

PROBING THE PRACTICALITY OF SUSTAINED-YIELD CROPPING OF ST. VINCENT  
ISLAND'S RACCOON ~~CROP~~ *Population*

A SUMMARY REPORT

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Predation by raccoons on nests of sea turtles on St. Vincent Island beaches has long been noted. This destruction probably plays an important role in slowing the recovery of the endangered sea turtle population. In addition, the high raccoon concentration on the island represents an economic asset that could be utilized without jeopardizing other wildlife or reducing the aesthetic values of the refuge. Perhaps ultimately a reduction of the current level of population would be of benefit to the species by heading off an outbreak of an epizootic disease.

Harvesting the fur crop on a sustained yield basis is an accepted procedure on many other refuges and could be made a part of the St. Vincent operations.

A project to probe the feasibility of cropping surplus raccoons on St. Vincent Island was conducted during late December-early January 1983.

Involved in the study were: Maurice Naggiar, Florida Game & Fresh Water Fish Commission, Tallahassee; David Enfinger, president of the Florida Trappers & Fur Hunters Association, Chipley; and Ronald Braxton, treasurer of the trappers' association, ~~Chipley~~ Westville. All are experienced trappers and provided their own equipment for the work.

The usual fur trapping techniques were employed to take raccoons using live traps, snares, foot hold and body grip traps.

Detailed records were kept of the operation, recording such items as the relative effectiveness of the four types of commonly utilized trapping devices as well as the relative effectiveness of both baits and commercial trapping lures. A summary of these findings is presented as a guide to future efforts in this direction.

#### MARKET VALUE OF ST. VINCENT ISLAND RACCOON PELTS

Despite statements from some fur buyers and other regarding the generally poor fur quality of Florida's coastal raccoons, the quality of St. Vincent produced pelts appears to be equal to those from other sections of north Florida.

Grading by a local furbuyer (Kent, Port St. Joe) agreed closely with project trappers' evaluation of the catch. Both pelts and dressed, washed carcasses were placed in individual plastic bags and iced down for transport to the fur buyer in Port St. Joe. Three deliveries of pelts and carcasses were made during the nine day operation.

The 169 raccoons pelted were graded as follows:

No. 1 & 2	large	100 @ \$16.50	\$1,650
	medium	29 @ 7.00	203
	small	40 2.50	100
			<hr/>
			\$1,953
895 pounds of meat @ \$0.30 lb		\$268.50	268.50
3 opossums large @ \$1.00			3.00
1 otter, large, singed @ \$16.00			<u>16.00</u>
		Total	\$2,240.50

#### DISCUSSION

Rain, heavy at times, fell during most of the time the crew was on the island. This made precise location of sets in the most effective areas somewhat hit and miss since reading sign was more difficult under the adverse conditions. Despite this fact, the non-target animal catch was limited to only two otter. Experience of the trappers involved undoubtedly contributed to the low non-target catch as signs indicated the presence of a substantial otter population in addition to some gray fox and bobcat.

A number of very small raccoons were pelted during this operation. These animals, on a well-managed, sustained-yield trapline would probably have been released. However since one of the objectives was to reduce the raccoon population, these animals were taken.

In regard to trap injury, the findings closely paralleled the results obtained in the three-season trapping gear evaluation study conducted by one of the trappers, Maurice Naggiar, under the auspices of the Game & Fresh Water Fish Commission. In brief, both No. 1 and No. 1½ coil spring traps inflicted only minor injury to raccoons.



Fastening the trap to a drag or solid anchoring where the animal was not able to climb above ground level helped minimize trap injury. Running traps daily and as early in the day as possible also helps ~~minimi~~ minimize trap injury. Some brands of traps are equipped with rounded jaws and this feature also helps to minimize skin abrasion injuries in trapped animals.

Snares are less adaptable to various set site situation but where useable are a practical device for taking raccoons. Almost all coons are snared around the body and are found alive and uninjured. The exception is the situation where the snared animal is able to climb into trees or brush in which case they no uncommonly become entangled and may be found dead in the snare. It appears on the basis of our experience here as well as elsewhere that the snare may be a viable alternative to the less reliable live trap for capturing raccoons for tagging.

Body grip traps such as the Conibear, are effective in raccoon work although not as widely adaptable as the foothold trap. One drawback is the fact that a non-target animal taken in a bodygrip is almost always killed, precluding the opportunity to release the animal as would be the case with the foothold trap or snare. Two otter were taken in Conibears during the course of the program; both were dead in the trap.

