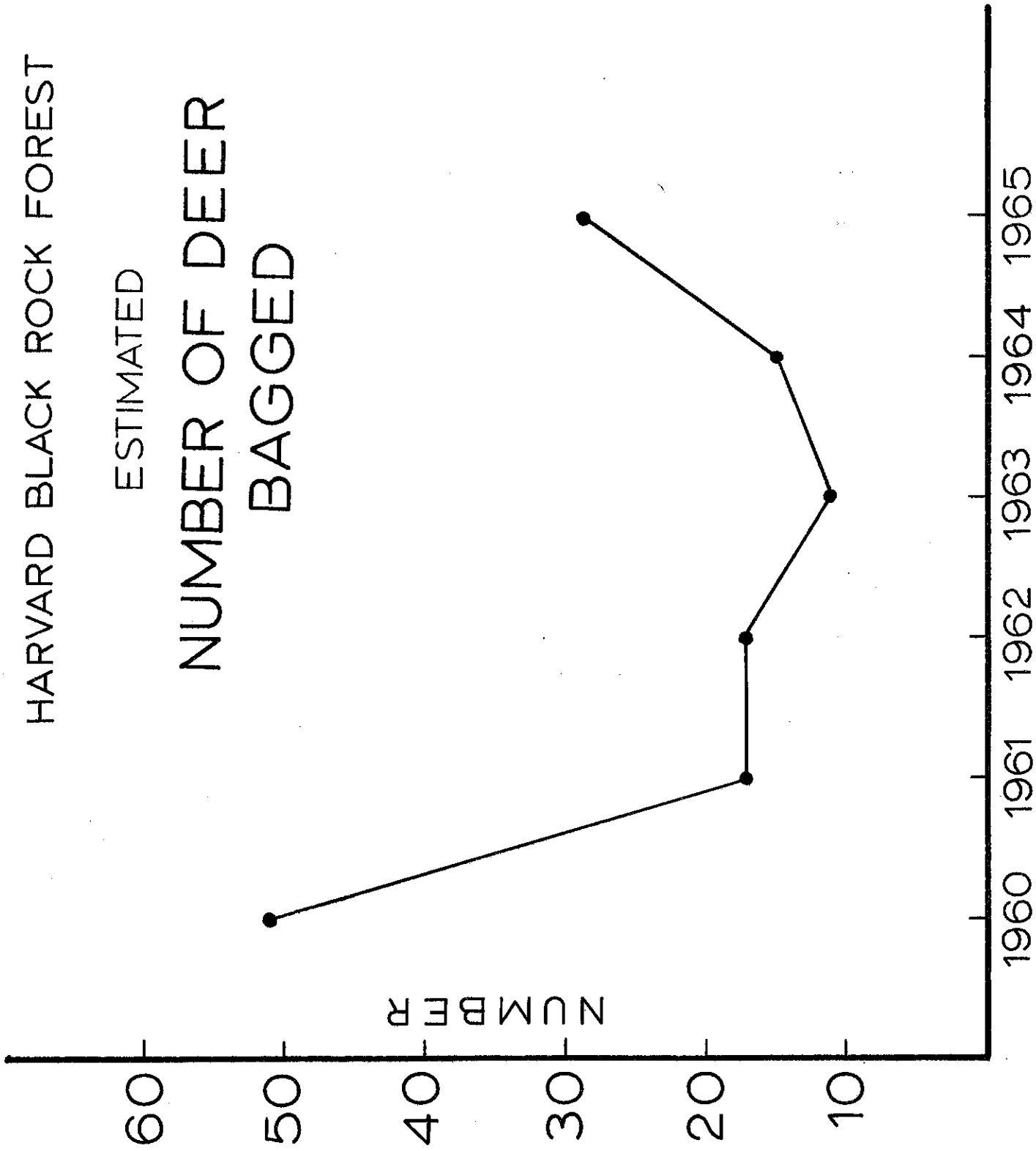


ESTIMATED USE
DEER HUNTING



HARVARD BLACK ROCK FOREST

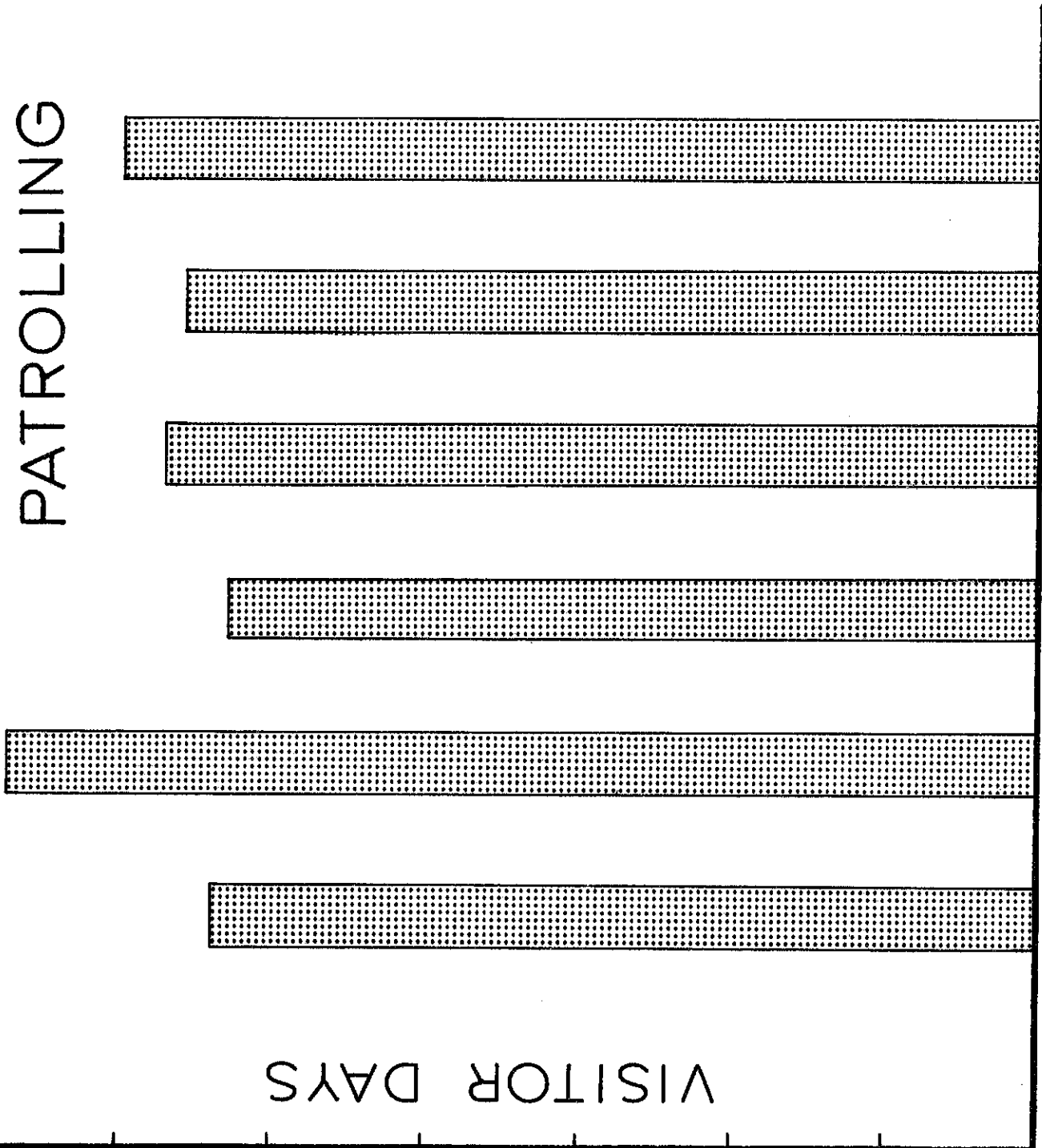
ESTIMATED NUMBER OF DEER BAGGED



ESTIMATED USE HIKING AND PATROLLING

