

Long Term Monitoring of the Coral Reef Organisms of Biscayne National Park

Final Report: 1989-1990 Field Seasons

Amendment no. 1,
Subagreement no. 25
Cooperative Agreement No. CA-5006-4-8005

Between USDI, NPS, & LGA Research Foundation Inc.

Volume 4 (of 8)

Deliverable: First and Second Year Digitized Maps from the Quadra Photographs

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DUPLICATE:
Original In
Museum Archives
BSC-118

Male. 1

Male. 68

Maya. 13



THE



2

22. 27

14.5m

□ □ □

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Mcum.1

Male.66

Male.67

4

2

~~Mulc. 67~~

[illegible]

Points	921
$\hat{n}$	9. cm ²
$\hat{P}$	13. cm

More Photo Frames (Y/M):

Long Term Monitoring of the Coral Reef Organisms of Biscayne National Park

Final Report: 1989-1990 Field Seasons

Volume 4 (of 8)

First and Second Year Digitized Maps from the Quadrat Photographs

In 1989 a coral reef monitoring project was established in Biscayne National Park in order to measure changes in coral reef community structure over time and to provide information about the natural resource to park management. Two reef sites in Biscayne National Park were chosen for intensive, ongoing study: Ball Buoy Reef, at the southern end of the Park, and Triumph Reef, towards the northern end. Methods employed at each site were: (1) a 1000 m² visual swim survey to assess species richness and the species present in the area; (2) three permanent line transects, 25 m long each, (3) a permanent 13.5 m² photostation, and (4) a 100 m² haphazard photographic survey to test the representativeness of the 13.5 m² photostation. In 1990, we added to each station: (1) two additional permanent 25 m long line transects; and (2) three permanent video transects, utilizing three of the five existing line transects.

This volume of information contains reproductions of the mylar tracings resulting from each photostation during the 1989 and 1990 field seasons. The photostations sampled by this method were permanently fixed by stainless steel stakes that were cemented into holes drilled into solid dead substrate at the perimeter of each photostation. We expect that the sites can be reliably relocated for some years into the future.

At each site a 2.00 m x 2.25 m PVC grid (area 4.5 m²) was fixed at marks filed into the steel stakes. Over this grid a small camera framer, measuring 50 cm x 75 cm (area 0.375 m²), was placed in order to photograph each area of the photostation at fairly close range. A Nikonos V

Malc.65

C.I.A.

Biscayne Nati
Year 1990
Frame 34
Scale 1: 4
Res 0.03414cm
Disc a:
bp02Fr34.Y90

TACHOMETER

Species 1
Colonies 1

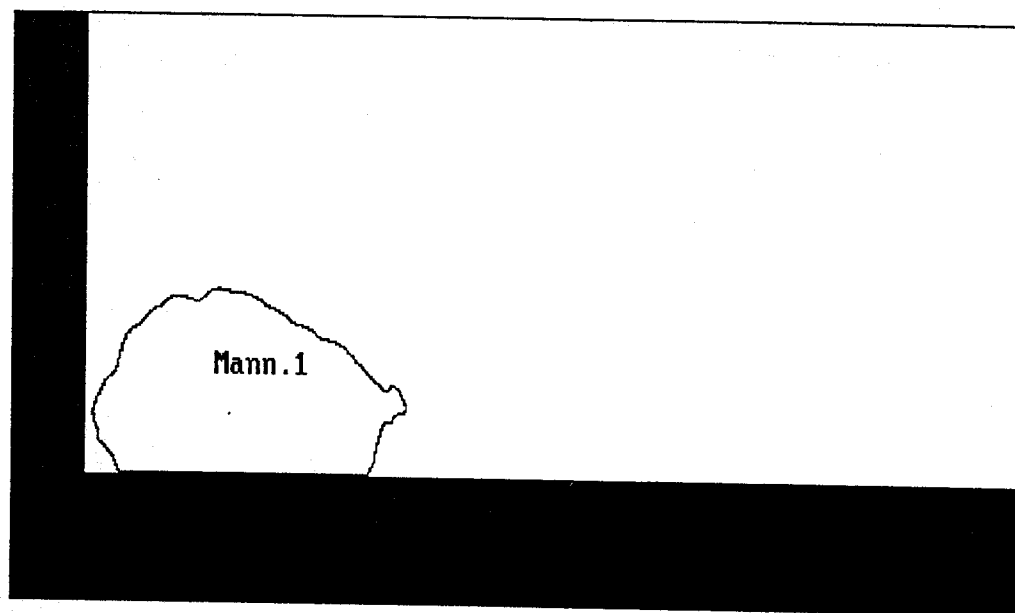
Points 198
A 3.cm²
P 10.cm

More Colonies (Y/N):

camera loaded with Kodak Tri-X Pan film, ASA 400, was mounted on the small camera framer at a distance of 1.0 m away from the plane of the small framer to photograph each area. Each time the grid was laid down, 12 photographs were required to cover the 4.5 m² area of the grid. At each of these photostations, the grid was laid down and fixed in place three times for a total area of 13.5 m², requiring 36 photographs for total coverage.

The black and white photos were printed on polycontrast paper at a size of 8" x 10", and outlines of each coral colony in each photograph were traced onto mylar sheets with the help of a light table. Each scleractinian and hydrozoan coral colony was identified to species, assigned a unique colony number, and followed through time. The tracings were digitized to obtain projected surface areas of each coral colony. The data resulting from this effort were analyzed for percent cover of living coral, relative abundance of coral species, species richness, and species diversity using a software program developed in our lab for this purpose. A presentation of results and summary statistics is available in Volume 1 of this Report. A detailed description of the method and its analysis is presented in Volume 8 of this Report.

This volume of information contains reproductions of .tif graphic files resulting from digitizing each frame within the photostations during the 1989 and 1990 field seasons. Each .tif graphic file includes the outline of the camera frame, identifying information on the specific reef site (BP01, Ball Buoy Reef; and BP02, Triumph Reef), frame number (1-36), and year. The outlines of each individual colony, its species abbreviation (first letter of the genus name followed by the first three letters of the species name), and its unique colony number are indicated in the .tif graphic files. Cut lines, used to eliminate parallax and colony duplication, are also evident in the graphic files; for more information about this procedure please refer to the software manual in Volume 8 of this Report.



C.I.A.

Biscayne Nati
Year__1990
Frame__33
Scale 1: 4
Res 0.04373cm
Disc a:
bp02Fr33.Y90

TACHOMETER

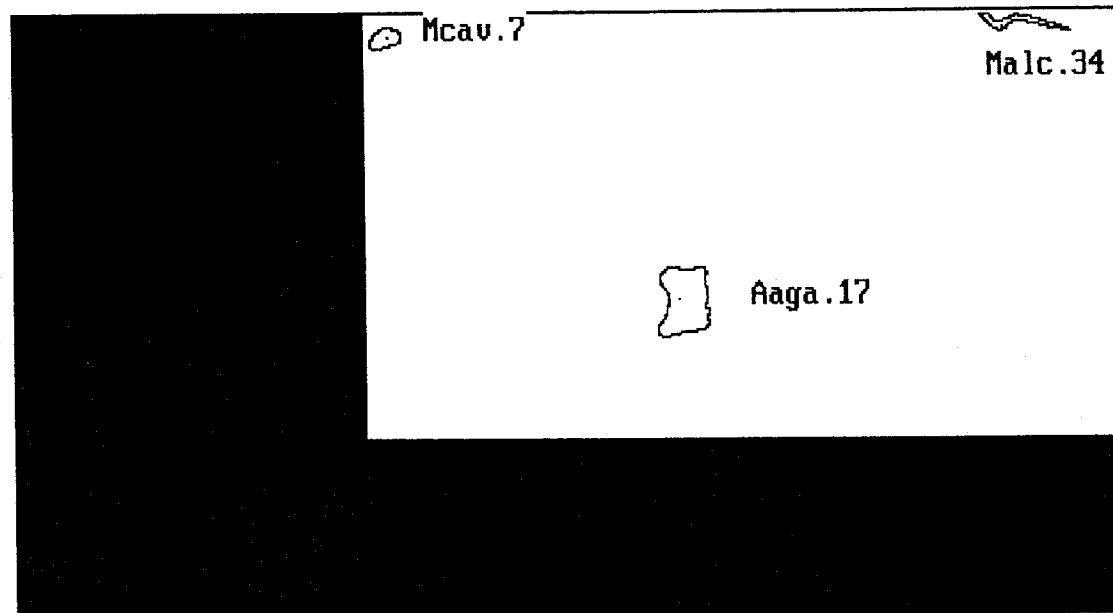
Species 1
Colonies 1

Points 1688
A 372.cm²
P 79.cm

More Colonies (Y/N): ☐

The .tif graphic files presented in this volume follow the order:

1. BP01, Ball Buoy Reef, 1989, frames 1-36
2. BP01, Ball Buoy Reef, 1990, frames 1-36
3. BP02, Triumph Reef, 1989, frames 1-36
4. BP02, Triumph Reef, 1990, frames 1-36.



C.I.A.

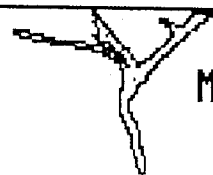
Biscayne Nati
Year 1990
Frame 32
Scale 1: 5
Res 0.04883cm
Disc a:
bp02Fr32.Y90

TACHOMETER

Species 3
Colonies 3

Points 338
A 6.cm²
P 21.cm

More Photo Frames (Y/N): ■



Malc.36



Malc.64



Ssid.3

C.I.A.

Biscayne Nati

Year__1990

Frame__31

Scale 1: 5

Res 0.04708cm

Disc c:\om\

bp02Fr31.Y90

TACHOMETER

Species 2

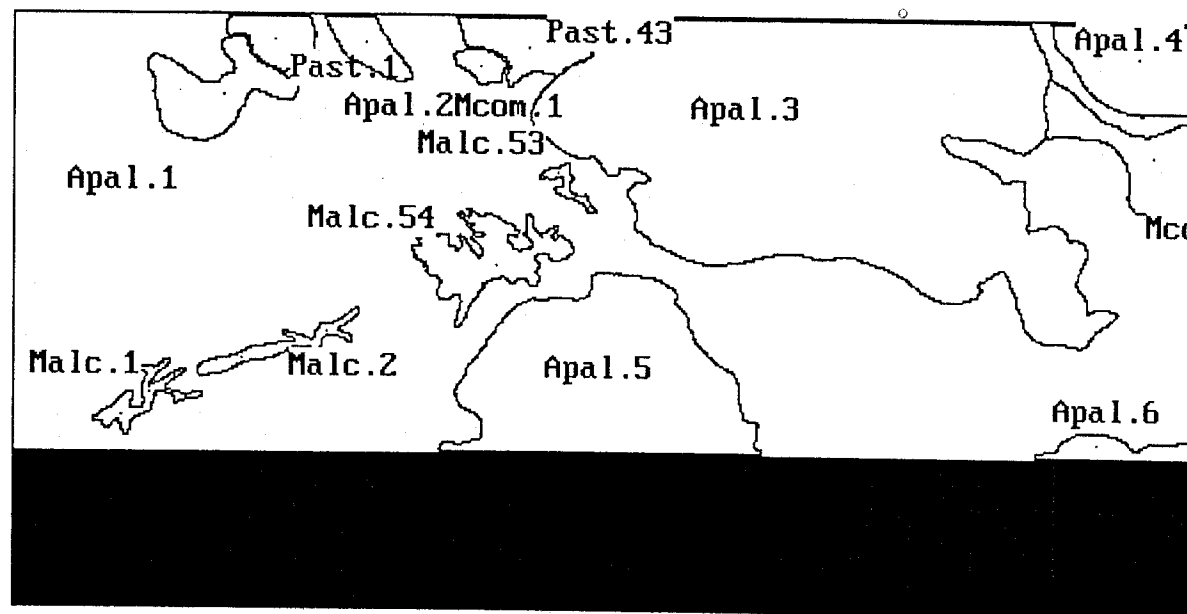
Colonies 3

Points 139

A 3.cm²

P 8.cm

More Photo Frames (Y/N): ☐



C.I.A.

Biscayne Natl

Year 1989

Frame 1

Mcom.2ale 1: 4

Res 0.04543cm

Disc c:\mp\

bp01Fr01.Y89

TACHOMETER

Species 4

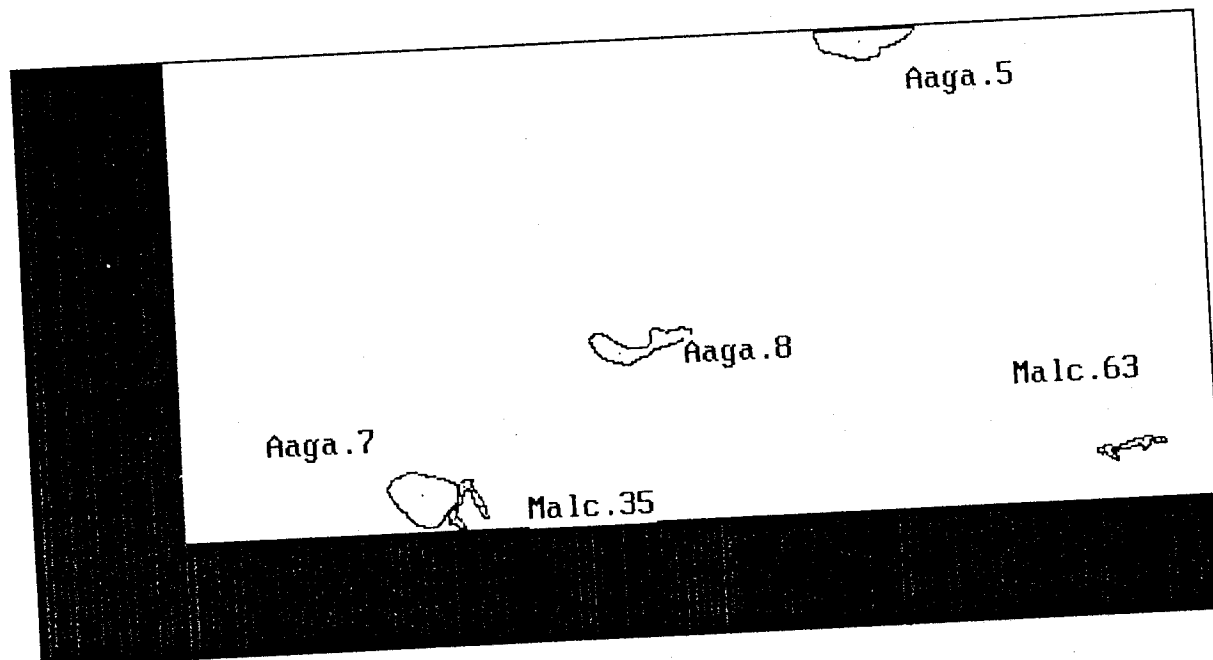
Colonies 14

Points 551

A 45.cm²

P 31.cm

More Photo Frames (Y/N):



C.I.A.

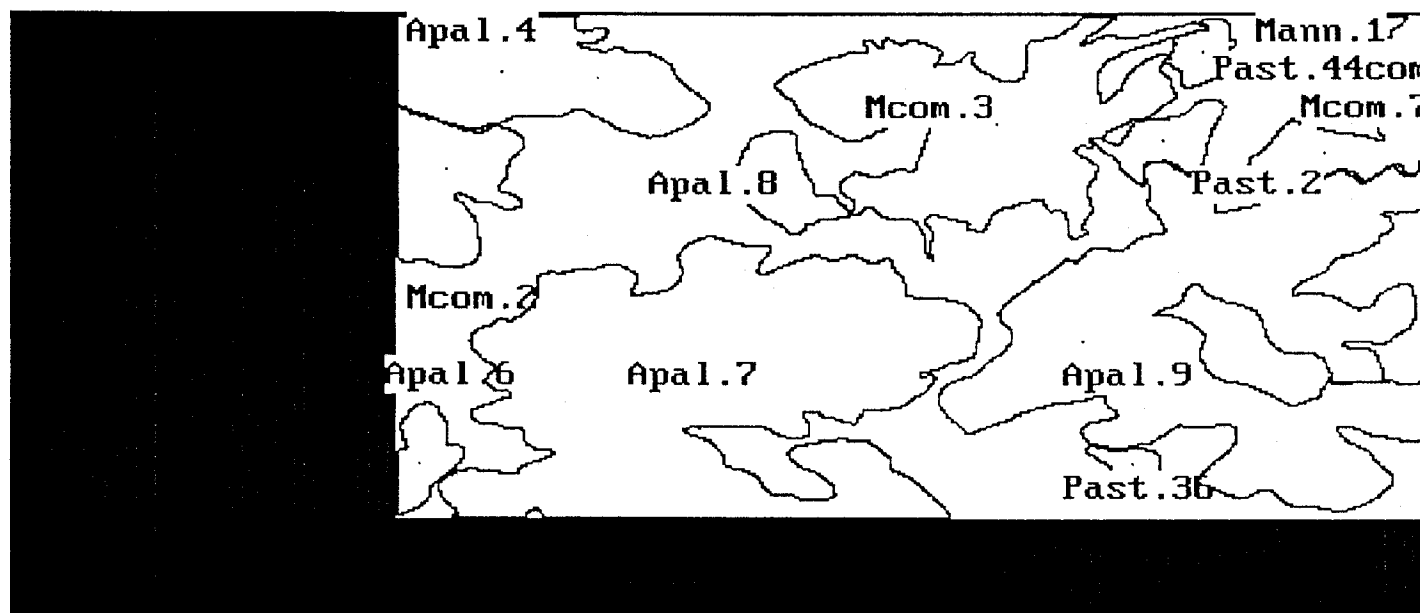
Biscayne Nati
 Year 1990
 Frame 30
 Scale 1: 4
 Res 0.04235cm
 Disc c:\om\
 bp02Fr30.Y90

TACHYMETRIC

Species 2
 Colonies 5

Points 328
 A 3.cm²
 P 15.cm

More Photo Frames (Y/N): ■



C.I.A.

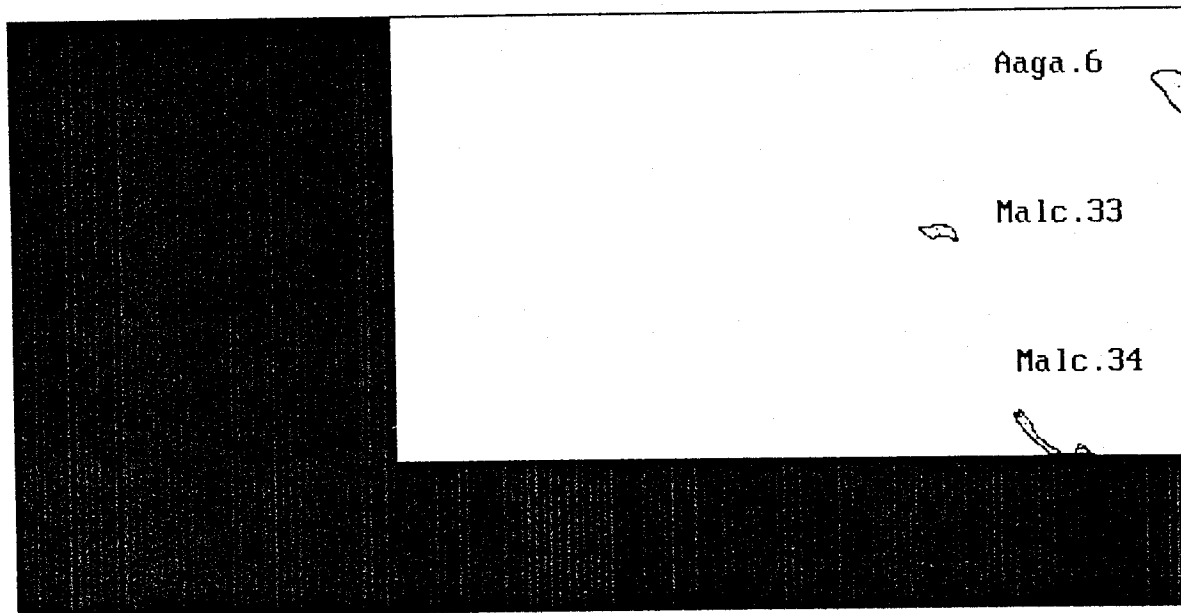
Biscayne Natl
 Year 1989
 Frame 2
 Scale 1: 4
 Res 0.04000cm
 Disc c:\mp\
 BP01Fr02.Y89

TACHOMETER

Species 4
 Colonies 13

Points 568
 A 47.cm²
 P 31.cm

More Photo Frames (Y/N):



Aaga.6

Malc.33

Malc.34

C.I.A.

