

OKEFENOKEE NATIONAL WILDLIFE REFUGE

BIOLOGICAL REPORT

JANUARY - JUNE

1965

I. WILDLIFE POPULATIONS

Regular bi-weekly counts of waterfowl and wading birds were made on the prescribed course from Camp Cornelia to Buzzard Roost and Gannet Lakes, and from Billy's Lake to Big Water Lake through April 3, 1965.

Water levels in the swamp were above normal during the last reporting period and remained above normal through April of this year. This high water has apparently caused the swamp to be less attractive to waterfowl and wading birds. Wading birds were dispersed so that at times more were observed along the road side ditches than were seen in the swamp.

A. Wading Birds.

Common Egrets. These birds, although residents of the swamp, were not seen in appreciable numbers until late May and early June. On June 4, 99 were counted along the boat trail from Billy's Lake to Big Water and on June 17, 38 were counted in Chesser and Grand Prairies. An estimated 50 common egrets nested in a rookery located near the old Gannet Lake boat trail in company with cattle egrets, little blue herons, green herons and grackles. This rookery was first visited on May 20.

Snowy egrets. These birds are not common in the swamp but are frequently seen feeding in the road side ditches near the swamp. Only two observations of snowy egrets were made in the swamp during this reporting period. One was seen at the above mentioned rookery.

Cattle egrets. The first observations of these birds for this year were of two birds on Timber Compartment 13 on March 25, and 30 birds at Camp Cornelia on April 5. A rookery located near the old Gannet Lake boat trail contained an estimated 1300 cattle egrets when visited on May 20.

Great Blue Herons. Great Blues are seen frequently but seem to be well dispersed and only a few are seen in a day's travel in the swamp.

Little Blue Heron. Little Blues were seen with about the usual frequency. The rookery mentioned above contained an estimated 900 little blues and 97 were counted along the boat trail from Billy's Lake to Big Water on June 4.

Green Herons. Green herons were seen with about the usual frequency. An estimated 200, nested in the above mentioned rookery and individual nests were observed along the Suwannee Canal and Sapling Prairie boat run.

Louisiana Herons. Two Louisiana herons were observed at the above mentioned rookery on May 26 and two were seen in Chesser Prairie on May 20.

White Ibises. The first white ibis observation this year was of 50 birds over Chesser Prairie on April 4. Fifty more were seen on the Suwannee River Sill on May 20 and 301 were counted at Big Water on June 4.

Wood Ibises. The first wood ibis observation this year was of two birds seen in the Pocket on March 22. Five and 21 birds were seen at the Suwannee River Sill on May 18 and 20, respectively. On June 4, 210 were counted at Big Water Lake.

Sandhill Cranes. As usual, some cranes stayed all winter in the swamp. On March 12 a flock of 300 ~~was~~ seen at Camp Cornelia. The number of cranes observed during the regular waterfowl counts were considerably below the 1964 observations for the same period. No crane nests were reported this spring. The following counts were made during trips across Chesser and Grand Prairies:

January	-	-
February 2	-	8
February 12	-	8
March 16	-	7
March 29	-	2

Miscellaneous Birds. A cormorant was observed on Billy's Lake on February 4 and two were seen on March 29; three Wilson's snipe were seen in Chesser Prairie on March 4 and two were seen on the Suwannee River Sill on May 20; the first swallow-tailed kite was observed on Timber Compartment 11 on March 12, and numerous later observations were recorded with one observation made of four kites feeding on dragonflies; ospreys were common along the boat runs; a single loon was observed on the west side of the refuge on April 11; four yellow-crowned night herons were observed along the Suwannee Canal on April 19; and four in Chesser Prairie on May 20. American bitterns were seen along Suwannee Canal on March 31 and one on April 2 and one on April 21; two purple gallinules and two least bitterns were seen in Sapling Prairie on May 13; one woodcock was seen on Mack's Island on May 14; and four clapper rail were seen in Grand Prairie on June 17.