VISITOR DAYS

3500
3000
2500
2000
1500
1000
500



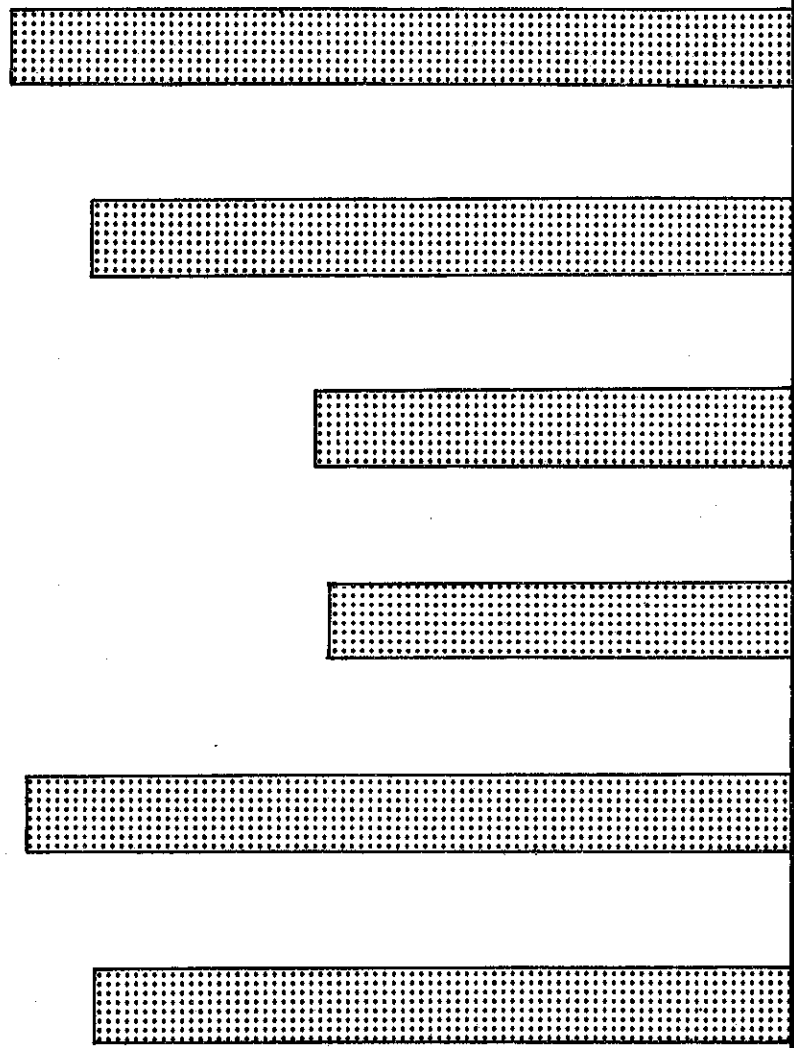
1960 1961 1962 1963 1964 1965

ESTIMATED USE
ALL ACTIVITIES
COMBINED

VISITOR DAYS

8000
7000
6000