Biscayne Nati

Year__1990

Frame__29

Scale 1: 4

Res 0.04611cm

Disc c:\om\

bp02Fr29.Y90

DISPATCH

Species 2

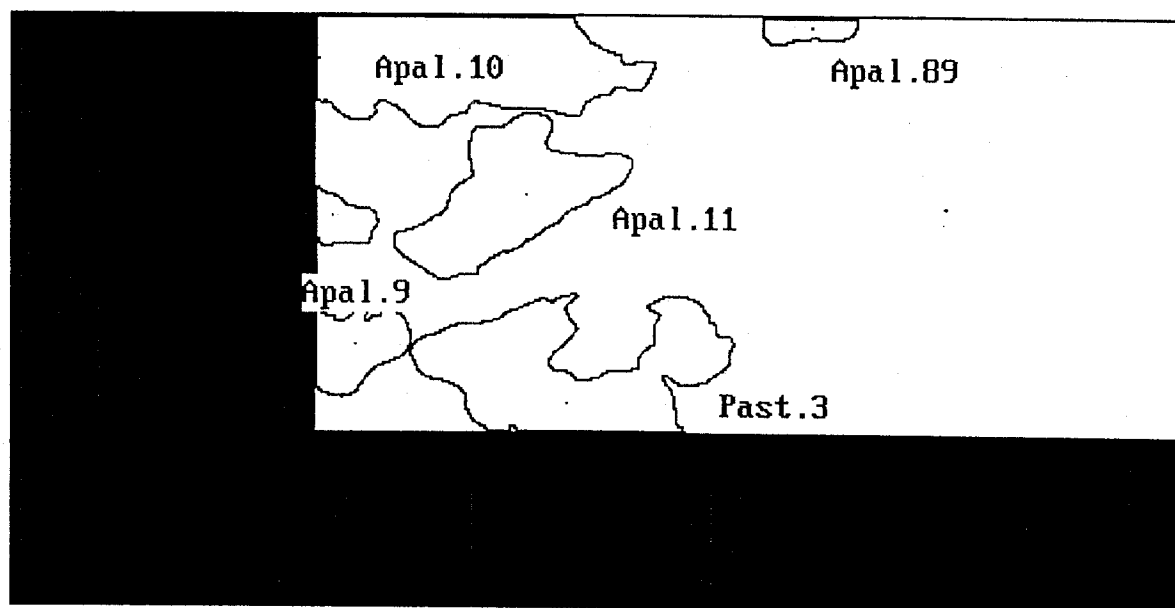
Colonies 3

Points 259

A 12.cm²

P 14.cm

More Photo Frames (Y/N): ☐



C.I.A.

Biscayne Natl
Year 1989
Frame 3
Scale 1: 4
Res 0.04752cm
Disc c:\mp\
bp01Fr03.Y89

TACHOMETER

Species 2
Colonies 5

Points 1060
A 189.cm²
P 67.cm

More Photo Frames (Y/N):



Malc.32

C.I.A.

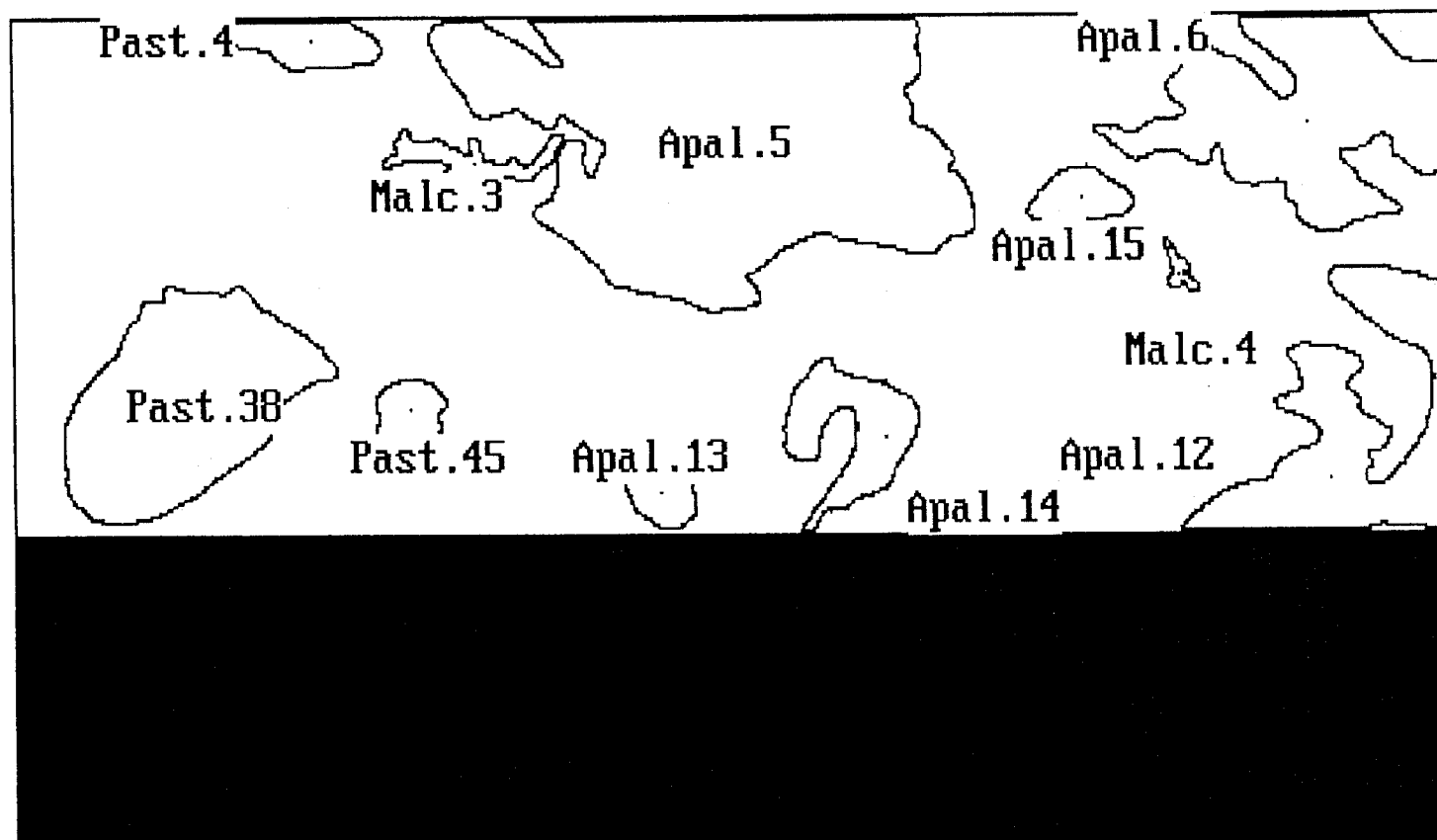
Biscayne Nati
Year___1990
Frame___28
Scale 1: 5
Res 0.04771cm
Disc c:\om\
bp02Fr28.Y90

TACHOMETRI

Species 1
Colonies 1

Points 524
A 10.cm²
P 31.cm

More Photo Frames (Y/N): ☐



C.I.A.

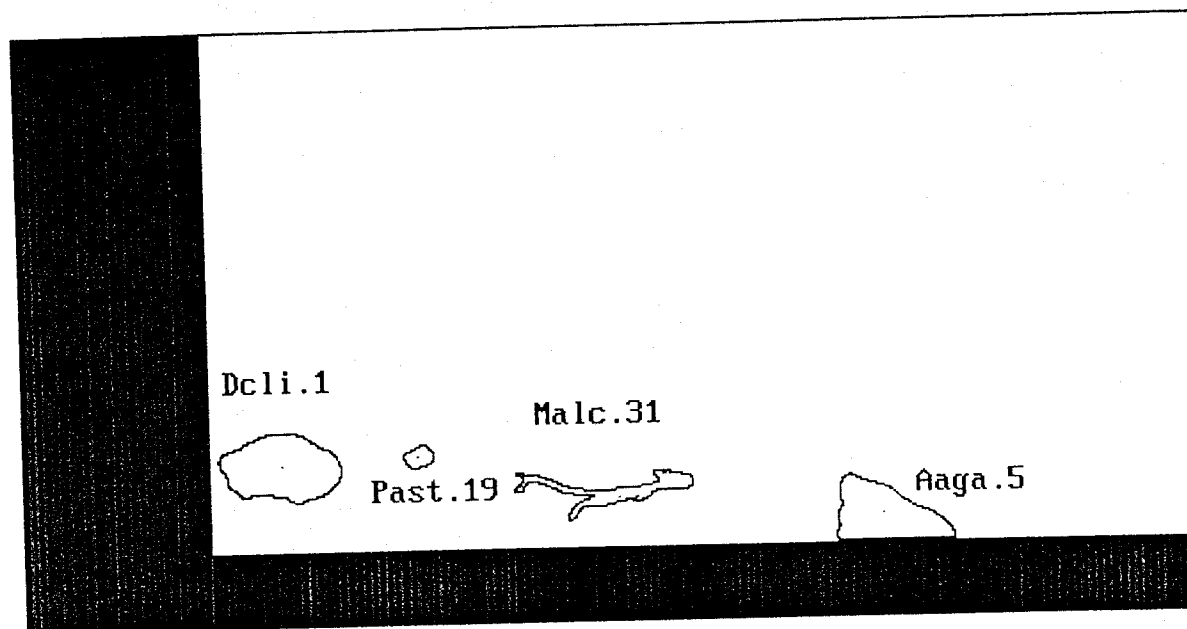
Biscayne Natl
Year 1989
Frame 4
Scale 1: 4
Res 0.05379cm
Disc c:\mp\
bp01Fr04.Y89

TACHOMETER

Species 3
Colonies 11

Points 241
A 4.cm²
P 12.cm

More Photo Frames (Y/N):



C.I.A.

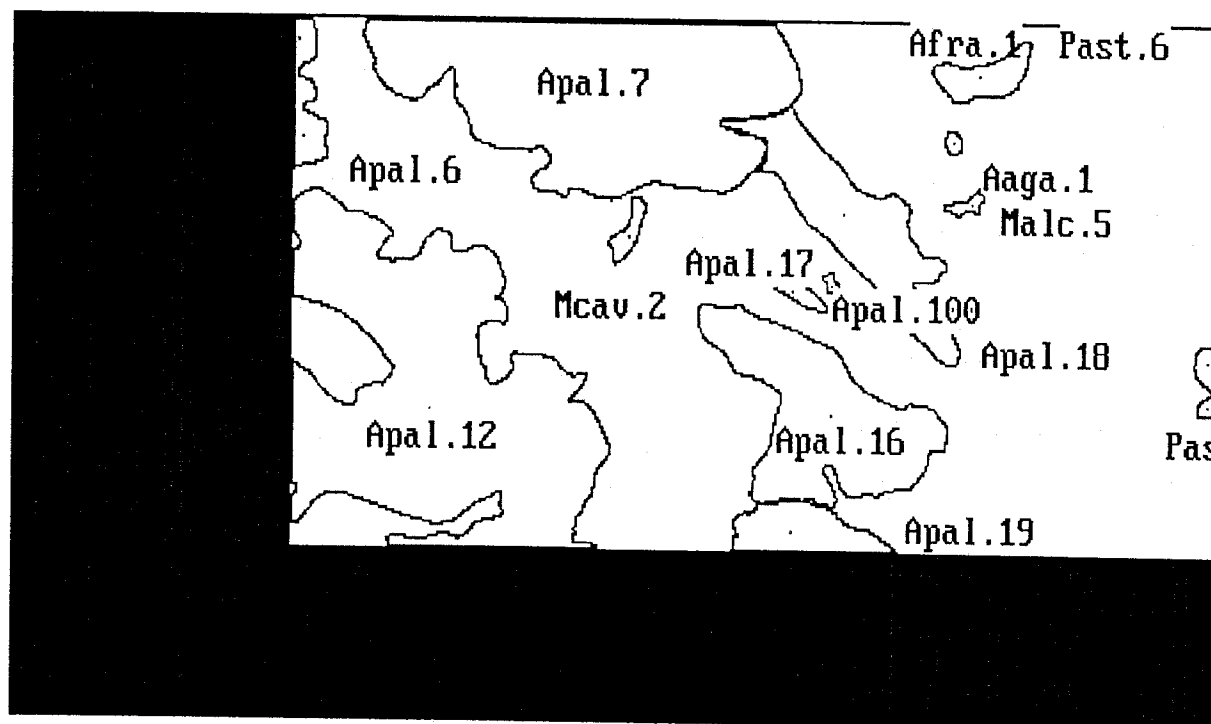
Biscayne Nati
Year 1990
Frame 27
Scale 1: 4
Res 0.03902cm
Disc c:\om\
bp02Fr27.Y90

TACHYMETER

Species 4
Colonies 4

Points 432
A 37.cm²
P 27.cm

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl

Year 1989

Frame 5

Scale 1: 4

Res 0.04451cm

Disc c:\mp\

bp01Fr05.Y89

Past.7

TACHOMETER

Species 6

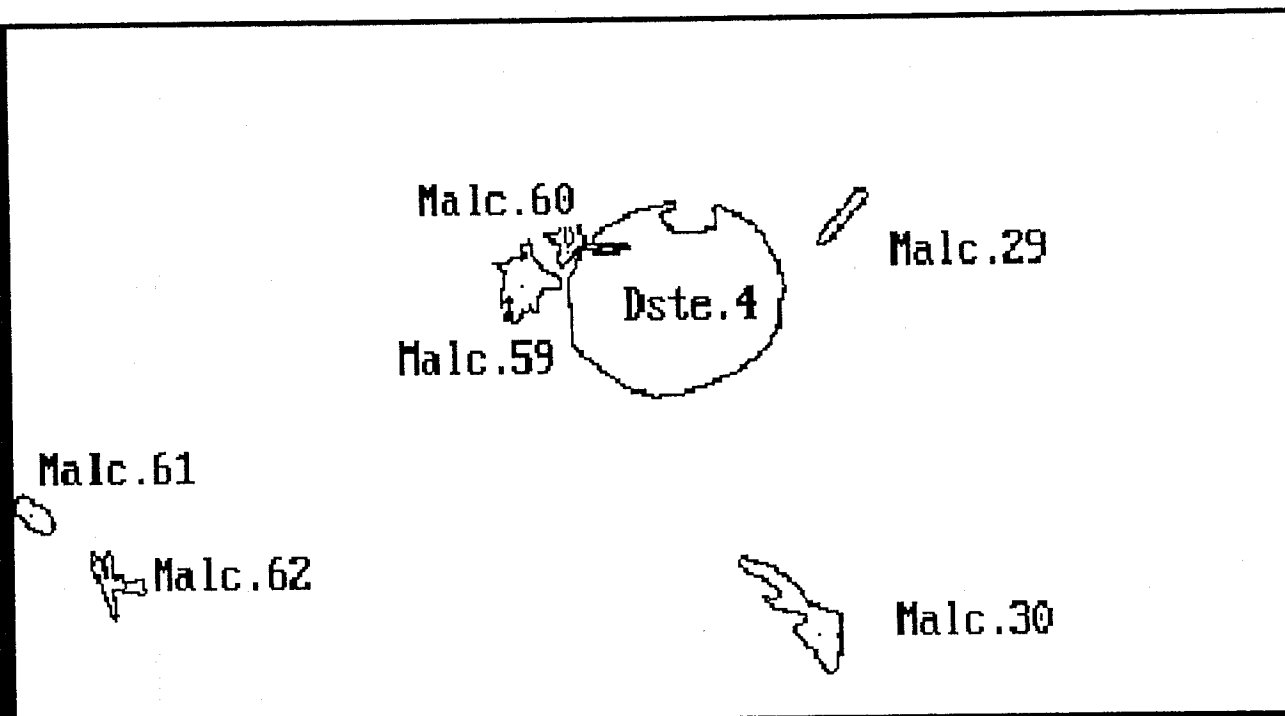
Colonies 14

Points 2918

A 523.cm²

P 173.cm

More Photo Frames (Y/N):



D.I.R.

.....

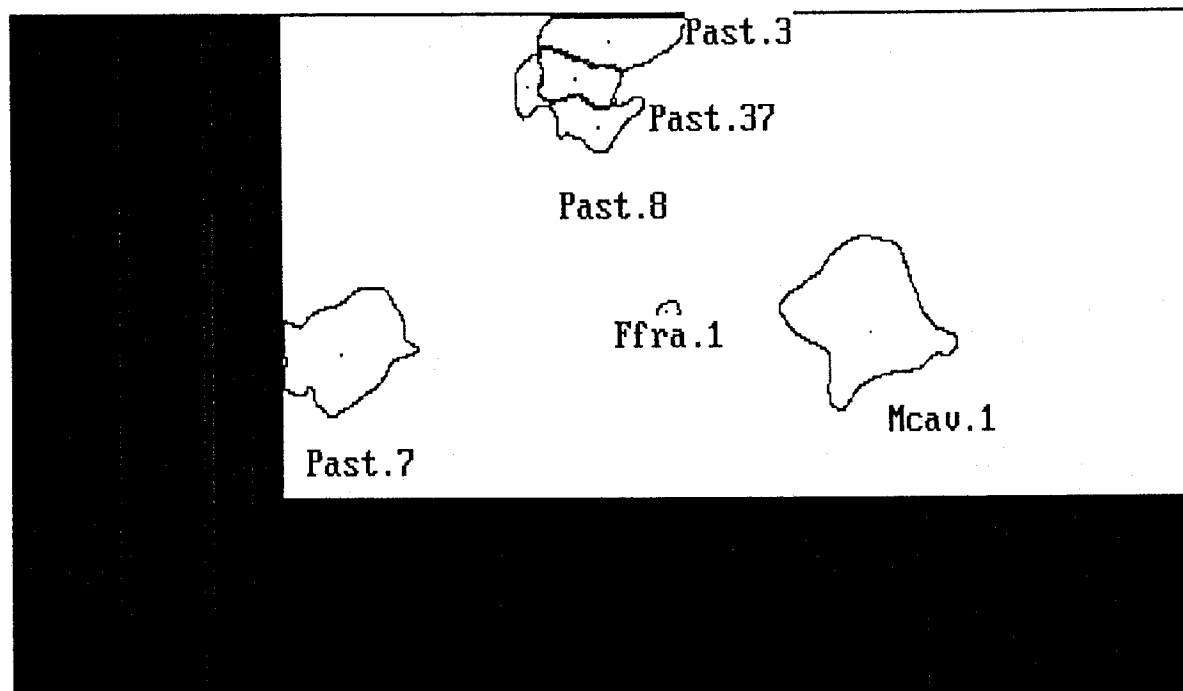
Biscayne Nati
 Year___1990
 Frame___26
 Scale 1: 4
 Res 0.04114cm
 Disc c:\om\
 bp02Fr26.Y90

~~YACOWES~~

Species	2
Colonies	7

Points	561
A	15.cm ²
P	26.cm

More Photo Frames (Y/N): ☐



C.I.A.

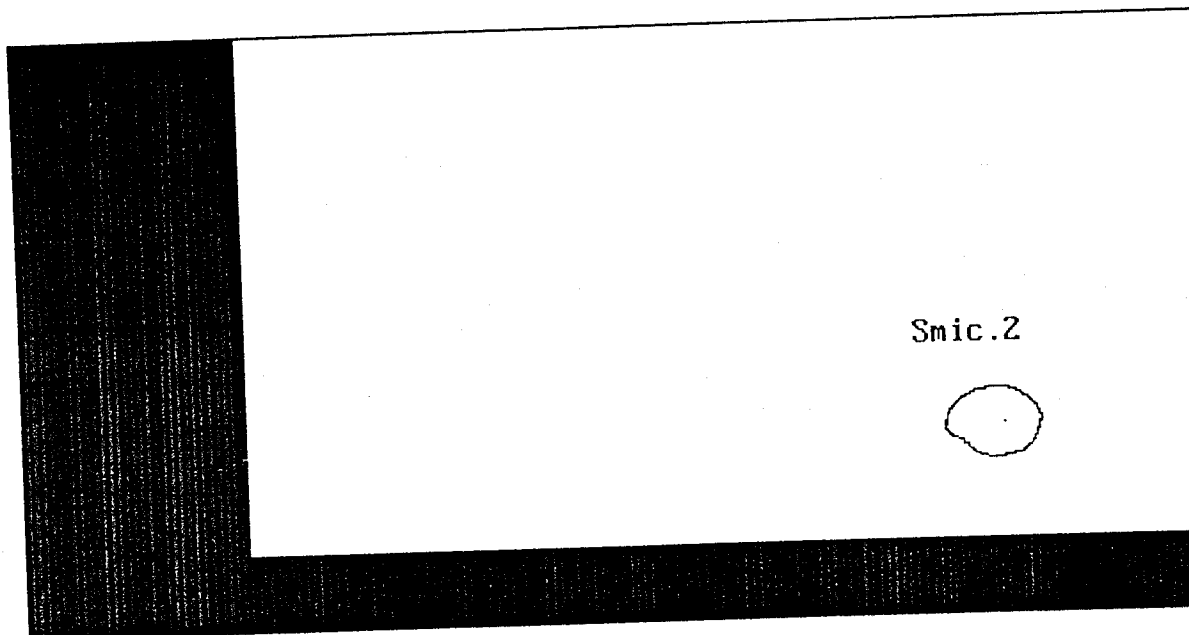
Biscayne Natl
 Year__1989
 Frame__ 6
 Scale 1: 4
 Res 0.04714cm
 Disc c:\mp\
 BP01Fr06.Y89

TACHOMETER

Species 3
 Colonies 6

Points 476
 A 50.cm²
 P 33.cm

More Photo Frames (Y/N):



C.I.A.