#### B. Waterfowl.

Waterfowl populations during the late winter and early spring averaged 45% higher than during the same period a year ago. All of the bi-weekly counts were higher with the exception of the first count in January. Most of the mallards left before March 1 but a few blue-winged teal remained until late April. A lone mallard drake was observed near Maul's Hammock on May 27.

None of the 85 wood duck nesting boxes located upstream from the Suwannee River Sill were utilized by wood ducks this year. Apparently natural nesting sites are sufficient in this area as a number of wood duck pairs have been observed there. The 66 boxes located along the Suwannee Canal and in Chesser, Chase and Mizell Prairies were checked in March and again in early July. Of the 66 boxes 10 had been utilized by wood ducks. One nest was still occupied by an incubating hen on July 8 and her nest contained 8 eggs. One nest contained 10 eggs but it is not known whether the nest was still active or deserted. One other nest contained an undetermined number of eggs. The 7 remaining nests contained 50 eggs of which 43 had hatched and 7 remained in the nests. Therefore 86% of the eggs laid in these 7 nests hatched successfully. One nesting box had been torn down and destroyed by a bear. It is not known whether the box contained an active wood duck nest at the time of the bear's visit. Several nesting boxes were used by other residents of the swamp. Squirrels occupied 7 boxes, small birds 4, screech owls 3, and flying squirrels 1. Eight broods of wood ducks have been reported and averaged 9.3 young per brood.

#### C. Turkeys.

Turkeys have been seen on Cow House Island, Soldier Camp Island, Billy's Island, Jones Island and in the Pocket. No broods have been observed this year. The last observations of the turkeys transplanted from Cape Romain Refuge to Billy's Island was in February. No broods from this transplanting have been reported to date.

#### D. Bears.

Bears and bear signs have been seen with about the same frequency this year. An adult bear and cub were seen in the Pocket during prescribed burning operations on February 11. One adult bear was seen at Soldier Camp Island and one near Camp Cornelia during early February. Bear sign has been reported on Timber Compartments 11 and 15, along Suwannee Canal, at Kitchen's Landing, Cow House Island and in Sapling Prairie. A fresh bear scat found on Cow House Island consisted entirely of the remnants of palmetto buds. One wood duck nesting box was destroyed by a bear and seven of nine posts supporting the roof of the Sapling Prairie Shelter had been "marked" by a bear. One alligator nest has been found that was robbed by a bear.

Several unofficial reports have been received of bear being killed by the apiarists who maintain their apiaries adjacent to the refuge boundary. No feasible solution has been found for this problem.

#### E. Deer.

Deer are seen frequently and deer sign is quite common on the uplands adjacent to the swamp.

In February the Georgia Game and Fish Commission removed five male and four female deer from the semi-tame group of deer that had been feeding at Stephen Foster State Park. The deer were fed apples containing an immobilizing drug. Some of the deer wandered into the heavy cover before becoming immobilized and were difficult to find. Three deer were found dead as a result of ingesting the drugged apples.

Mr. Charles M. Marshall, Assistant Director, Southeastern Cooperative Disease Study, obtained blood samples from the captured deer for their regional Anaplasmosis Study.

#### F. Raccoons.

The raccoon population was drastically reduced by an unidentified disease during March and April of last year. However, raccoons are increasing and are frequently seen in and adjacent to the swamp.

#### G. Otters.

Two male otters and one female otter was shipped to Wheeler Refuge on January 12 and March 1, 1965 respectively. During late 1964 three males and two females were sent to Wheeler. The total transplant now stands at five males and three females.

Only two observations of otters have been reported this period with the exception of the three mentioned above. One otter was seen along the Suwannee Canal in January and one was seen on a battery in Chesser Prairie on March 3.