5000
4000

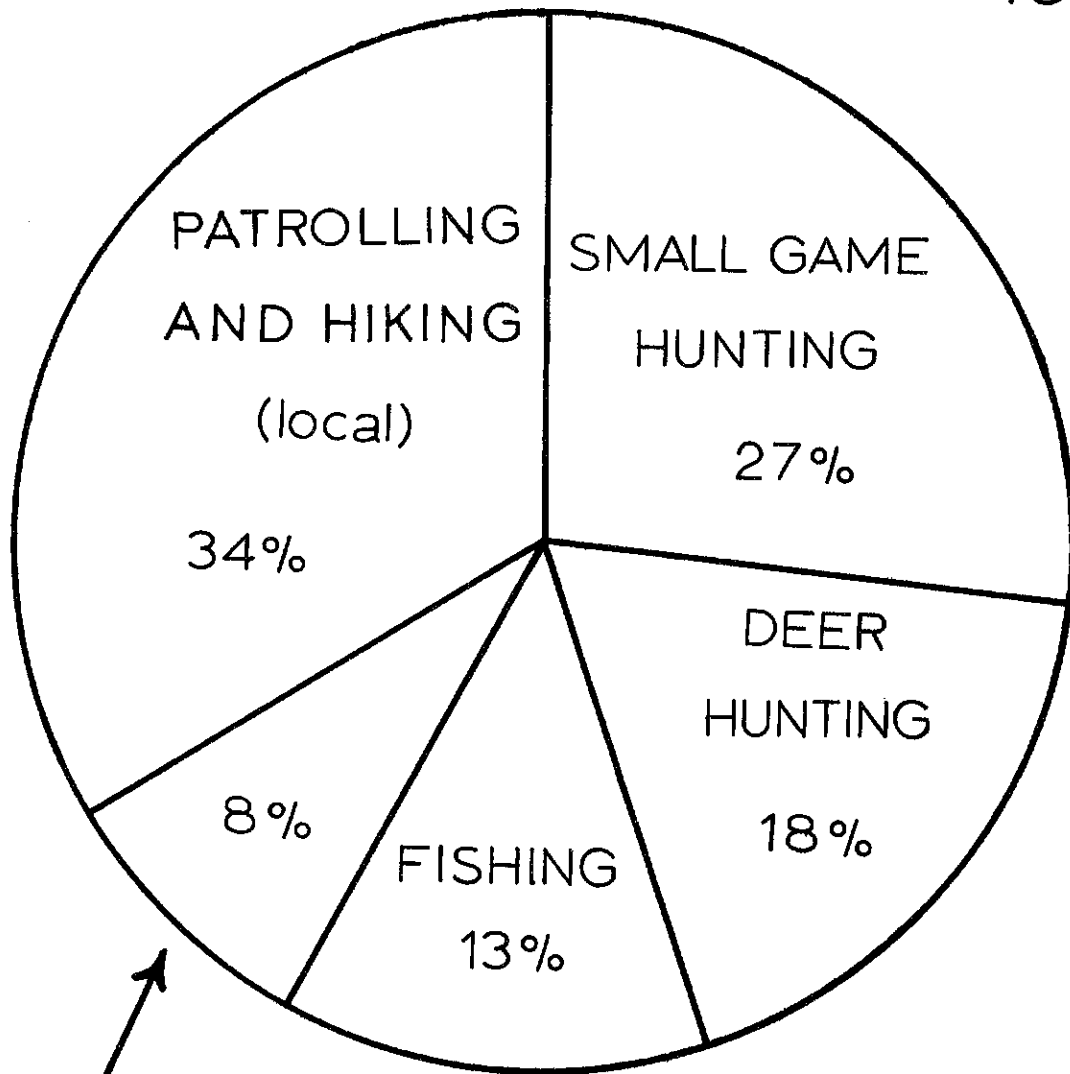
1960 1961 1962 1963 1964 1965



HARVARD BLACK ROCK FOREST

RECREATION USE BY TYPE

1965



NY. CITY & N.J. HIKERS

PERCENT OF TOTAL - VISITOR DAYS