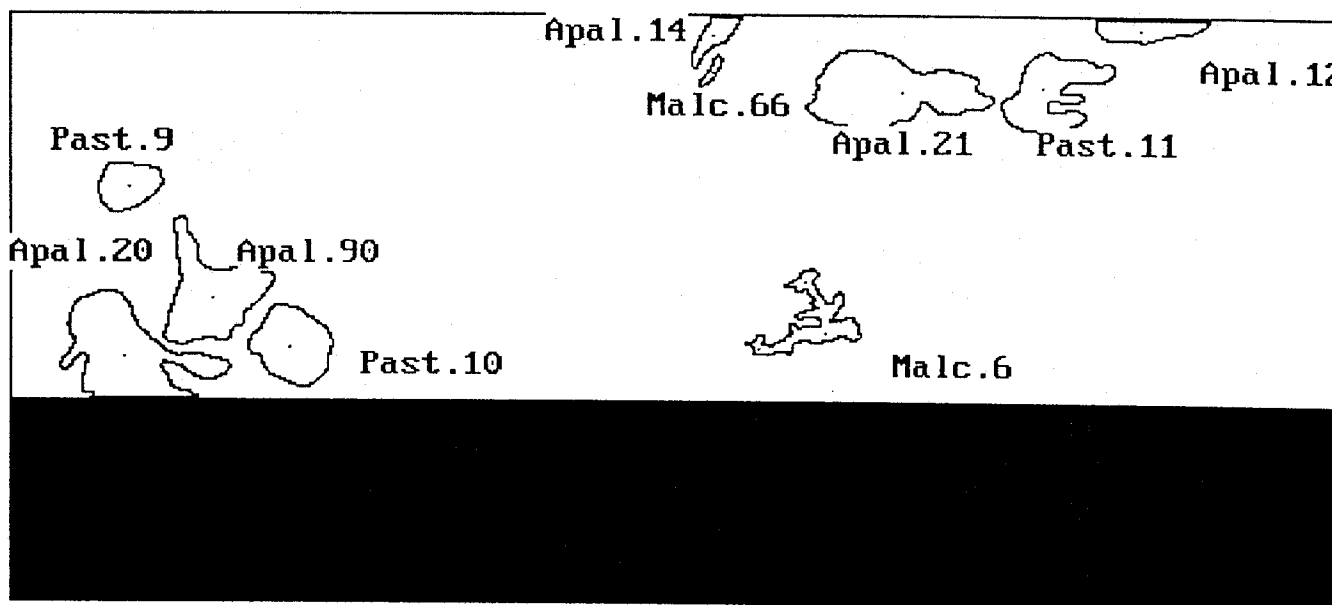
Biscayne Nati
Year__1990
Frame__25
Scale 1: 4
Res 0.03925cm
Disc c:\om\
bp02Fr25.Y90

EXAMPLER

Species 1
Colonies 1

Points 468
A 38.cm²
P 23.cm

More Photo Frames (Y/N): ■



C.I.A.

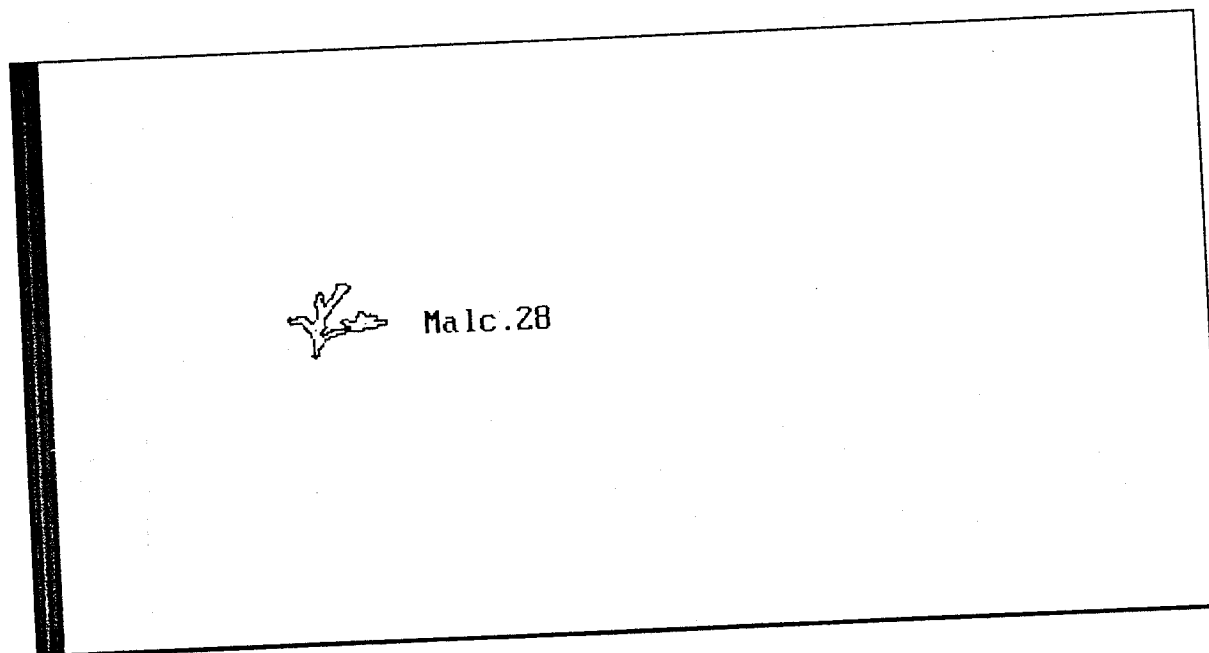
Biscayne Natl
Year 1989
Frame 7
Scale 1: 4
Res 0.05114cm
Disc c:\mp\
BP01Fr07.Y89

TACHOMETER

Species 3
Colonies 10

Points 282
A 8.cm²
P 15.cm

More Photo Frames (Y/N):



C.I.A.

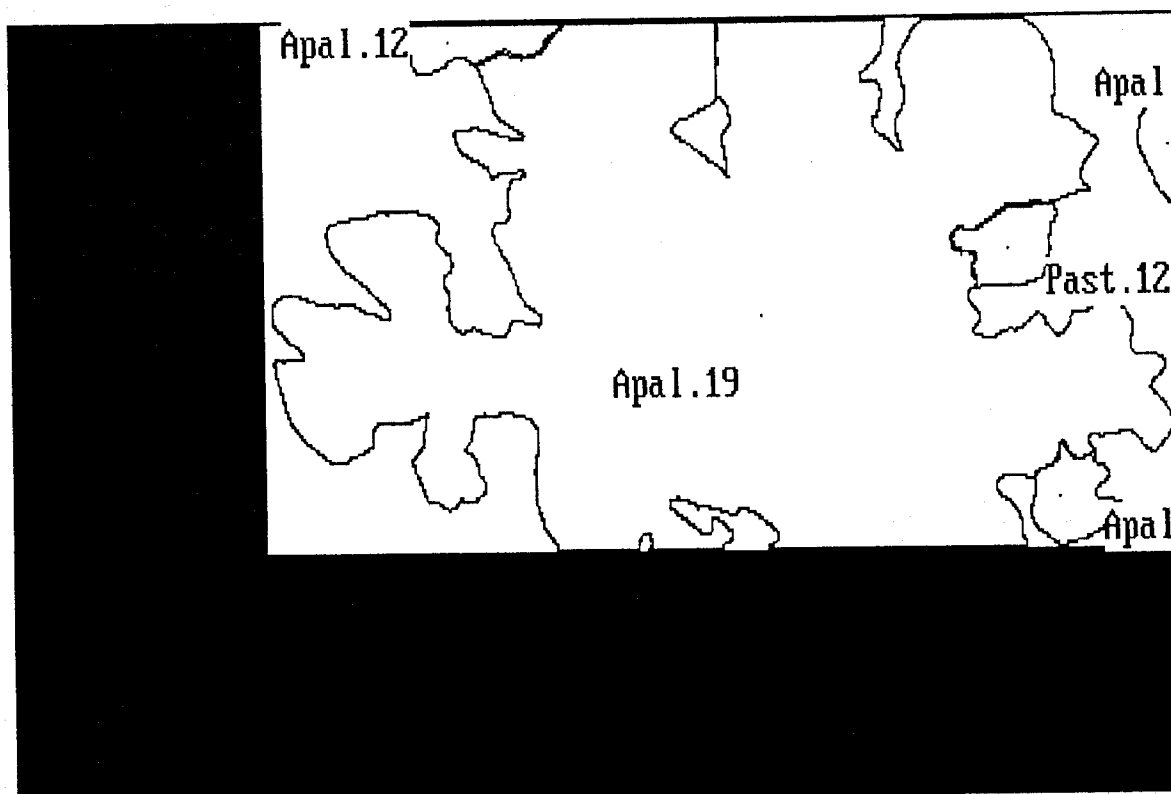
Biscayne Nati
Year__1990
Frame__24
Scale 1: 3
Res 0.03428cm
Disc c:\om\
bp02Fr24.Y90

TRANSMISSION

Species 1
Colonies 1

Points 804
A 9.cm²
P 32.cm

More Photo Frames (Y/N): ☐



C.I.A.

Apal.22

Biscayne Natl

Year 1989

Frame 8

Scale 1: 4

Res 0.04888cm

Disc c:\mp\

bp01Fr08.Y89

Apal.23 TACHOMETER

Species 2

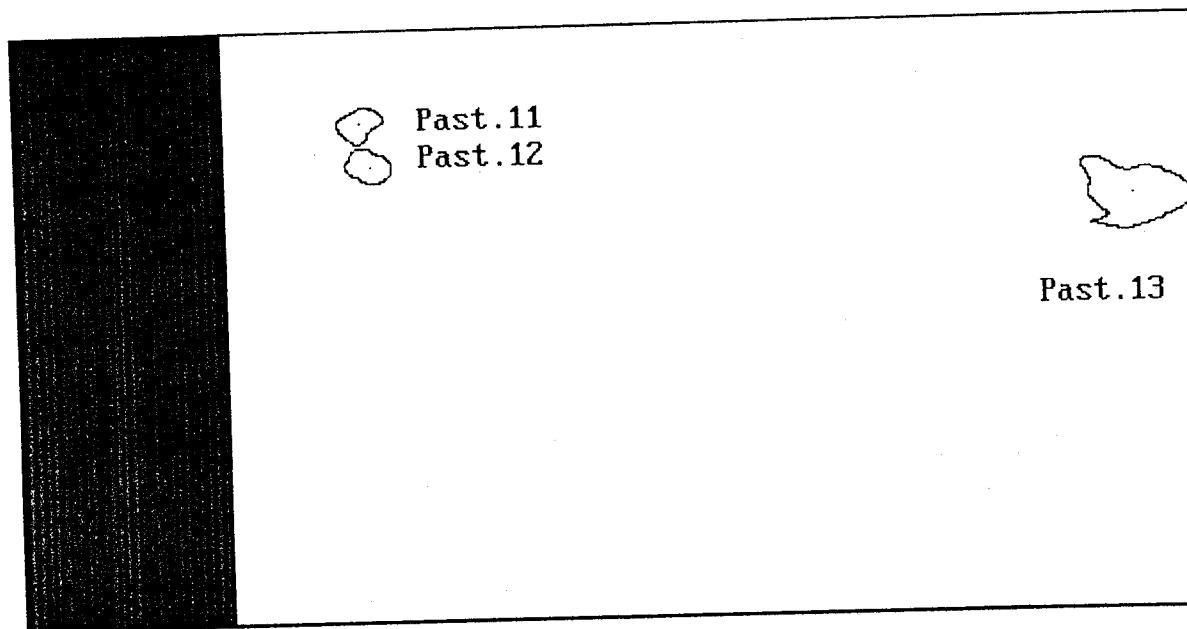
Colonies 5

Points 524

A 44.cm²

P 30.cm

More Photo Frames (Y/N):



C.I.A.

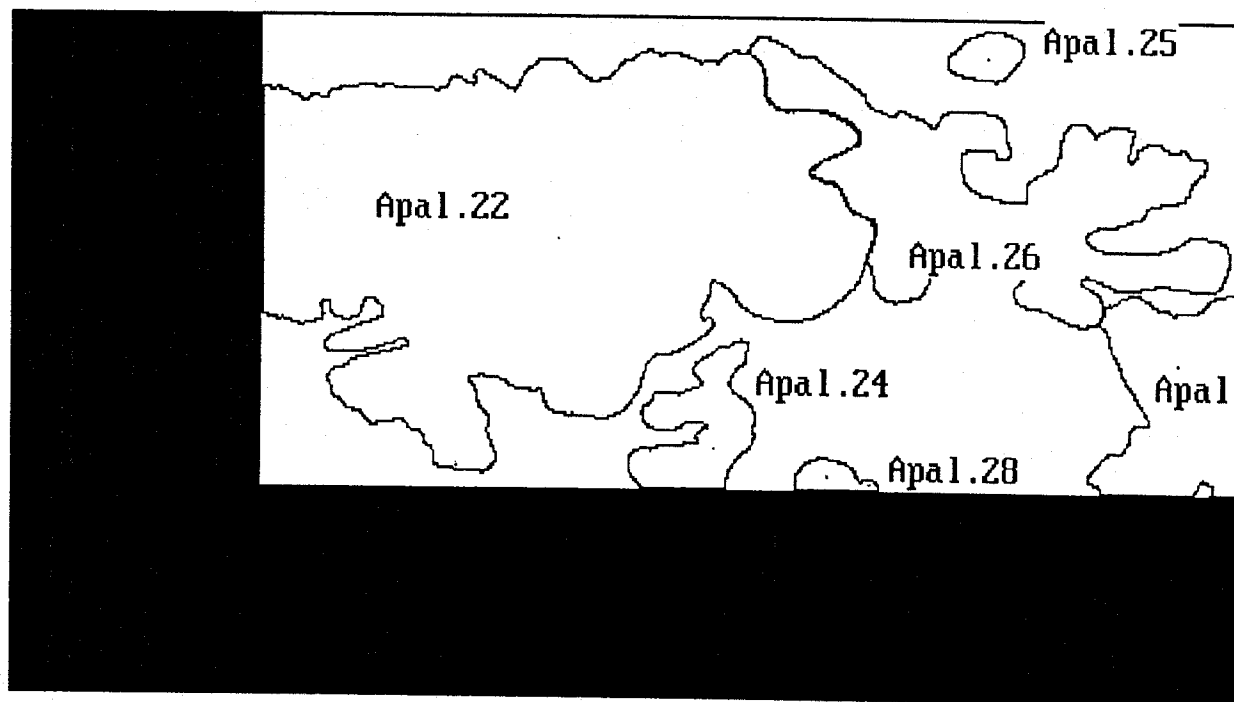
Biscayne Nati
Year___1990
Frame___23
Scale 1: 3
Res 0.03435cm
Disc c:\om\
bp02Fr23.Y90

COLLECTED

Species 1
Colonies 3

Points 575
A 34.cm²
P 26.cm

More Photo Frames (Y/N): ☐



C.I.A.

Biscayne Natl

Year 1989

Frame 9

Scale 1: 4

Res 0.04823cm

Disc c:\mp\

Apal.27p01Fr09.Y89

TACHOMETER

Species 1

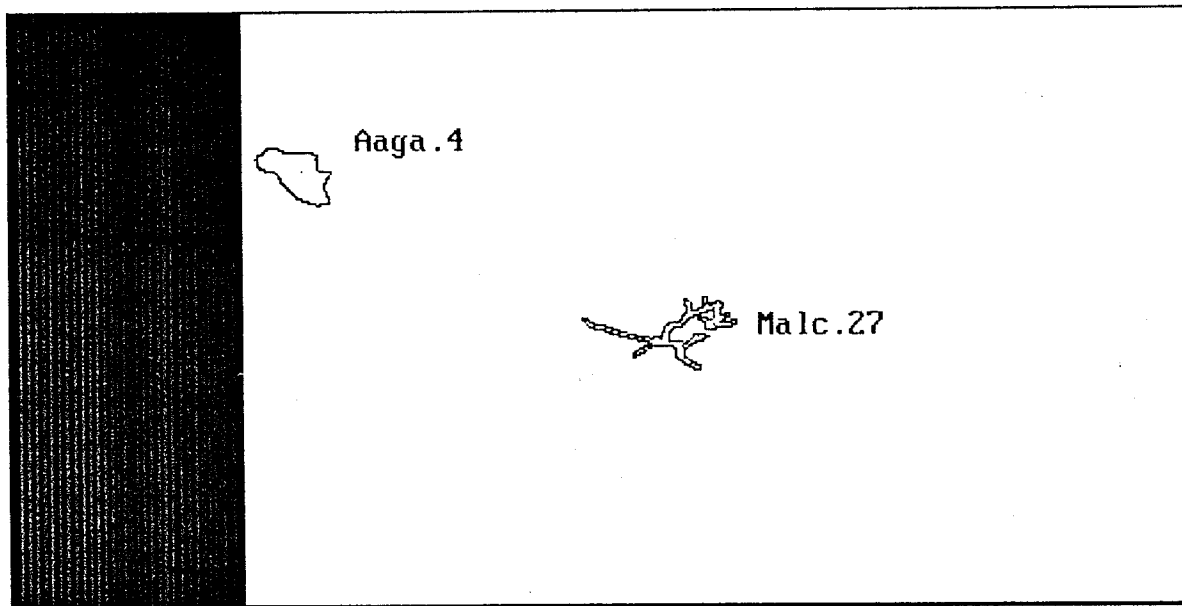
Colonies 6

Points 305

A 23.cm²

P 18.cm

More Photo Frames (Y/N):



C.I.A.

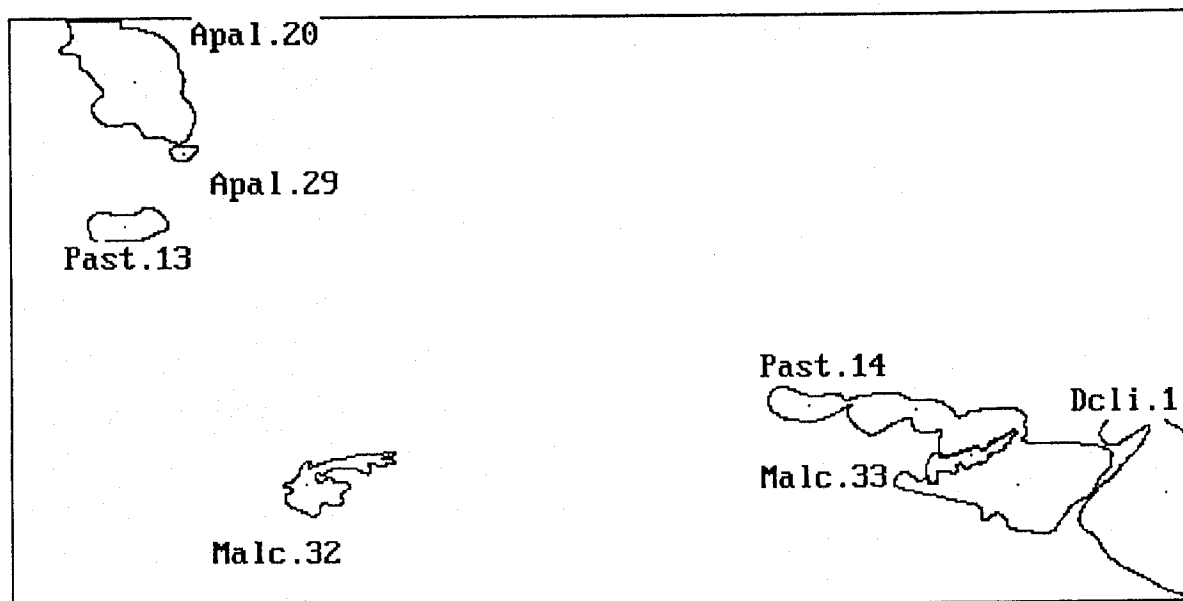
Biscayne Nati
Year__1990
Frame__22
Scale 1: 4
Res 0.03423cm
Disc c:\om\
bp02Fr22.Y90

WIKIWATCH

Species 2
Colonies 2

Points 1254
A 12.cm²
P 54.cm

More Photo Frames (Y/N): ☐



C.I.A.