#### H. Fishing.

Fishing in the swamp for bluegill, warmouth and chain pickerel has been excellent during most of this period. Creel limits of each of these species has been reported frequently and almost daily during late May and early June when the water was low. Increased catches of largemouth bass were reported during June. The concessionaires at Camp Cornelia and Stephen Foster State Park have reported a thriving business during this period.

#### I. Alligators.

During high water the alligators are well dispersed throughout the prairies and bays. When the water is low they concentrate in the lakes, boat trails, runs and gator holes. During a period of low water in late May and early June 75 were counted along the Suwannee Canal, 56 from Billy's Lake to Big Water Lake, and 30 along the Suwannee River Sill borrow pit. Four new nests have been reported close to the Suwannee Canal and the Gannet Lake boat run.

### II. WEED CONTROL.

#### A. Maidencane.

During this period the Suwannee Canal was cleared of the mats of

maidencane and debris by a dragline mounted on a barge. The clearing was a success, however, new growth of maidencane encroaching from the brushy edges of the canal threatened to block the canal again. This new growth was sprayed on May 4, 5 and 6 with dalapon at the rate of 10.1 pounds per acre of acid equivalent. The maidencane was in the early blooming stage when sprayed and the effects of the herbicide on the above water portions of the plant were apparent after six hours. By the third day the above water portions of the plants had turned brown. It is estimated that a 95% kill was received.

### III. ECOLOGICAL SUCCESSION FOLLOWING FLOODING BY THE SUWANNEE RIVER SILL

The marked trees in this transect was not checked during this period. It is planned to check this transect during July. On May 13, Mr. Eugene Cypert showed me where the control transects were located.

### IV. PLANT SUCCESSION ON PRAIRIE BATTERIES

I met with Mr. Eugene Cypert on May 12-14 and he showed me the two batteries that are being studied and how the data was recorded. These studies will be made during September of this year.

### V. ECOLOGICAL SUCCESSION FOLLOWING THE 1954-1955 FIRES

On May 12-14, Mr. Eugene Cypert returned to Okefenokee and showed me the location of the burn transects and control transects and explained the mapping technique used to record the vegetative data.

### VI. PUBLIC RELATIONS

The Stephen Foster Nature Trail was checked and the signs destroyed by vandals were replaced.

Assistance was provided the Swamp Park in establishing a nature trail along their board walk.

An announcement relative to Water Pollution was taped for WACL Radio in Waycross on March 11.

Showed color slides of the swamp at a Cub Scout pack meeting at Alice Street Elementary School on March 23. There were 40 scouts and parents present.

A talk on Conservation and color slides were presented to a group of 25 students at Folkston High School on April 9.

Mr. Fred Parish, Professor of Zoology, Agnes Scott College, and 10 students were given a tour of the west side of the refuge and a color slide lecture on May 1.

Three wildlife films were shown to a group of 20 forestry students from the University of Georgia on July 8. The films were: THIS IS THE MALLARD, BEHIND THE FLYWAYS, and GEORGIA WHITETAILS.

The following groups and special visitors were accompanied to points of interest on the refuge or otherwise assisted.

Mr. Roland C. Ross, Professor of Natural History, Los Angeles State College on March 26.

Mr. Robert Murphy, a writer, gathering data to write a book on wildlife refuges on March 29.

Lou Erickson, writer for the Atlanta Journal on March 31.

Carl Fermanich, Victor Kay and Bob Ballou of the Fish and Wildlife Service visited the refuge on April 12.

Dr. Ralph McMullen, Director, Michigan Department of Conservation on April 21.

Mr. Joseph Shomon, Director and Mr. Byron Ashbaugh, Associate Director, Nature Studies Division, National Audubon Society on April 25.

Messrs. Charles Vaughan and Nick Chriss, WAGA Television, Atlanta, on April 26.

Mr. Ben Lucien Burman, Readers Digest, on May 17-25.