Live traps proved to be less effective per unit of effort and the trap that was tested - Woodstream's ~~XXXXXX~~ <sup>"Tender Trap"</sup> ~~Hav-A-Hart~~ - are subject to damage by large raccoon, especially if they were held for several hours. In several instances, raccoons managed to bend the drop door enough to allow their escape. The more ruggedly-constructed Hav-A-Hart trap, based on previous experience, would make a more satisfactory live trap. The bulk of live traps makes their transport more difficult.

Coupled with the cost, extensive use of such traps would be deemed economically questionable by most trappers. There is also a question whether holding an animal in the confines of a live trap is any more "humane" than taking one in a foothold trap by a conscientious trapper who gets to his traps early and takes other means to avoid undue injury to his catch.

### RECOMMENDATIONS

It is believed the experience of the trapping crew established the fact that the economic value of the raccoon resource of St. Vincent is well worth exploiting. An unanswered question however is how much of an annual harvest could the island population withstand without cutting into the vital "seed" stock.

It is suggested that a live trapping and tagging program could provide a reasonable basis for establishing a suitable harvest level.

An intensive, short-term trapping and tagging program in November or December followed by a ten day fur harvesting effort in late December-early January as in early 1983 should provide better than a "ballpark" figure for setting a reasonable raccoon harvest for the refuge.

A "Lincoln index" type of calculation could be readily obtained and would provide at least a reasonable estimate of the total population.

$$\frac{\text{number of raccoons tagged}}{\text{total population (X)}} : \frac{\text{number tagged coons retrapped}}{\text{total number of coons trapped}}$$

example:

$$\frac{50 \text{ coons tagged \& released}}{\text{unknown total population (X)}} : \frac{10 \text{ tagged coons retrapped}}{200 \text{ coons trapped}}$$

$$\frac{50}{X} : \frac{10}{200} \text{ or } 10X=10,000 \text{ or } X=1,000(\text{calculated total population}).$$

The 178 raccoons (9 were not pelted) taken during the course of the project appear to represent a relatively light cropping of the island's total population. This is based on the amount of sign noted on the final day of trapping when the weather had improved and tracking conditions were good. The contention is also borne out by comments of the refuge manager based on tracks noted after the trappers had left the island.

The three man crew that conducted the trapping effort during the past season is willing to undertake a follow-up project. This would involve live trapping and tagging raccoons and a later fur harvesting operation of approximately 10 days. There would be no cost to the Fish and Wildlife Service or to the Game and Fresh Water Fish Commission other than providing suitable quarters for the crew during conduct of the work. The pelts harvested would constitute pay to the crew for the effort expended. Detailed records of all phases of the operation would be maintained and a report submitted at the conclusion of the program.



St. Vincent Island - December-January 1983

Bait and Lure

Fresh Fish

Species not specified	6
w/ Cobby's Bobcat	2
w/ fig	1
w/Helfrich Meateater	1

Flounder

w/ anise oil	1
w/fig	1

Spanish Mackerel	4
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w/ anise oil	6
w/Cobby's Coon	4
w/fig	6

Ladyfish	1
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w/Rickards Coon 45	4
w/ fig	2
w/Cobby's Coon	2

Bream

w/Cobby's Coon	4
w/anise oil	1

Canned Fish

Mackerel

w/ Cobby's Coon & Fox	1
w/ Helfrich Coon 400	1



Sucker	16
w/Cobby's Coon	1
w/Helfrich Meateater	3
w/fig	1
Sardine Mix	
w/Formula A	3
<u>Fish Oil</u>	3
<u>Shrimp</u>	18
w/Cobby's Coon	4
w/fish oil,Helf.Meateater	1
<u>Crab</u>	
w/Formula A	1
<u>Prepared Bait</u>	
Castor & honey	2
Fig	21
w/Milligan's Big Time	2
Cox Coon Bait	15
W/Cobby's Gray Fox	3
Olmstead's Coon Bait	2
w/fig	2
Persimmon	1
<u>Scent</u>	
Cobby's Coon(w/egg shell)	1
Helfrich Coon 400	1
<u>Other Bait</u>	
Chicken necks w/fig	6

Baited Trail

220

Helfrich Mink & Coon

~~5~~ 4

castor & honey

4

Rickards Coon 45

2

Helfrich Meateater

1

Snare

Cobby's Coon

1

No bait or scent

220

5

snare

6

24

Total 179