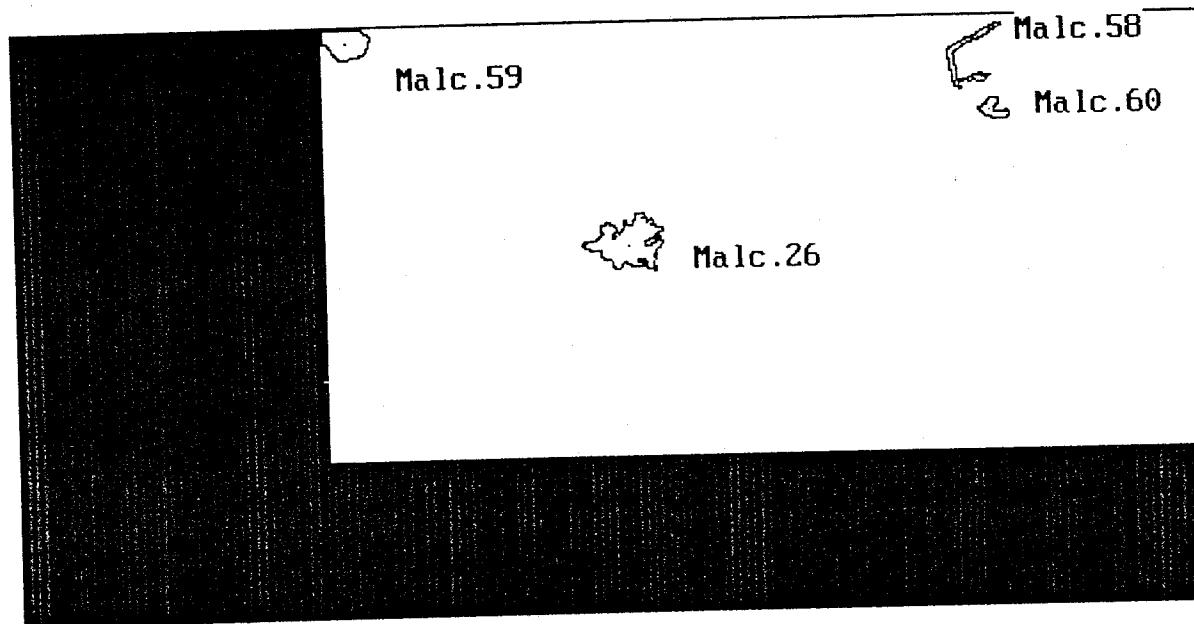
Biscayne Natl
 Year 1989
 Frame 10
 Scale 1: 3
 Res 0.03343cm
 Disc c:\mp\
 bp01Fr10.Y89

TACHOMETER

Species 4
 Colonies 7

Points 775
 A 81.cm²
 P 47.cm

More Photo Frames (Y/N):



C.I.A.

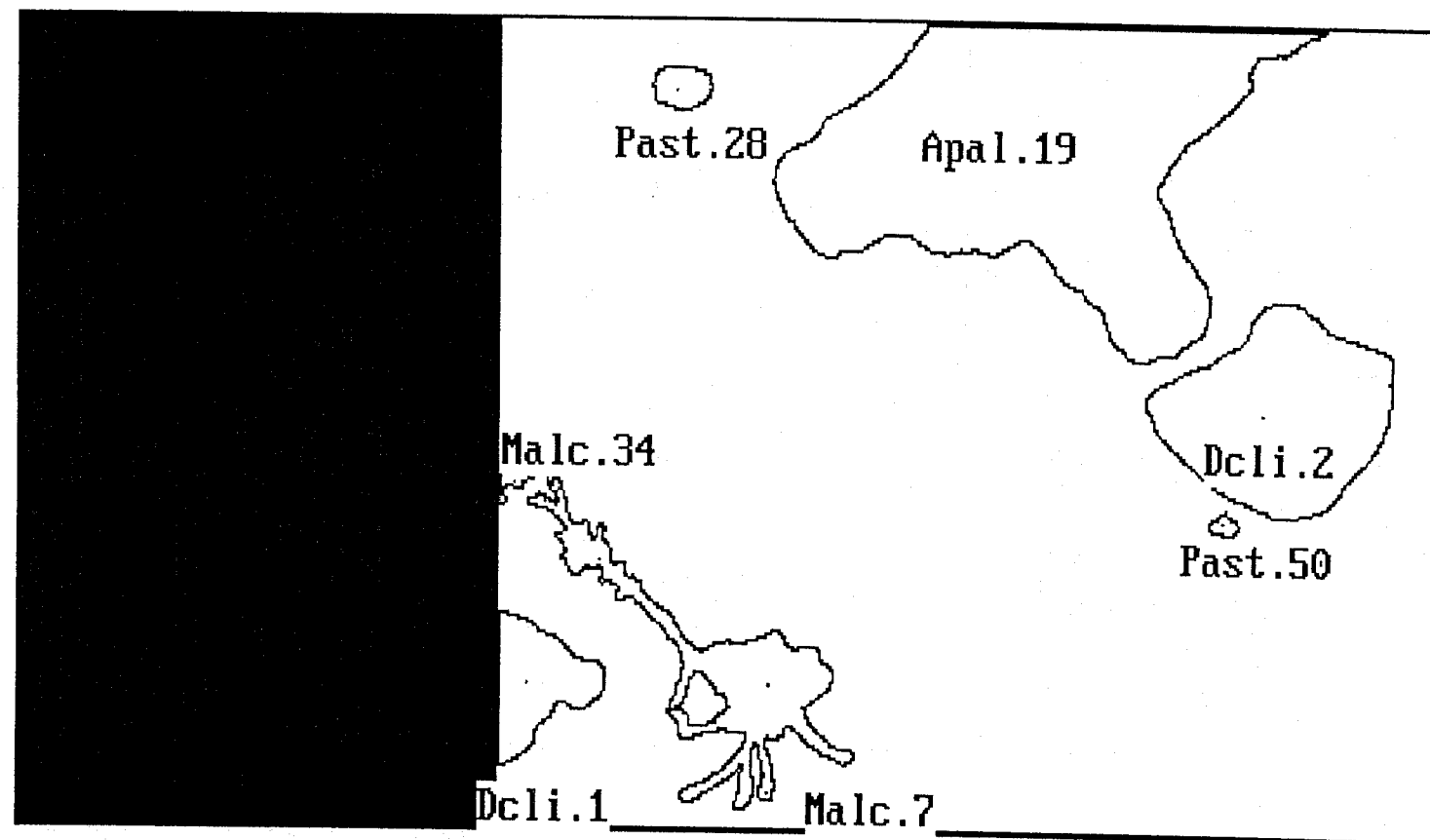
Biscayne Nati
Year___1990
Frame___21
Scale 1: 4
Res 0.04687cm
Disc c:\om\
bp02Fr21.Y90

TACHIMETER

Species 1
Colonies 4

Points 187
A 3.cm²
P 10.cm

More Photo Frames (Y/N): ■



C.I.A.

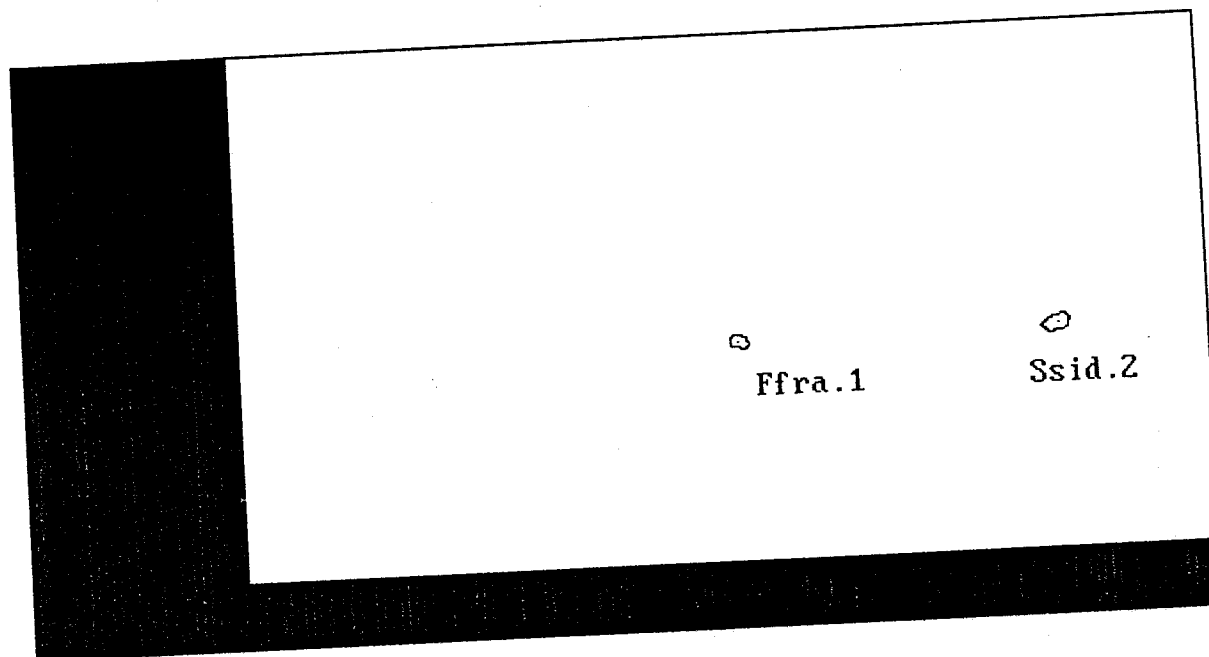
Biscayne Natl
Year 1989
Frame 11
Scale 1: 4
Res 0.03350cm
Disc c:\mp\
bp01Fr11.489

TACHOMETER

Species 4
Colonies 7

Points 116
A 2.cm²
P 6.cm

More Photo Frames (Y/N):



Ffra.1

Ssid.2

C.I.A.

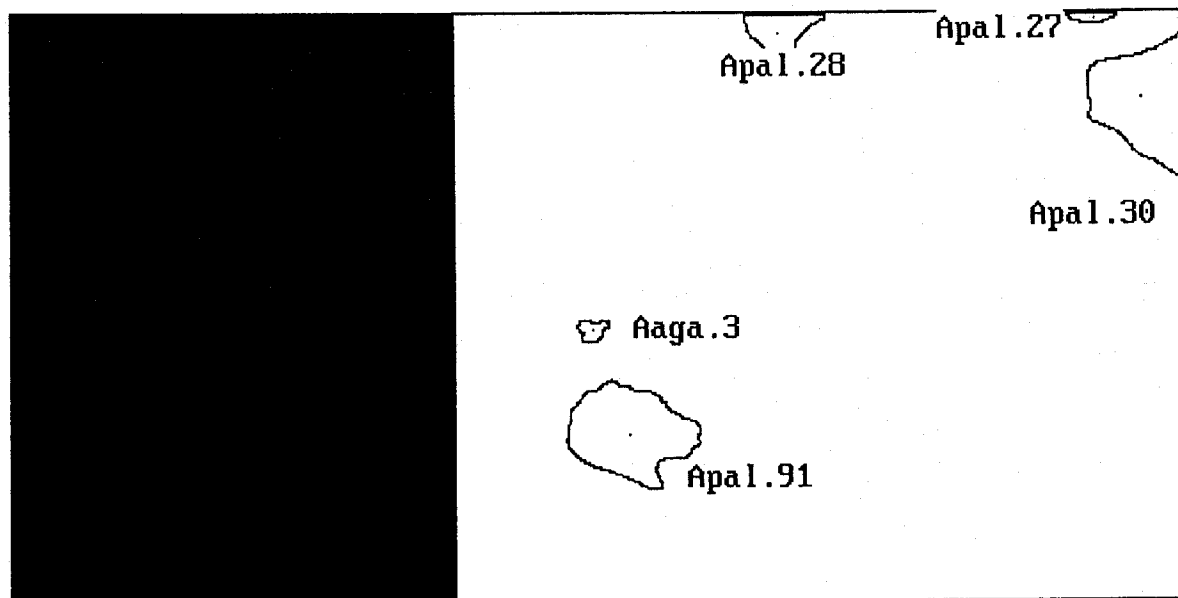
Biscayne Nati
Year 1990
Frame 20
Scale 1: 4
Res 0.03859cm
Disc c:\om\
bp02Fr20.Y90

TACHOMETER

Species 2
Colonies 2

Points 137
A 3.cm²
P 6.cm

More Photo Frames (Y/N):



C.I.A.

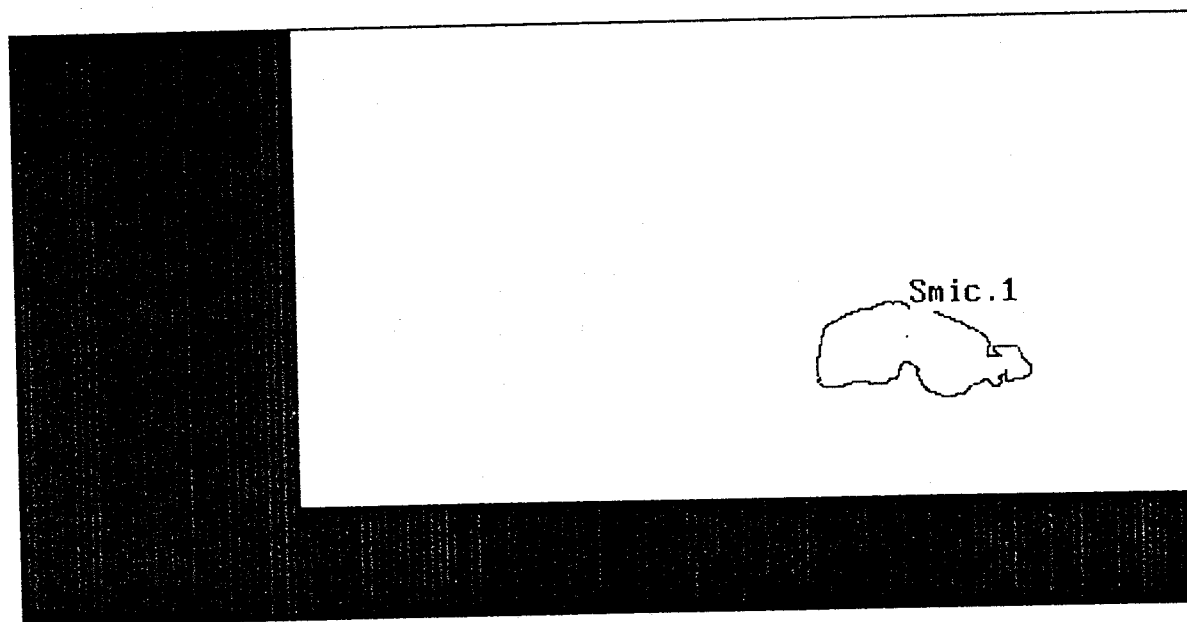
Biscayne Nat'
Year 1989
Frame 12
Scale 1: 4
Res 0.03361cm
Disc c:\mp\
bp01Fr12.Y89

TACHOMETER

Species 2
Colonies 5

Points 484
A 86.cm²
P 43.cm

More Photo Frames (Y/N):



C.I.A.

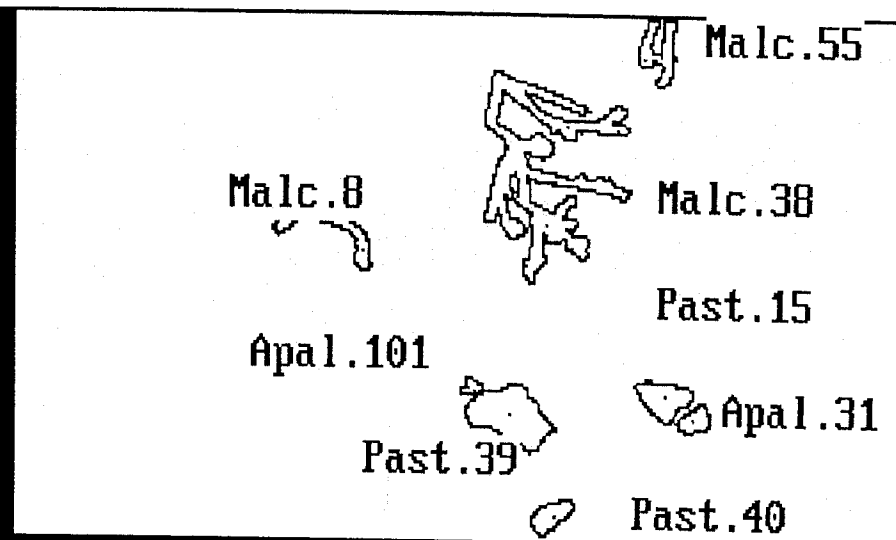
Biscayne Nati
Year__1990
Frame__19
Scale 1: 4
Res 0.04239cm
Disc c:\om\
bp02Fr19.Y90

TACHYMETRE

Species 1
Colonies 1

Points 1143
A 112.cm²
P 57.cm

More Photo Frames (Y/N): ☐



C.I.A.

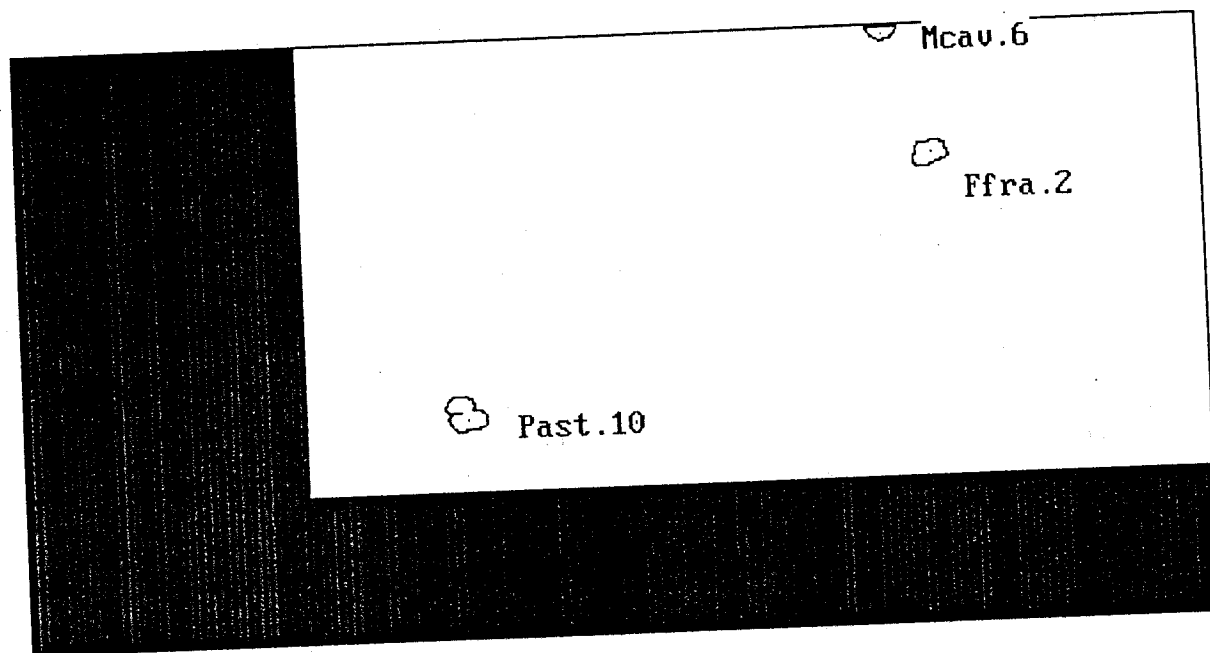
Biscayne Nat'
Year 1989
Frame 13
Scale 1: 5
Res 0.05319cm
Disc c:\mp\
bp01Fr13.Y89

TACHOMETER

Species 3
Colonies 8

Points 207
A 12.cm²
P 14.cm

More Photo Frames (Y/N):



C.I.A.

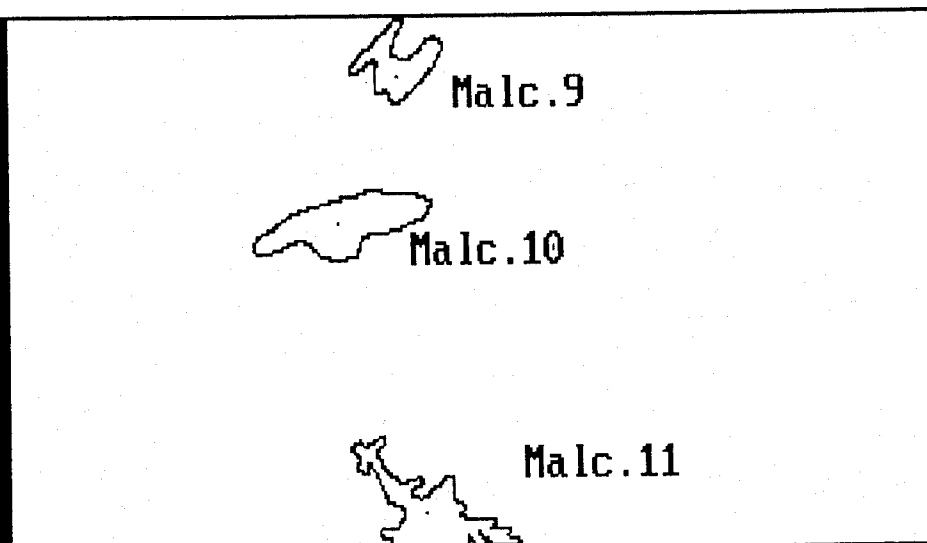
Biscayne Nati
Year 1990
Frame 18
Scale 1: 4
Res 0.04528cm
Disc c:\om\
bp02Fr18.Y90

TACTICAL

Species 3
Colonies 3

Points 283
A 9.cm²
P 14.cm

More Photo Frames (Y/N):



C.I.A.