Mr. and Mrs. Goode Davis, writer for National Geographic Magazine, on

Respectfully submitted,

*Leonard O. Walker*  
Leonard O. Walker  
Wildlife Biologist

August 12, 1965

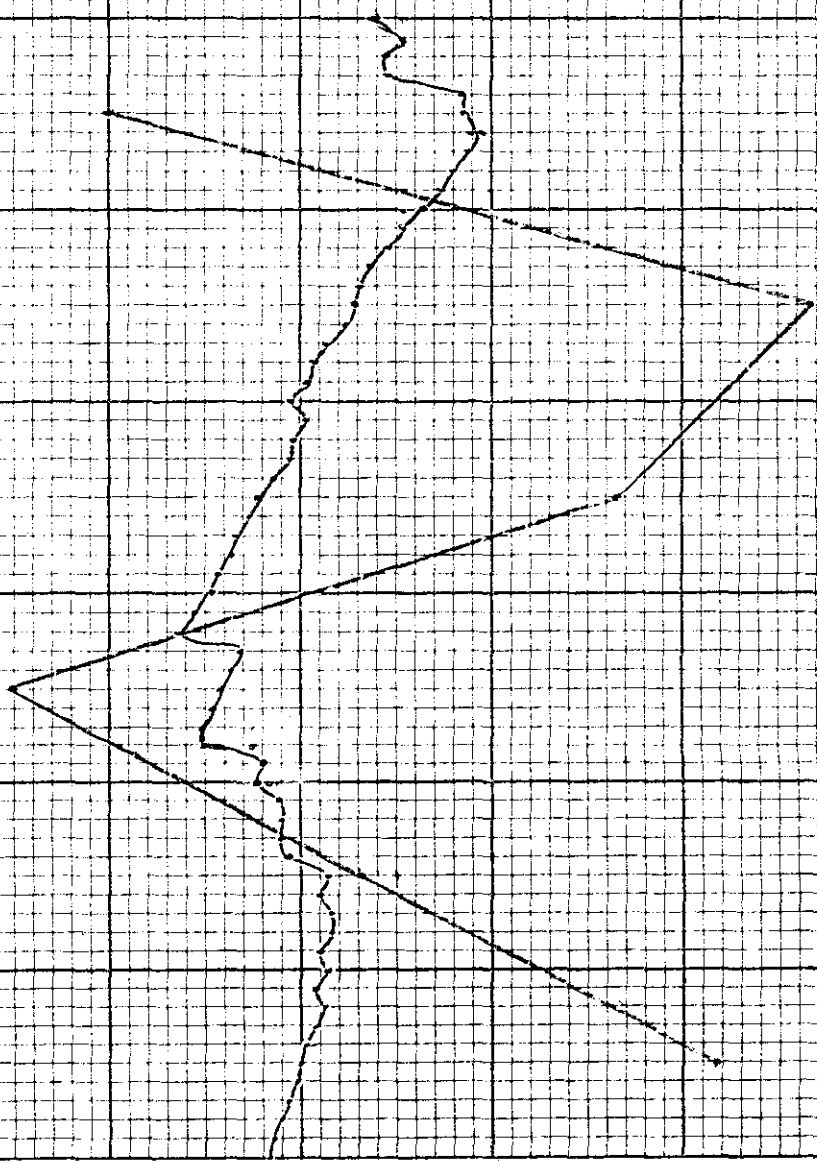
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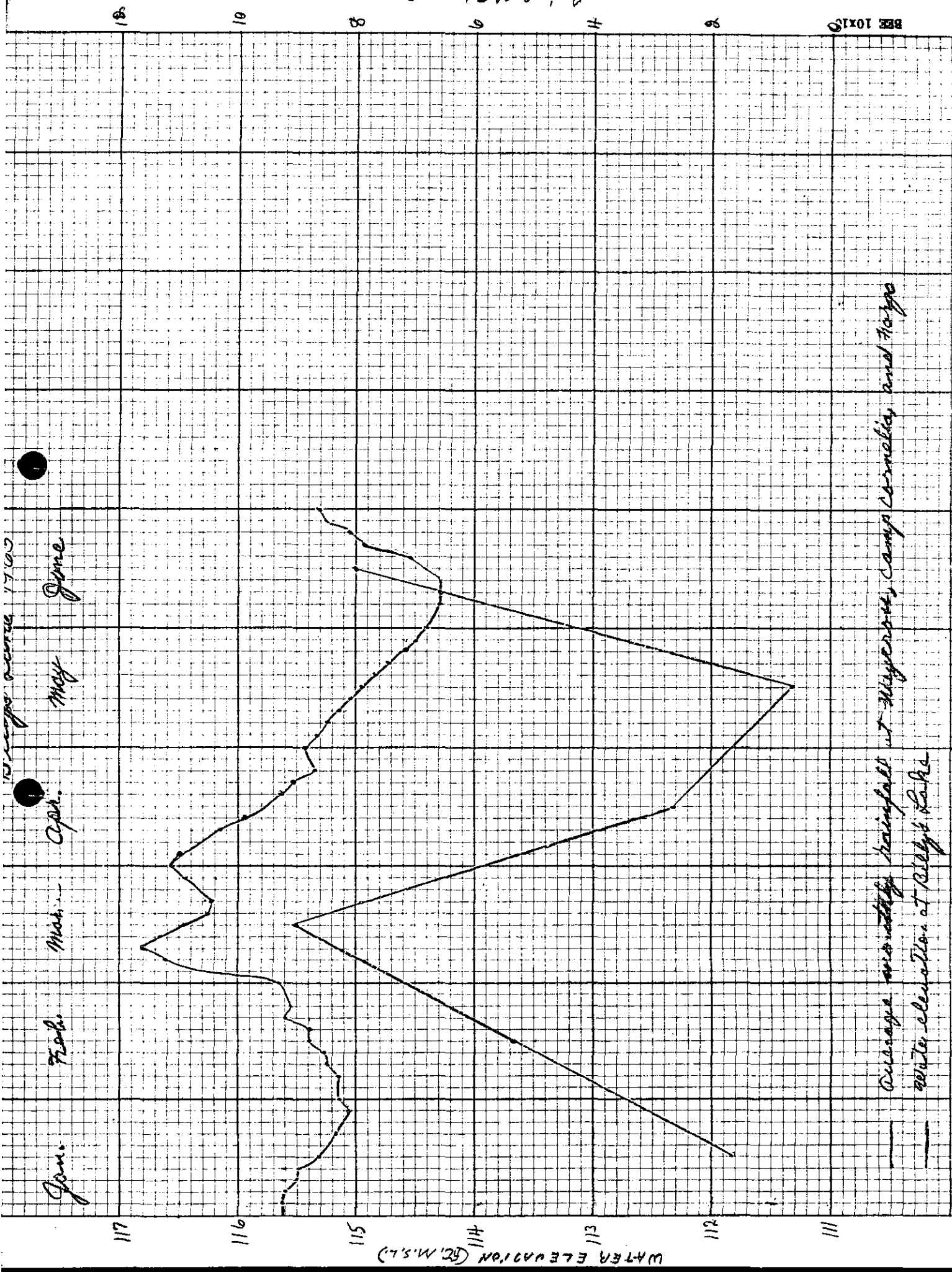
Jan Feb Mar Apr May June

Camp water tower

117.46



— Average monthly rainfall at Wapiti Falls, Camp Co. B.C., and Hugo  
 - - - Water elevation in Pulemnae Canal at Camp Comelia



10 days since 1700

Jan.

Feb.

Mar.

Apr.

May

June

SEE INDEX

Discharge monthly rainfall at Myerston, Camp Cornelia, and Hoops  
water elevations at Billy's Lake

WATER ELEVATION (FT. M.S.L.)

117

116

115

114

113

112

111

18

19

20

21

22

23

24