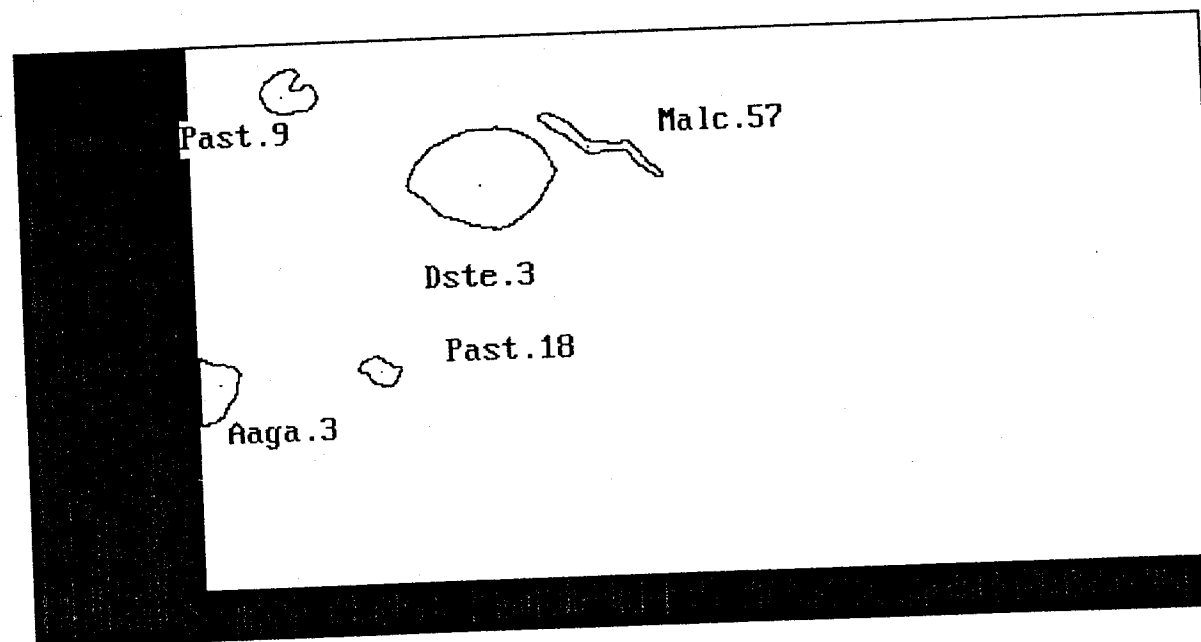
Biscayne Nat'
Year 1989
Frame 14
Scale 1: 5
Res 0.05306cm
Disc c:\mp\
bp01Fr14.Y89

TACHOMETER

Species 1
Colonies 3

Points 369
A 25.cm²
P 31.cm

More Photo Frames (Y/N):



C.I.A.

Biscayne Nati
Year 1990
Frame 17
Scale 1: 4
Res 0.03749cm
Disc c:\om\
bp02Fr17.Y90

TACHOMETER

Species 4
Colonies 5

Points 523
A 9.cm²
P 25.cm

More Photo Frames (Y/N): ■

Malc.68



Apal.32



Apal.92

Apal.33

C.I.A.

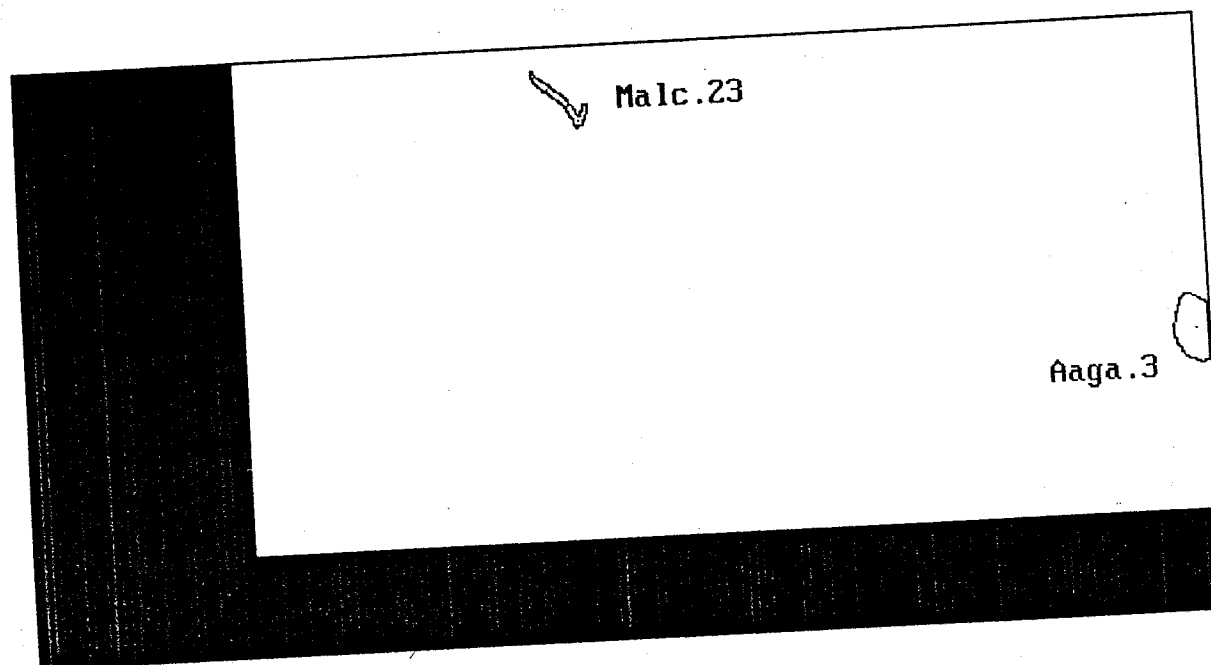
Biscayne Natl
Year 1989
Frame 15
Scale 1: 5
Apal.33Res 0.05752cm
Disc c:\mp\
bp01Fr15.Y89

RECOVERED

Species 2
Colonies 4

Points 229
A 7.cm²
P 15.cm

More Photo Frames (Y/N):



C.I.A.

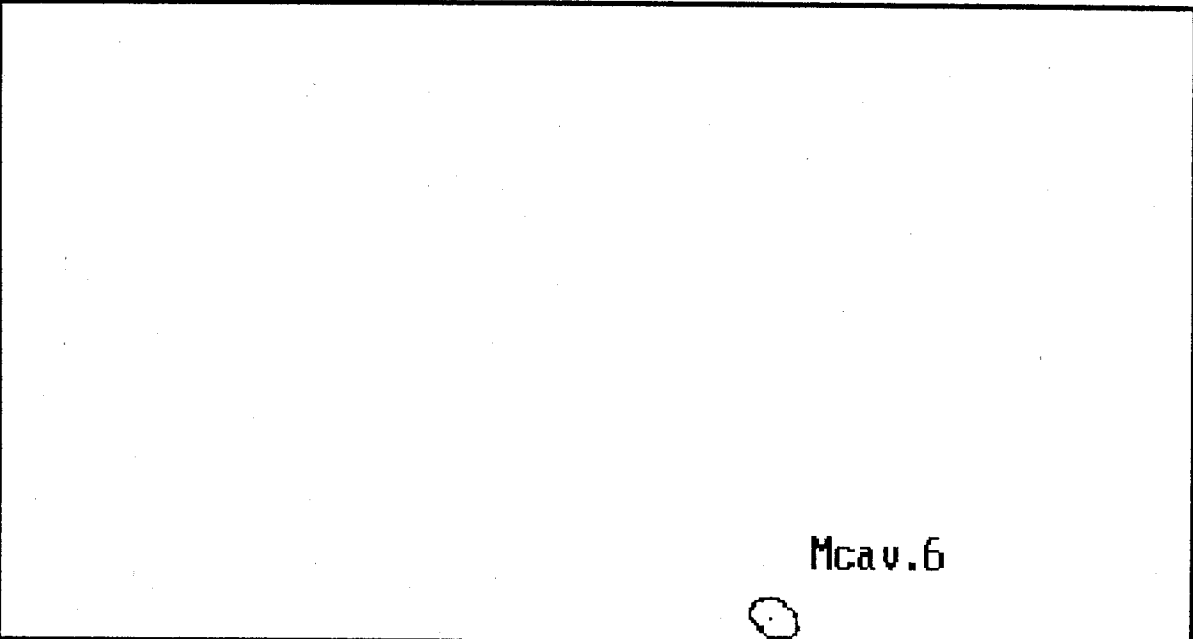
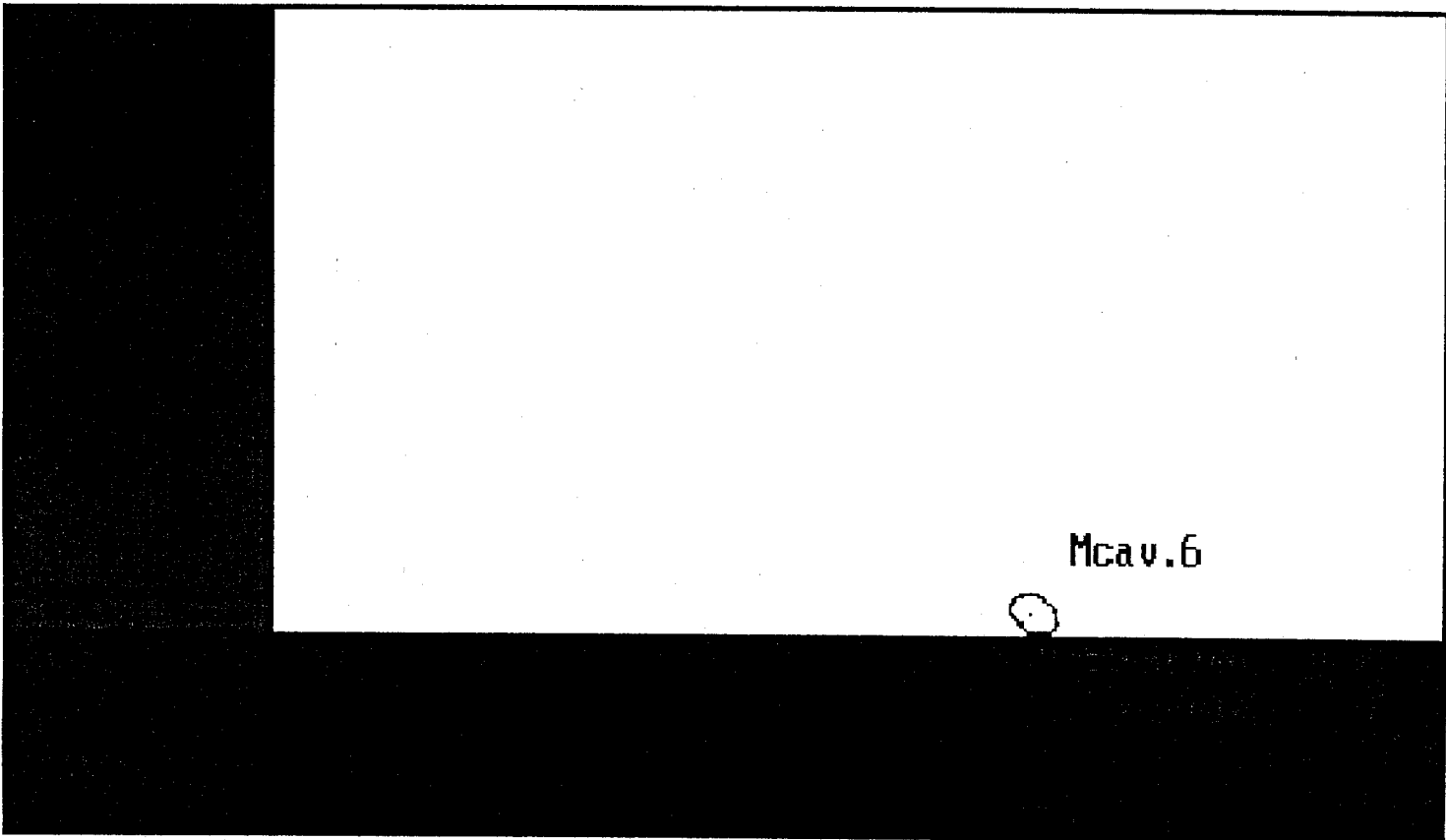
Biscayne Nati
Year 1990
Frame 16
Scale 1: 4
Res 0.04140cm
Disc c:\om\
bp02Fr16.Y90

TRIUMETER

Species 2
Colonies 2

Points 314
A 15.cm²
P 17.cm

More Photo Frames (Y/N): ■



Mca v.6

D.I.A.

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Biscayne Nati

Year___1990

Frame___15

Scale 1: 4

Res 0.04562cm

Disc c:\om\

bp02Fr15.Y90

1800000000

Species 1

Colonies 1

Points 197

A 7.cm²

P 10.cm

More Photo Frames (Y/N): ☐

Past.17 Malc.43



Mcom.9



Past.18



Mlam.1



Malc.15

C.I.A.

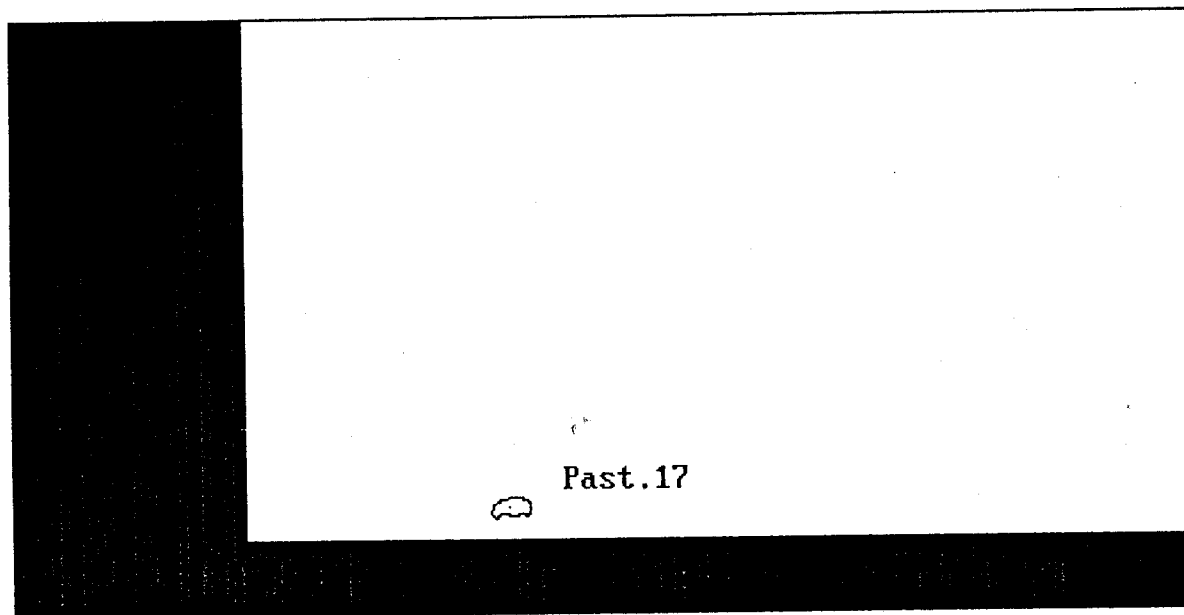
Biscayne Natl
Year 1989
Frame 17
Scale 1: 5
Res 0.05427cm
Disc c:\mp\
bp01Fr17.Y89

THOMSON

Species 4
Colonies 6

Points 218
A 5.cm²
P 15.cm

More Photo Frames (Y/N):



Past.17

C.I.A.

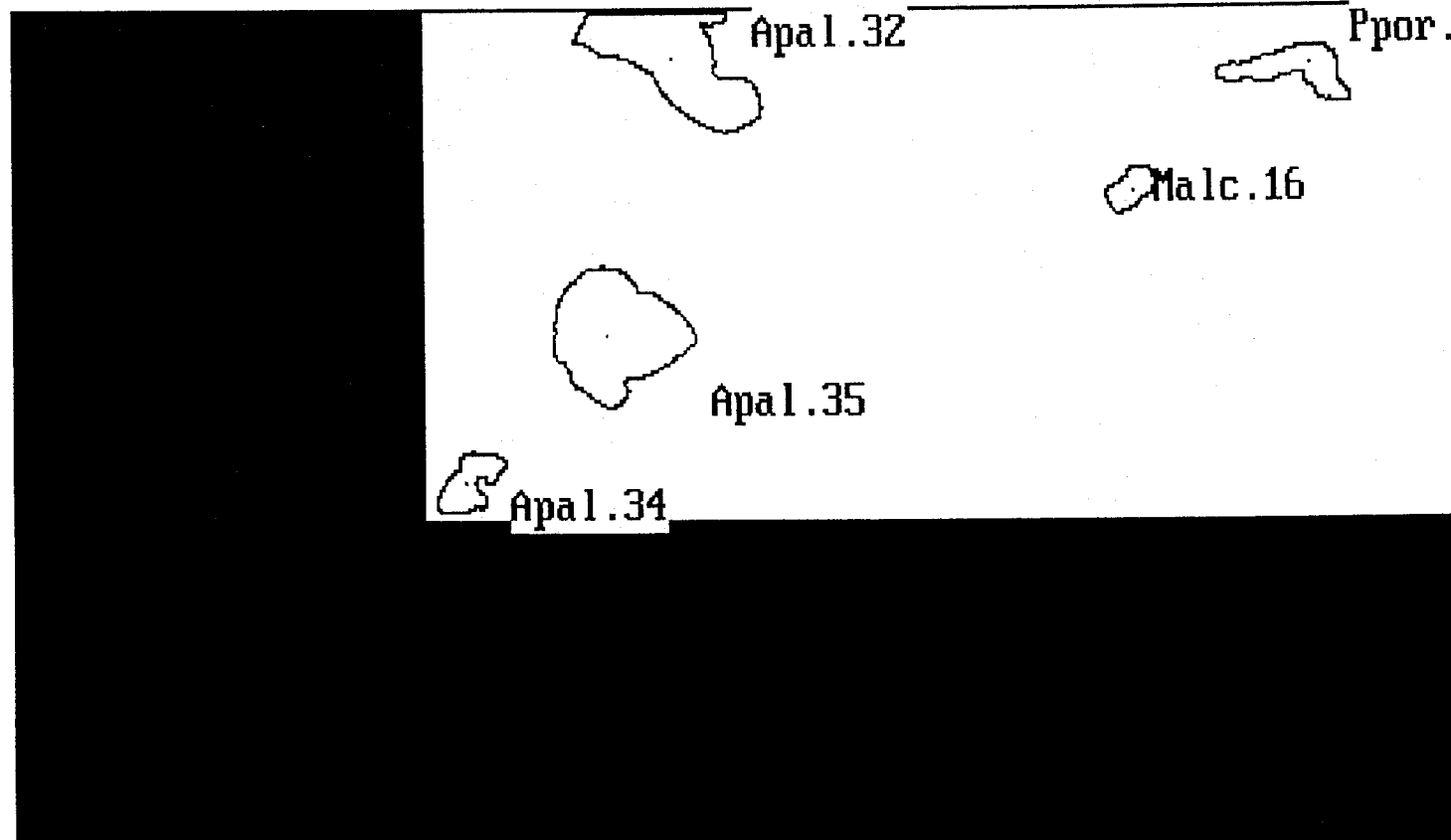
Biscayne Nati
Year 1990
Frame 14
Scale 1: 4
Res 0.03913cm
Disc c:\om\
bp02Fr14.Y90

TACHOMETER

Species 1
Colonies 1

Points 195
A 4.cm²
P 9.cm

More Photo Frames (Y/N):



Ppor.3 C.I.A.

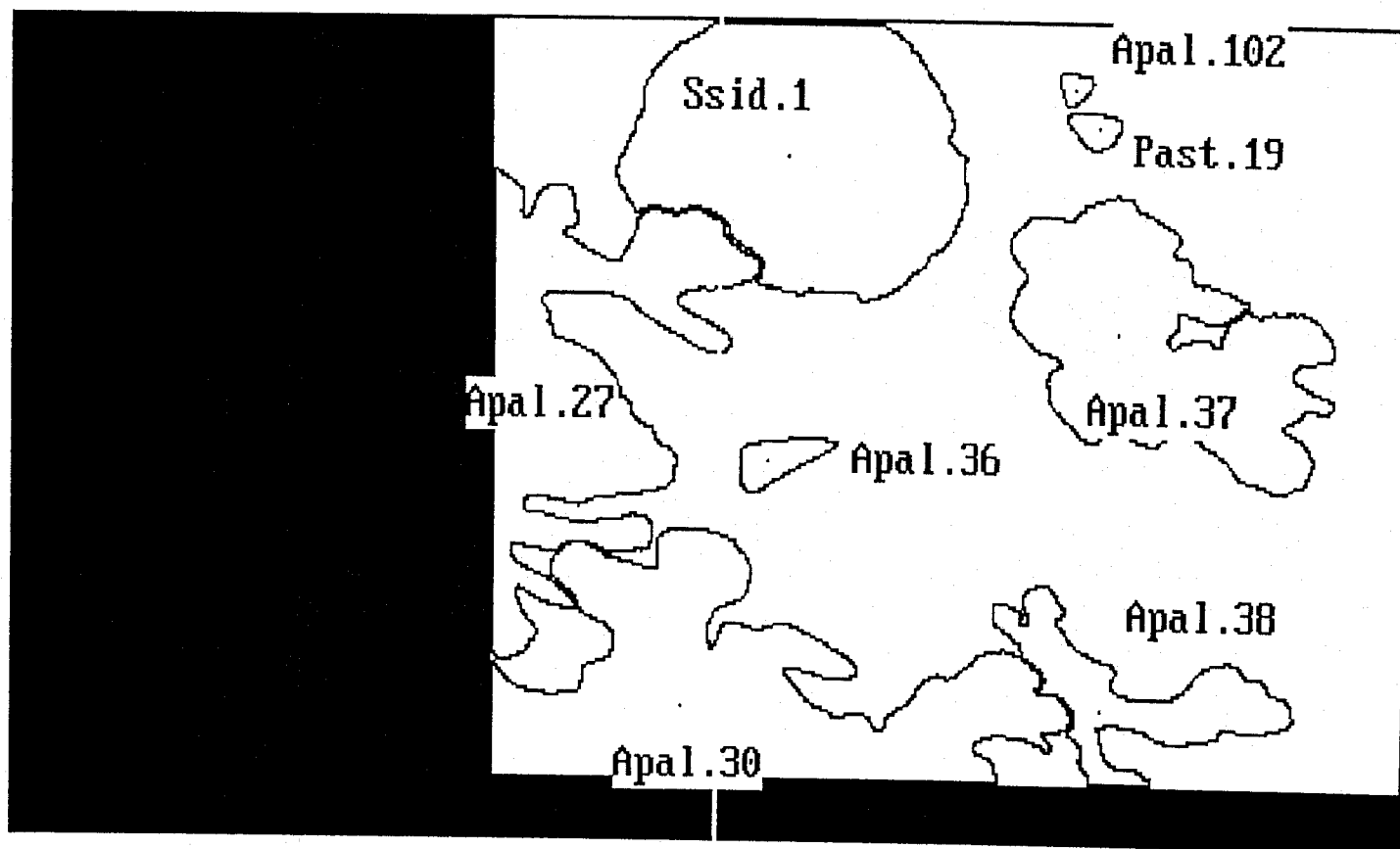
Biscayne Natl
Year__1989
Frame__18
Scale 1: 5
Res 0.05488cm
Disc c:\mp\
bp01Fr18.Y89

TACHOMETER

Species 3
Colonies 5

Points 519
A 89.cm²
P 38.cm

More Photo Frames (Y/N): ■



C.I.A.

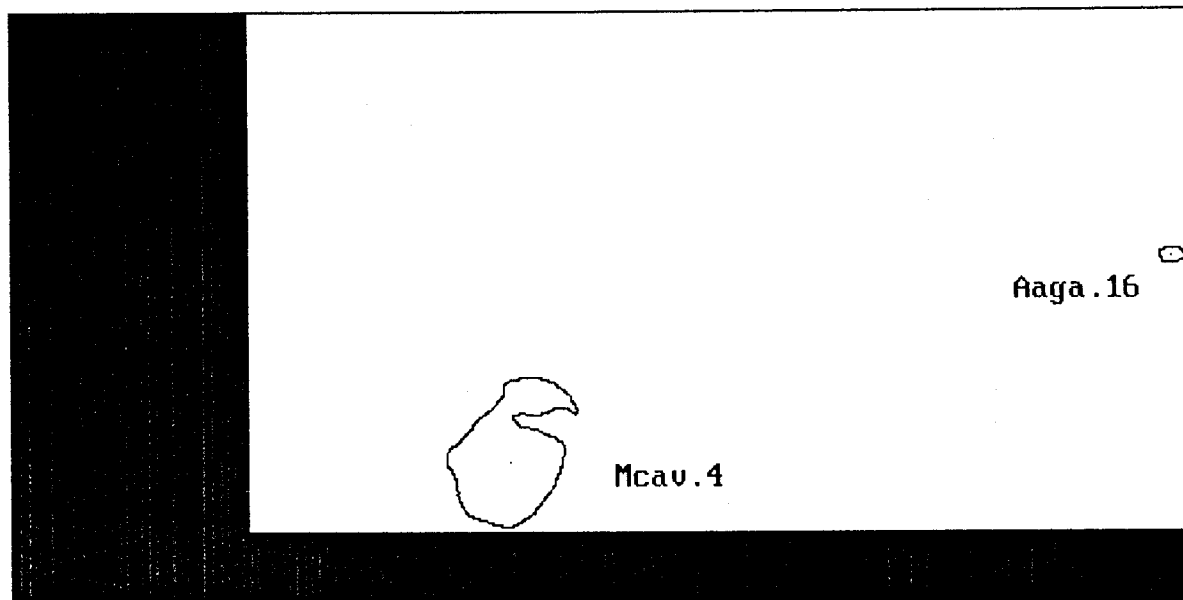
Biscayne Natl
Year__1989
Frame__19
Scale 1: 4
Res 0.03595cm
Disc c:\mp\
bp01Fr19.Y89

TACHOMETER

Species 3
Colonies 8

Points 318
A 16.cm²
P 19.cm

More Photo Frames (Y/N): ☐



C.I.A.

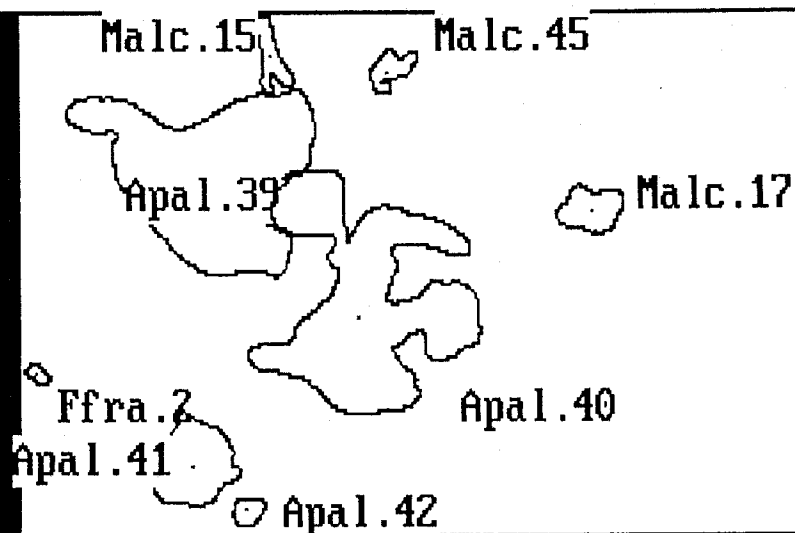
Biscayne Nati
Year__1990
Frame__13
Scale 1: 4
Res 0.03939cm
Disc c:\nom\
bp02Fr13.Y90

TACHOMETER

Species 2
Colonies 2

Points 129
A 2.cm²
P 6.cm

More Photo Frames (Y/N): ■



C.I.A.

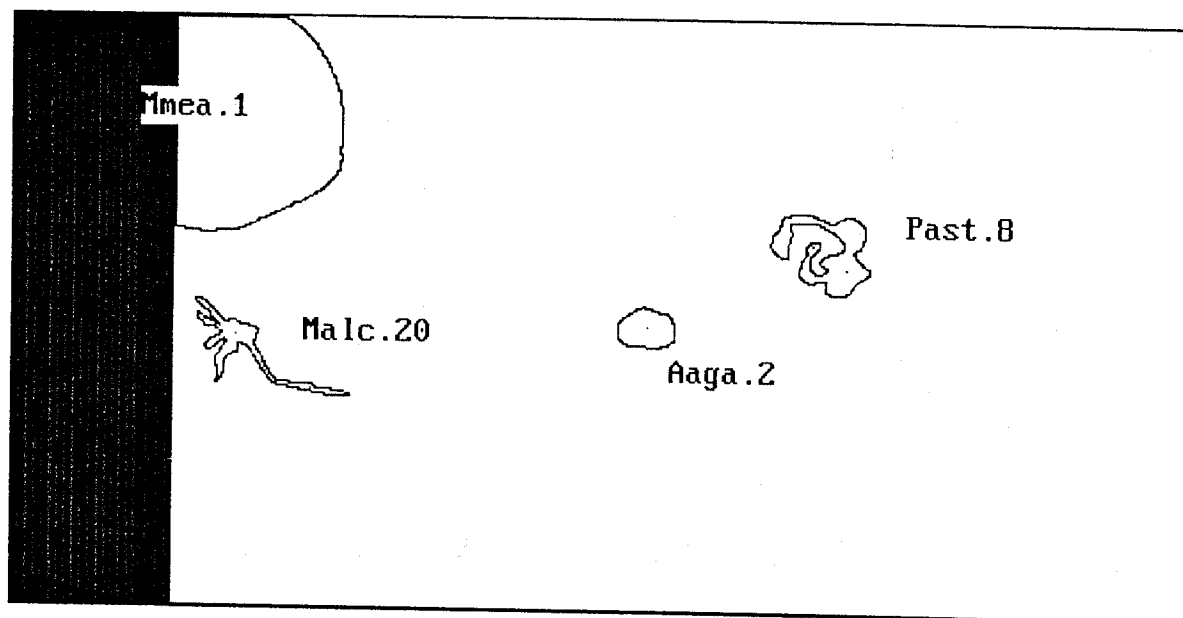
Biscayne Natl
 Year 1989
 Frame 20
 Scale 1: 5
 Res 0.05407cm
 Disc c:\mp\
 bp01Fr20.Y89

TACHOMETER

Species 3
 Colonies 8

Points 1733
 A 219.cm²
 P 112.cm

More Photo Frames (Y/N):



C.I.A.

Biscayne Nati
 Year__1990
 Frame__12
 Scale 1: 3
 Res 0.03416cm
 Disc c:\om\
 bp02Fr12.Y90

TACHIMETER

Species 4
 Colonies 4

Points 1031
 A 23.cm²
 P 44.cm

More Photo Frames (Y/N): ■

C.I.A.

Biscayne Natl

Dstr.1Year___1989

Frame___21

Scale 1: 5

Res 0.05281cm

Disc c:\mp\

bp01Fr21.Y89

TACHOMETER

Species 3

Colonies 7

Points 122

A 4.cm²

P 9.cm

Malc.18

Malc.46

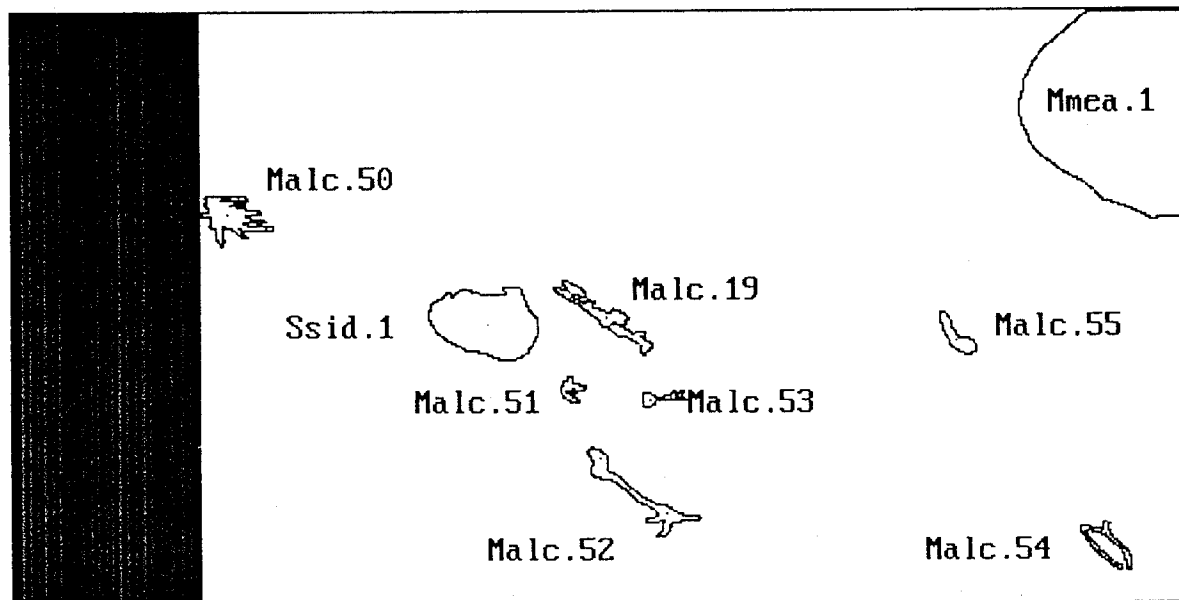
Past.20

Malc.19

Past.51

Malc.47

More Photo Frames (Y/N):



C.I.A.

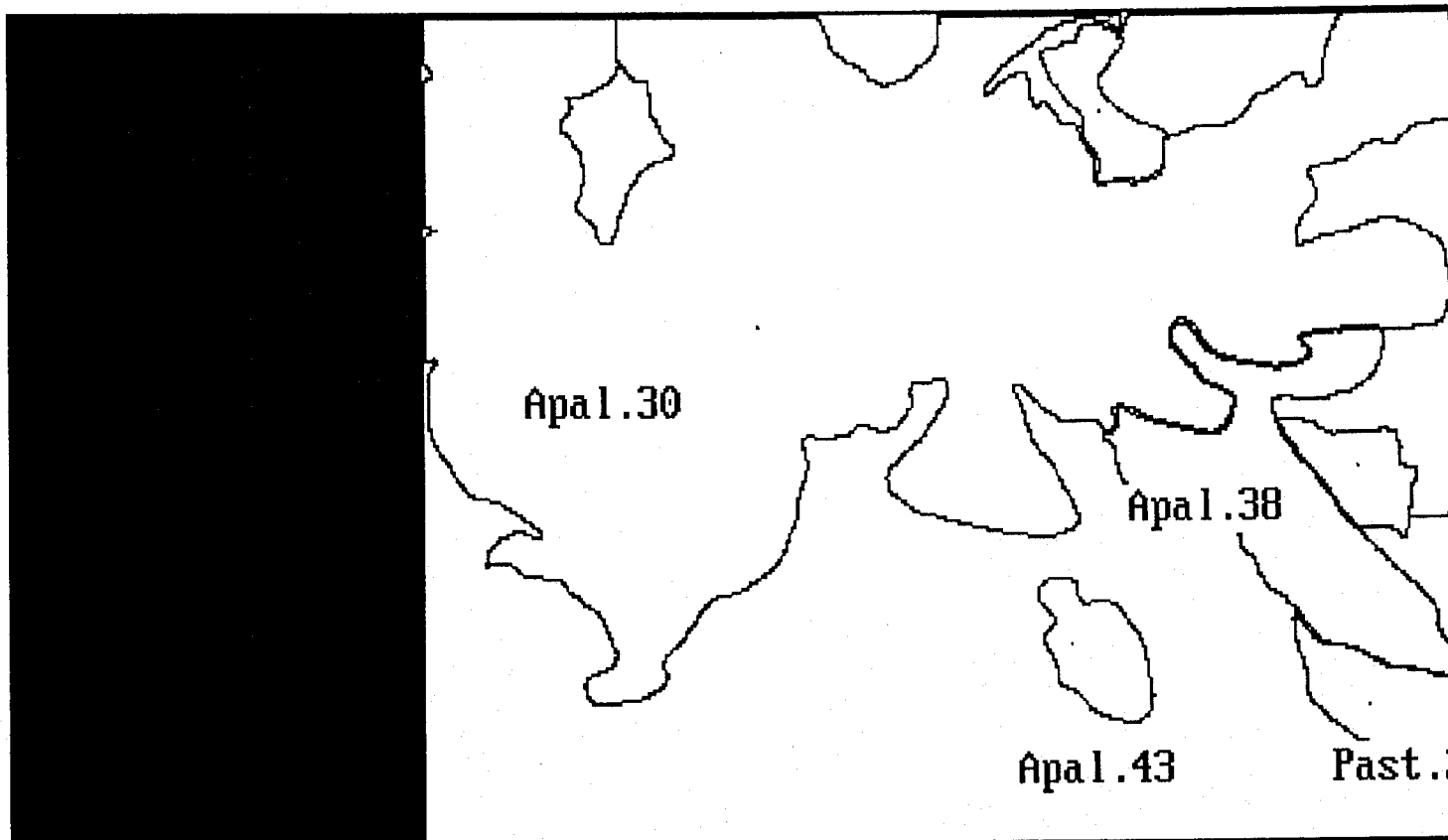
Biscayne Nati
 Year__1990
 Frame__11
 Scale 1: 3
 Res 0.03428cm
 Disc c:\om\
 bp02Fr11.Y90

TACHOMETER

Species 3
 Colonies 9

Points 251
 A 2.cm²
 P 10.cm

More Photo Frames (Y/N): ■



C.I.A.

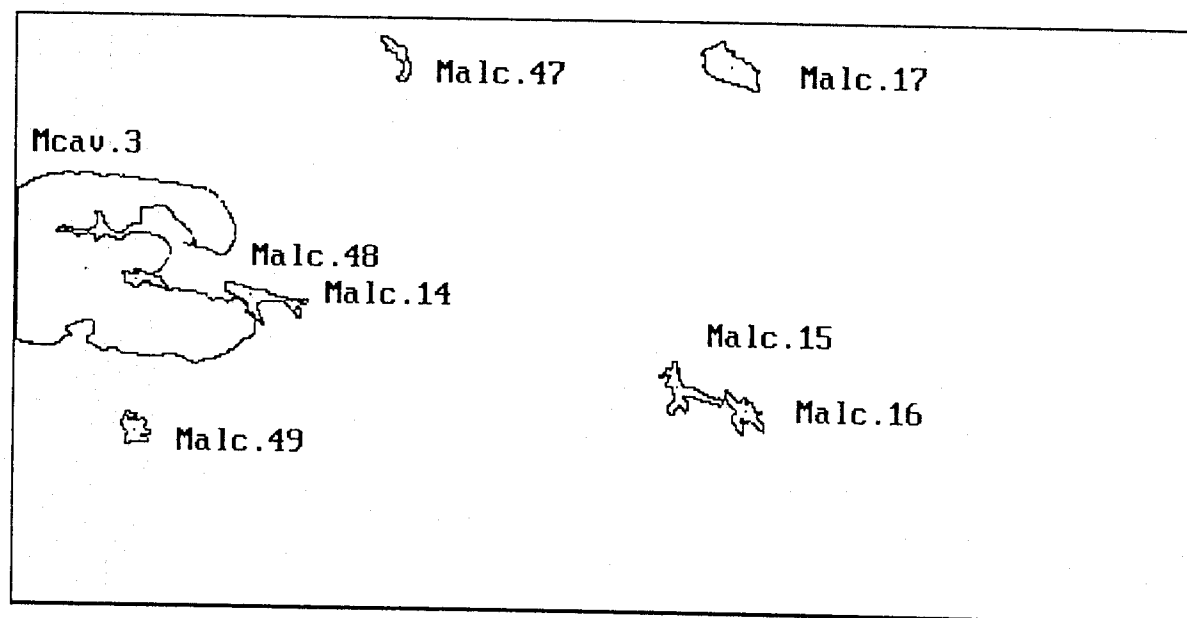
Biscayne Natl
Year__1989
Frame__ 22
Scale 1: 4
Res 0.03365cm
Disc c:\mp\
bp01Fr22.Y89

TACHOMETER

Species 2
Colonies 4

Points 3535
A 247.cm²
P 275.cm

More Photo Frames (Y/N): ■



C.I.A.

Biscayne Nati
Year__1990
Frame__10
Scale 1: 3
Res 0.03424cm
Disc c:\om\
bp02Fr10.Y90

TACHOMETER

Species 2
Colonies 8

Points 380
A 4.cm²
P 15.cm

More Photo Frames (Y/N): ☐

C.I.A.

Biscayne Natl
Year 1989
Frame 23
Scale 1: 4
Res 0.03338cm
Disc c:\mp\
bp01Fr23.Y89

TACHOMETER

Malc.20

Species 4
Colonies 4

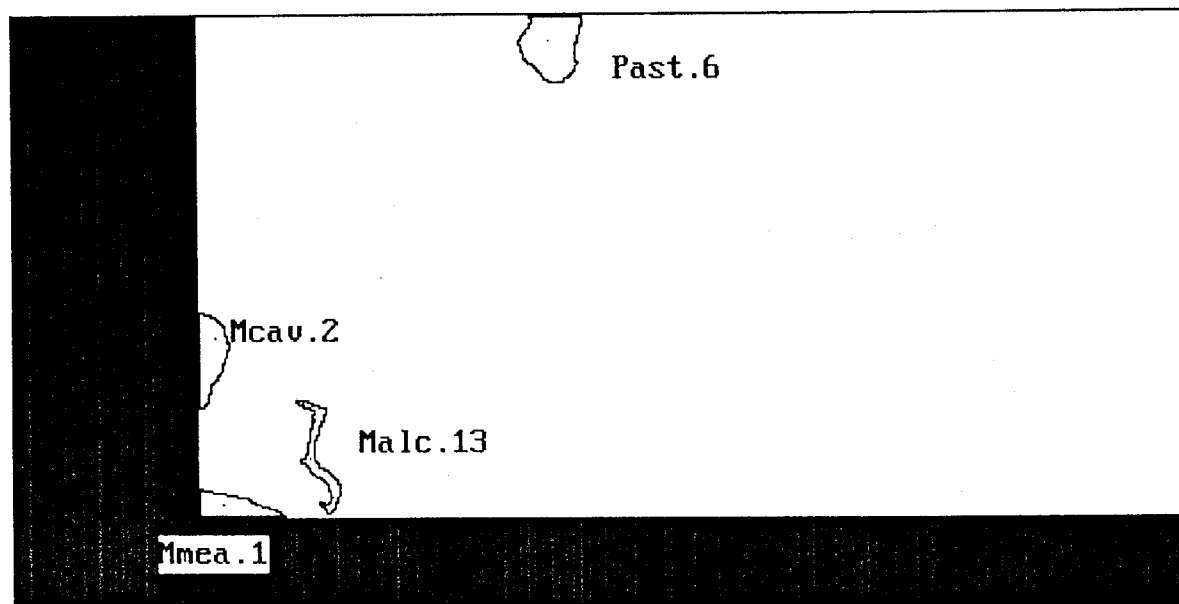
Points 94
A 1.cm²
P 5.cm

Ffra.3

Apal.44

Past.21

More Photo Frames (Y/N):



C.I.A.

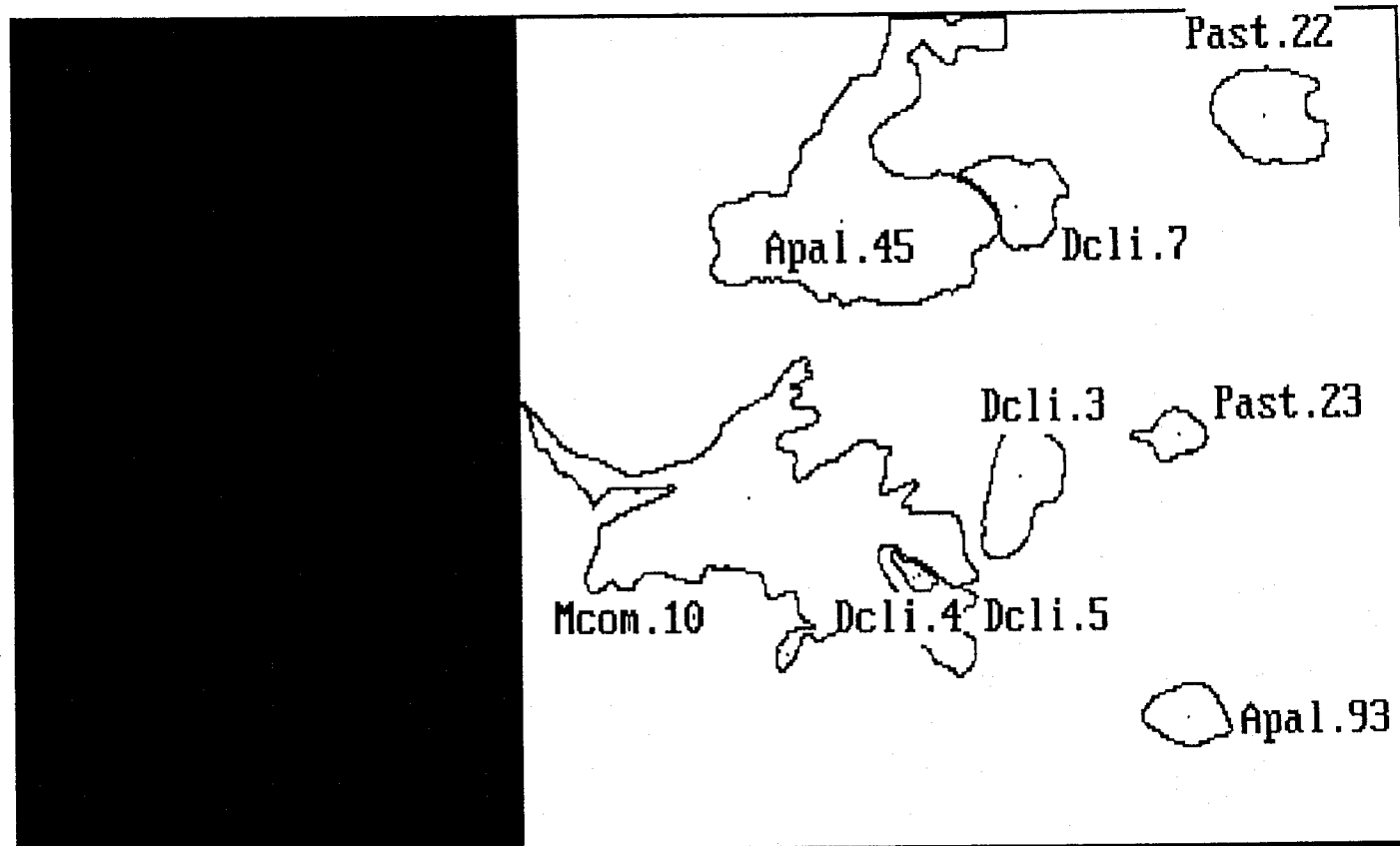
Biscayne Nati
Year__1990
Frame__ 9
Scale 1: 4
Res 0.04041cm
Disc c:\om\
bp02Fr09.Y90

TACHOMETER

Species 4
Colonies 4

Points 620
A 9.cm²
P 29.cm

More Photo Frames (Y/N): ☐



C.I.A.

Biscayne Natl

Year 1989

Frame 24

Scale 1: 4

Res 0.03355cm

Disc c:\mp\

bp01Fr24.Y89

TACHOMETER

Species 4

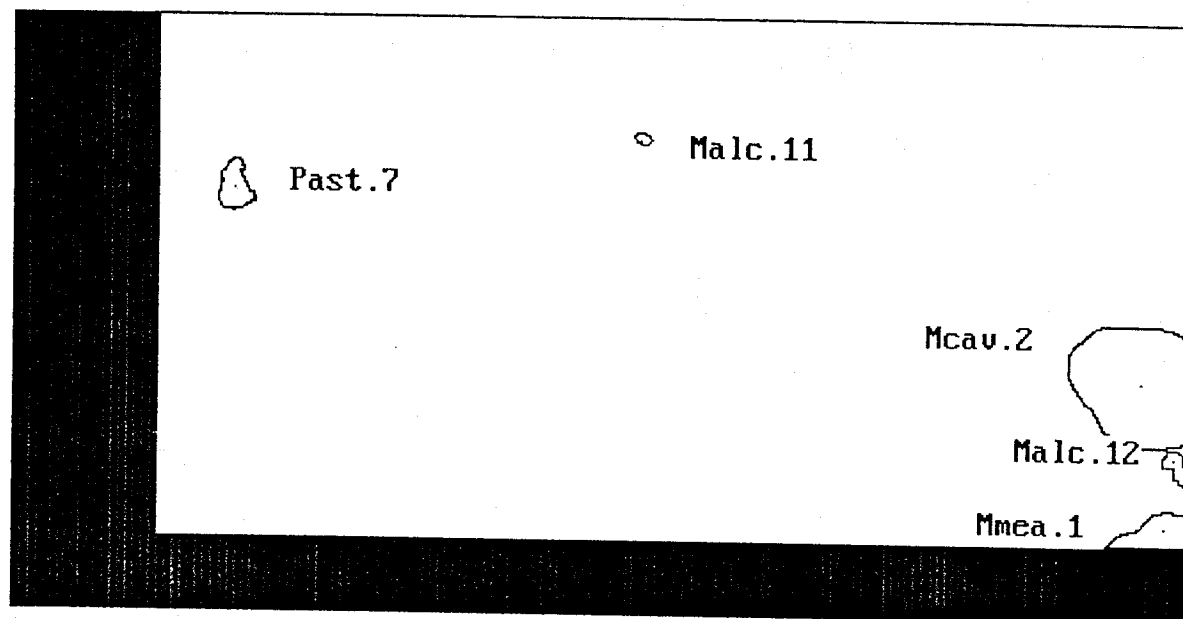
Colonies 9

Points 189

A 4.cm²

P 10.cm

More Photo Frames (Y/N):



C.I.A.

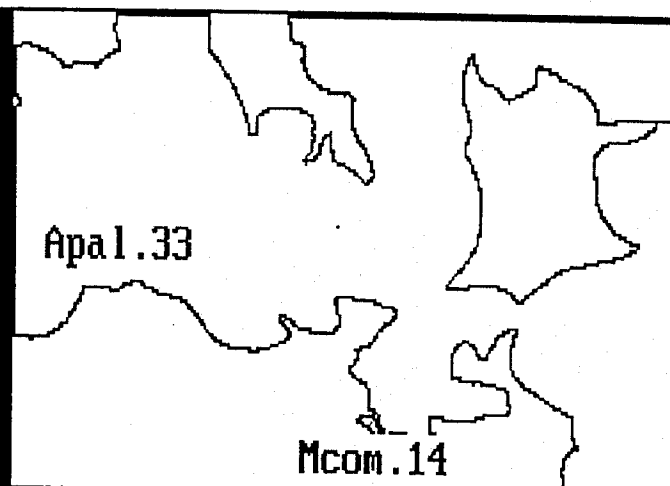
Biscayne Nati
Year__1990
Frame__8
Scale 1: 4
Res 0.03881cm
Disc c:\nom\
bp02Fr08.Y90

TOPOGRAPHIC

Species 4
Colonies 5

Points 299
A 15.cm²
P 18.cm

More Photo Frames (Y/N): ☐



C.I.A.

Biscayne Natl

Year__1989

Frame__25

Scale 1: 6

Res 0.05905cm

Disc c:\mp\

bp01Fr25.Y89

TACHOMETER

Species 2

Colonies 2

Points 168

A 5.cm²

P 12.cm

More Photo Frames (Y/N): ☐

 Malc.46

C.I.A.

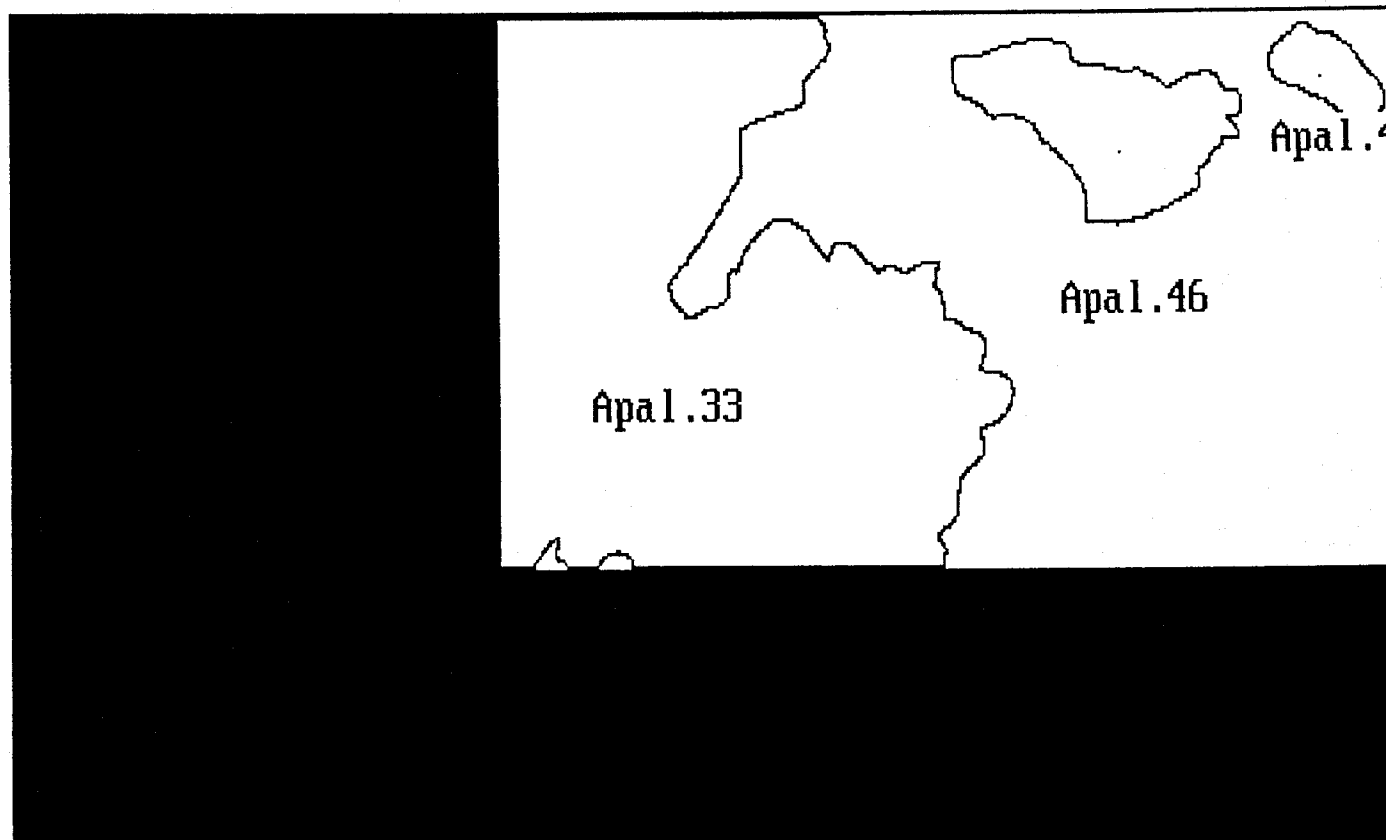
Biscayne Nati
Year__1990
Frame__ 7
Scale 1: 3
Res 0.04166cm
Disc c:\om\
bp02Fr07.Y90

TO HOMETER

Species 1
Colonies 1

Points 227
A 4.cm²
P 10.cm

More Photo Frames (Y/N): ☒



C.I.A.

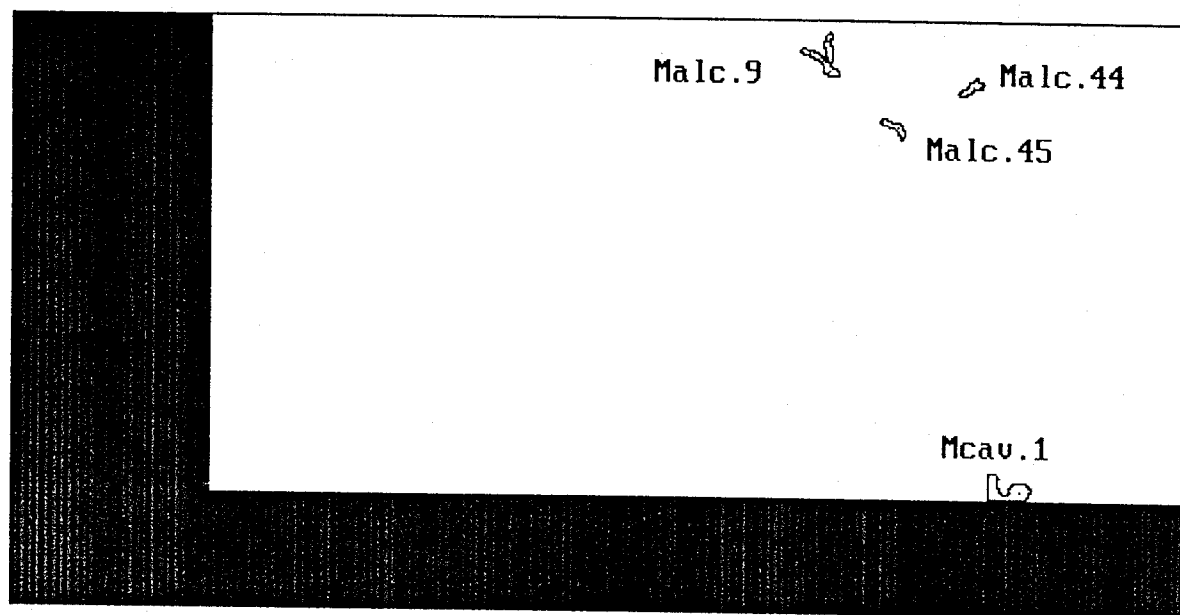
Apal.47 Biscayne Natl
Year 1989
Frame 26
Scale 1: 5
Res 0.05047cm
Disc c:\mp\
bp01Fr26.Y89

TACHOMETER

Species 1
Colonies 3

Points 461
A 49.cm²
P 29.cm

More Photo Frames (Y/N):



C.I.A.

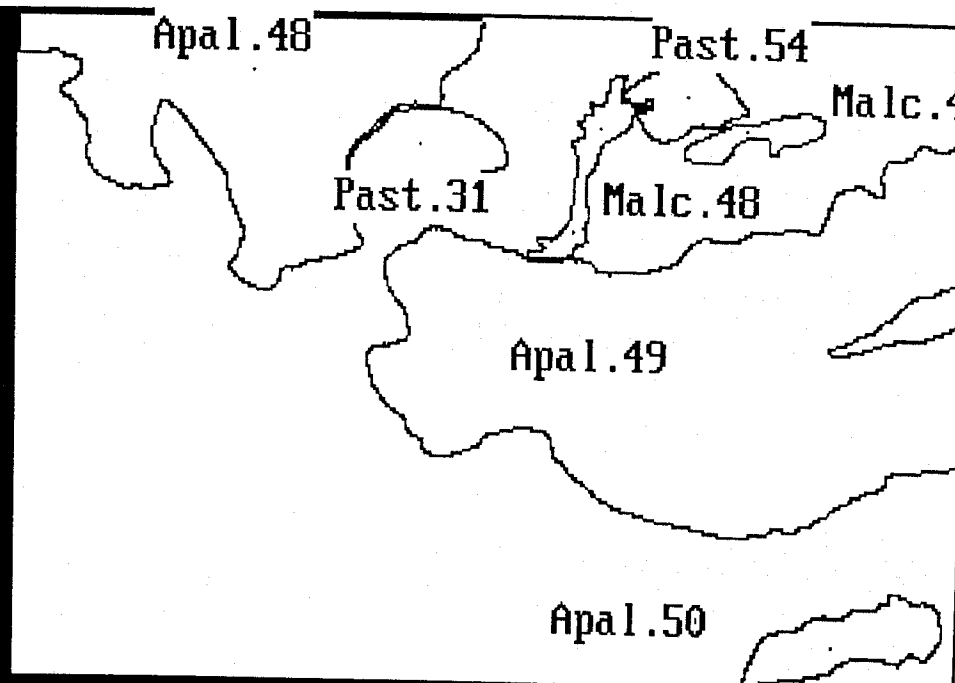
Biscayne Nati
Year__1990
Frame__ 6
Scale 1: 4
Res 0.04255cm
Disc c:\om\
bp02Fr06.Y90

TACHOMETER

Species 2
Colonies 4

Points 290
A 5.cm²
P 14.cm

More Photo Frames (Y/N): ■



C.I.A.

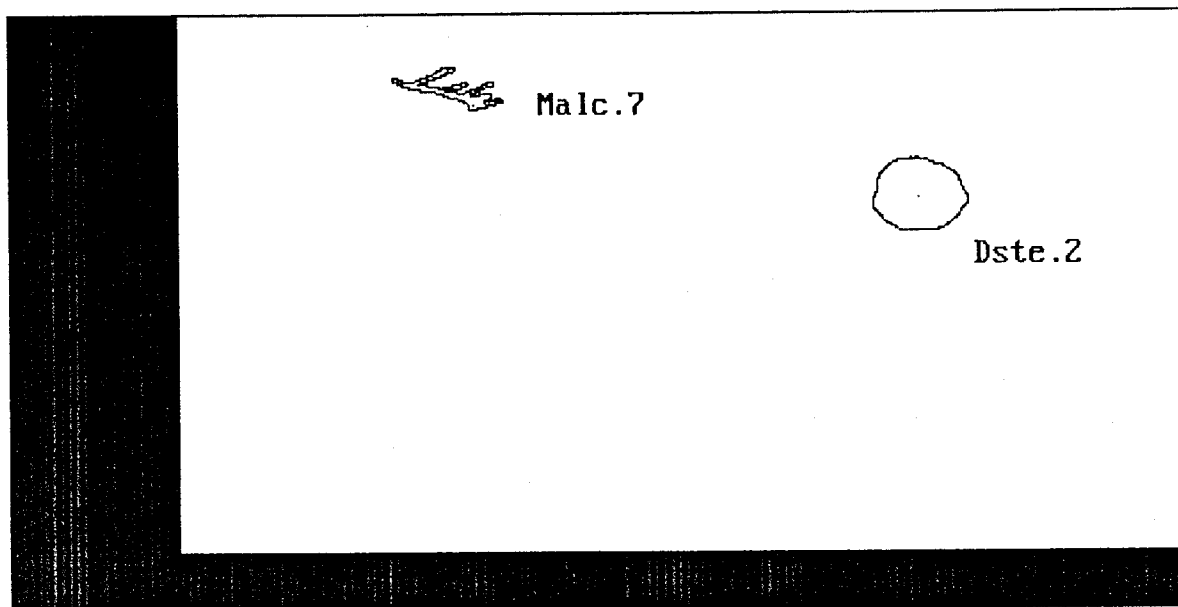
Biscayne Natl
Year 1989
Frame 27
Scale 1: 4
Res 0.04188cm
Disc c:\mp\
bp01Fr27.1989

TACHOMETER

Species 3
Colonies 7

Points 465
A 52.cm²
P 30.cm

More Photo Frames (Y/N):



C.I.A.

Biscayne Nati
Year__1990
Frame__ 5
Scale 1: 4
Res 0.03812cm
Disc c:\om\
bp02Fr05.Y90

TACHOMETER

Species 2
Colonies 2

Points 481
A 37.cm²
P 23.cm

More Photo Frames (Y/N): ■

Apal.33

C.I.A.

Mcom.11Biscayne Natl

Year__1989

Frame__28

Scale 1: 6

Res 0.05429cm

Disc c:\mp\

bp01Fr28.Y89

Past.24

Malc.21

Malc.22

TACHOMETER

Species 4

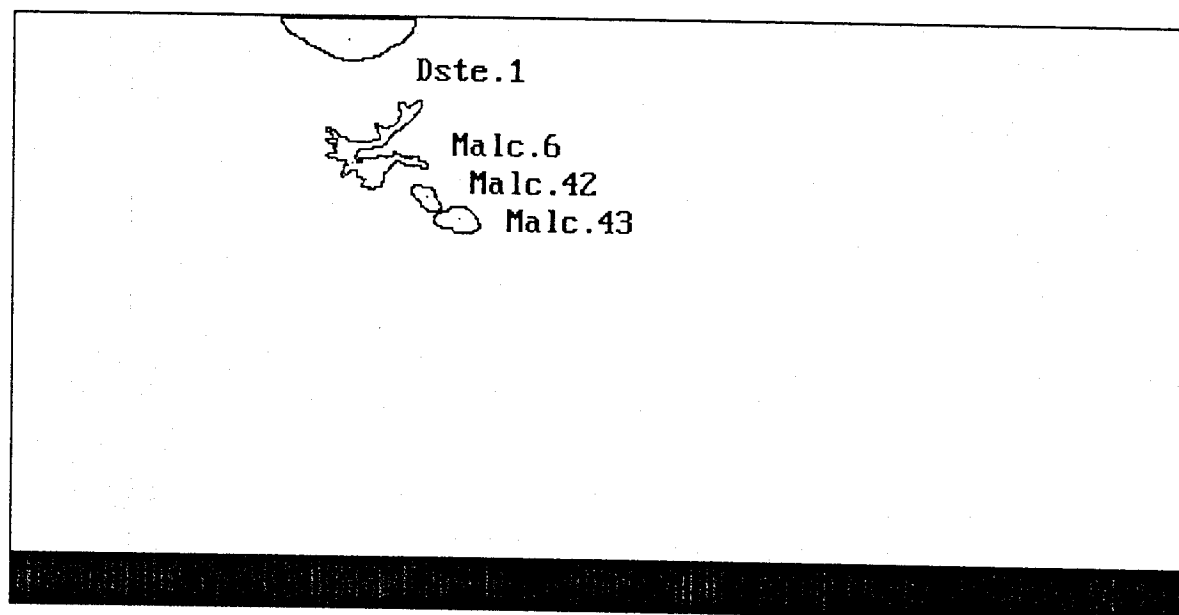
Colonies 5

Points 267

A 11.cm²

P 21.cm

More Photo Frames (Y/N):



C.I.A.

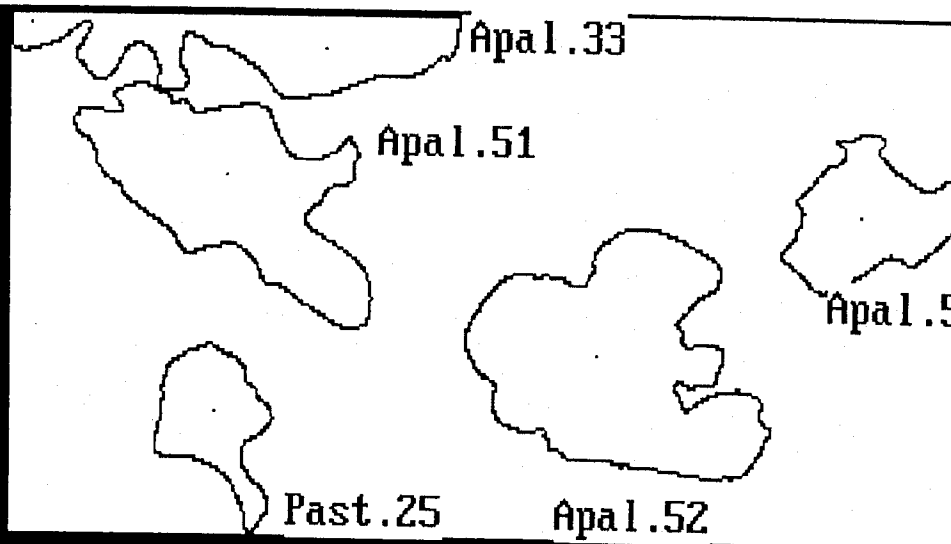
Biscayne Nati
Year__1990
Frame__4
Scale 1: 3
Res 0.03771cm
Disc c:\om\
bp02Fr04.Y90

TACHOMETER

Species 2
Colonies 4

Points 207
A 5.cm²
P 9.cm

More Photo Frames (Y/N): ■



C.I.A.

Biscayne Natl

Year 1989

Frame 29

Scale 1: 5

Res 0.05363cm

Disc c:\mp\

bp01Fr29.Y89

TACHOMETER

Species 2

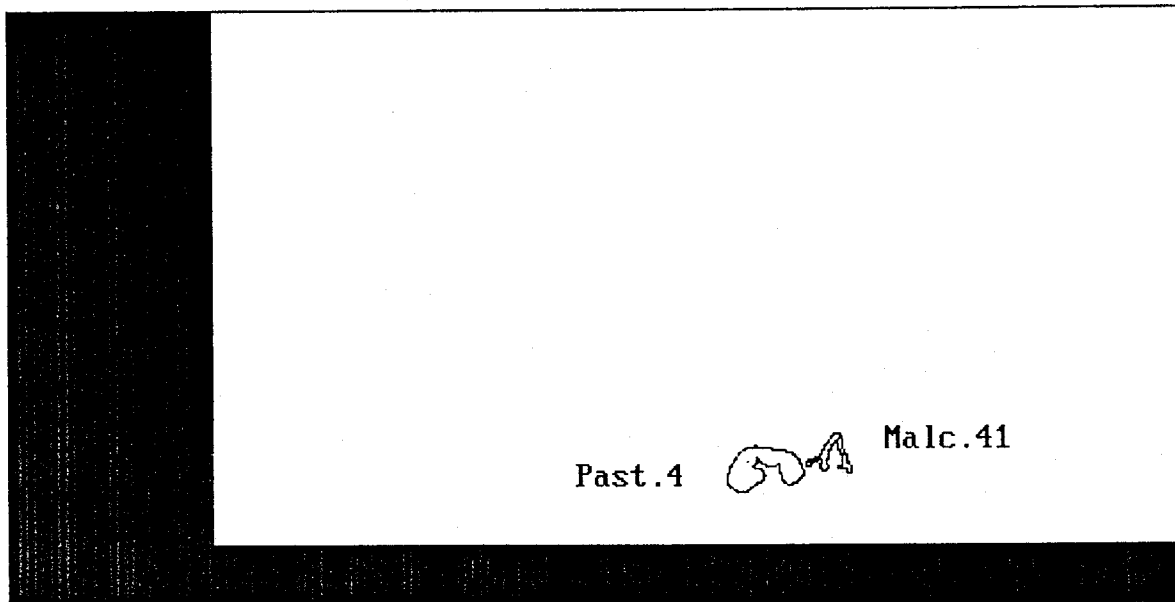
Colonies 5

Points 722

A 125.cm²

P 53.cm

More Photo Frames (Y/N):



Past.4  Malc.41

C.I.A.

Biscayne Nati
Year__1990
Frame__3
Scale 1: 4
Res 0.03821cm
Disc c:\om\
bp02Fr03.Y90

TACHOMETER

Species 2
Colonies 2

Points 437
A 4.cm²
P 19.cm

More Photo Frames (Y/N): ■

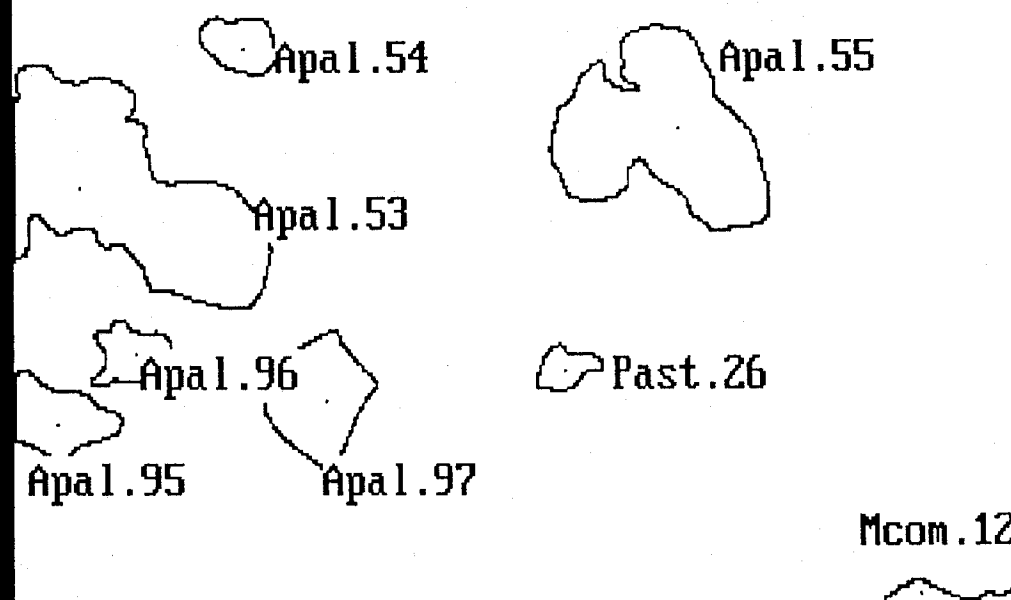
C.I.A.

Biscayne Natl
Year__1989
Frame__30
Scale 1: 4
Res 0.04465cm
Disc c:\mp\
bp01Fr30.Y89

TACHOMETER

Species 3
Colonies 8

Points 362
A 19.cm²
P 20.cm



More Photo Frames (Y/N): ■

 Dstr.1

Past.1D Past.1C
Past.2B Past.1B
Past.2A Past.1A
Malc.4
Malc.39
Malc.3

C.I.A.

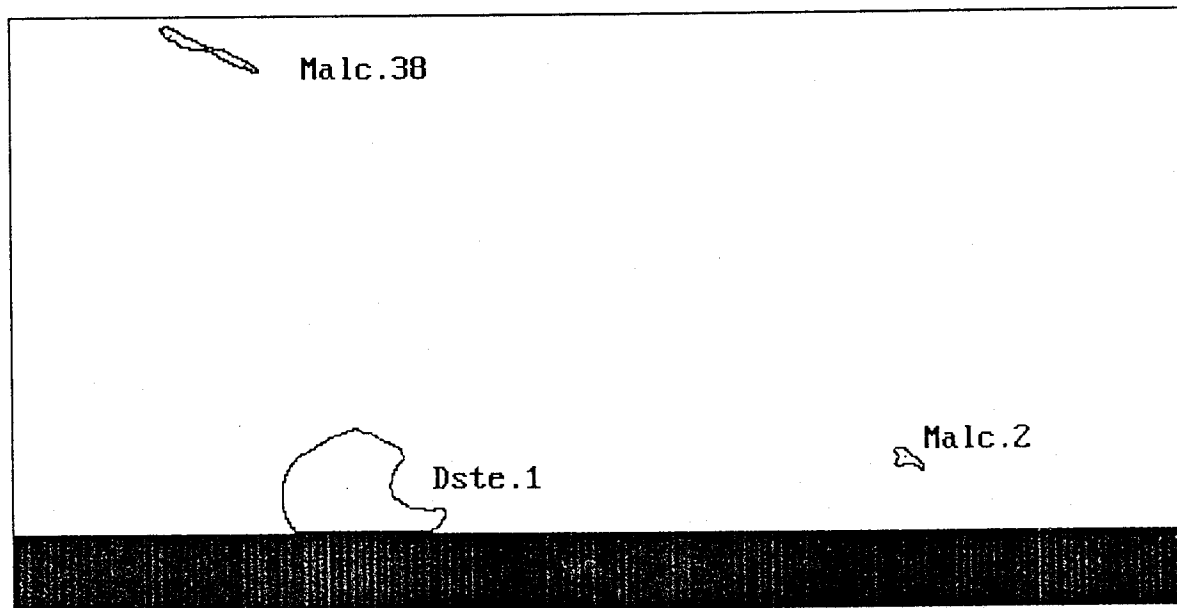
Biscayne Nati
Year__1990
Frame__ 2
Scale 1: 4
Res 0.03962cm
Disc c:\om\
bp02Fr02.Y90

TACHOMETER

Species 3
Colonies 10

Points 230
A 9.cm²
P 12.cm

More Photo Frames (Y/N): ☐



C.I.A.

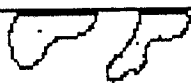
Biscayne Nati
Year__1990
Frame__ 1
Scale 1: 3
Res 0.03939cm
Disc c:\om\
bp02Fr01.Y90

TACHIMETER

Species 2
Colonies 3

Points 181
A 2.cm²
P 8.cm

More Photo Frames (Y/N): ☐

Malc.21  Malc.22

C.I.A.

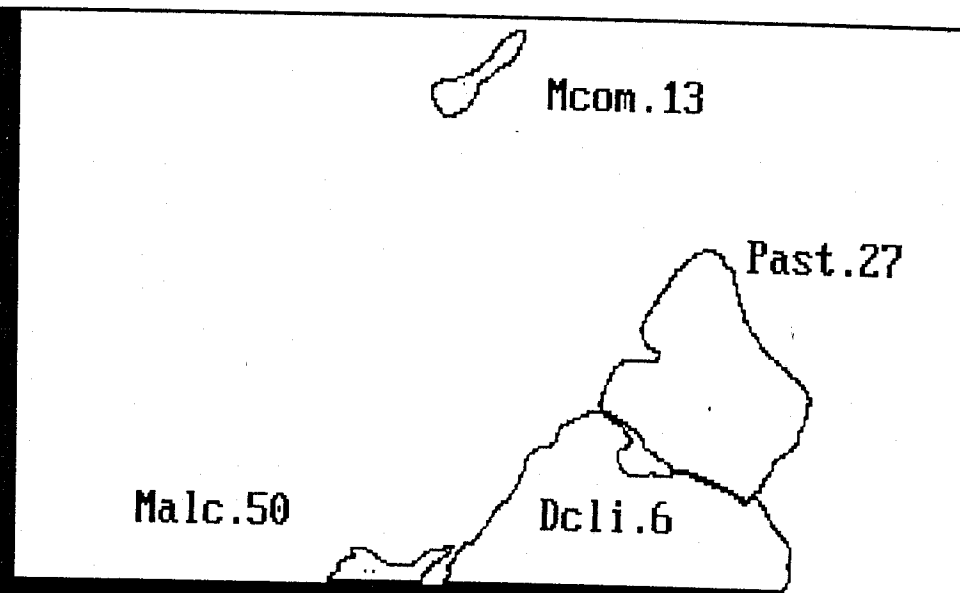
Biscayne Natl
Year___1989
Frame___31
Scale 1: 6
Res 0.05306cm
Disc c:\mp\
bp01Fr31.Y89

TACHOMETER

Species 1
Colonies 2

Points 318
A 24.cm²
P 26.cm

More Photo Frames (Y/N): ☐



C.I.A.

Biscayne Natl
Year___1989
Frame___32
Scale 1: 5
Res 0.04947cm
Disc c:\mp\
bp01Fr32.Y89

TACHOMETER

Species 4
Colonies 4

Points 370
A 16.cm²
P 23.cm

More Photo Frames (Y/N): ■

C. I. N.

Biscayne N.P.

Year 1989

Frame 36

Scale 1: 3

Res 0.03382cm

Disc c:\ncsz\

bp02fr36.y89

TACHOMETER

Species 3
Colonies 4

Points 457
A 44.cm²
P 27.cm

Mem. 1

Agua. 12

Agua. 13

Past. 16

More Photo Frames (Y/N):

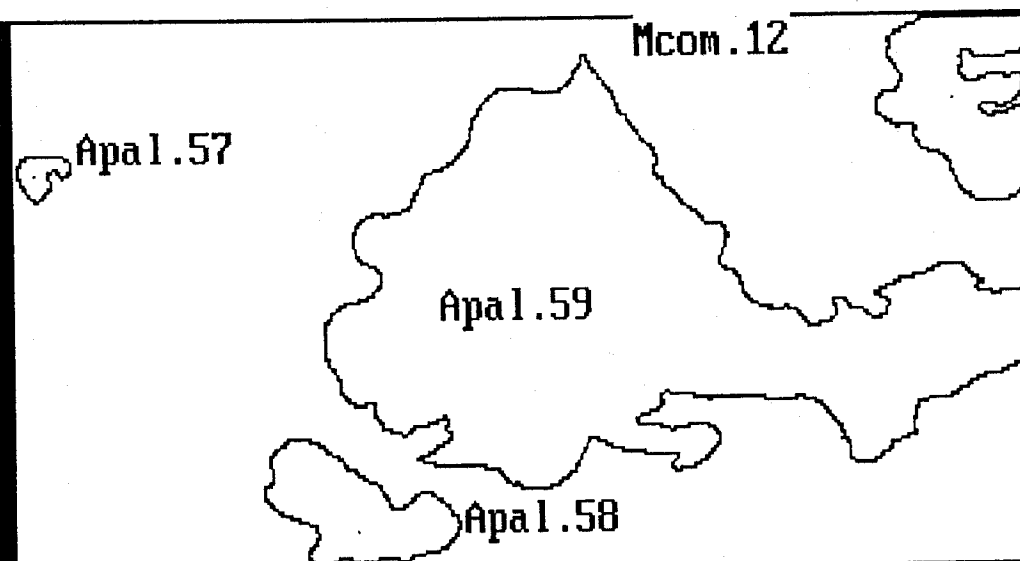
C.I.A.

Biscayne Natl
Year__1989
Frame__33
Scale 1: 5
Res 0.05115cm
Disc c:\mp\
bp01Fr33.Y89

TACHOMETER

Species 2
Colonies 4

Points 263
A 10.cm²
P 15.cm



More Photo Frames (Y/N): ☐

C.I.A.

Biscayne N.P.
Year 1989
Frame 35
Scale 1: 4
Res 0.03368cm
Disc c:\ncs2\
bp02Fr35.Y89

TACHOMETER

Species 2
Colonies 2

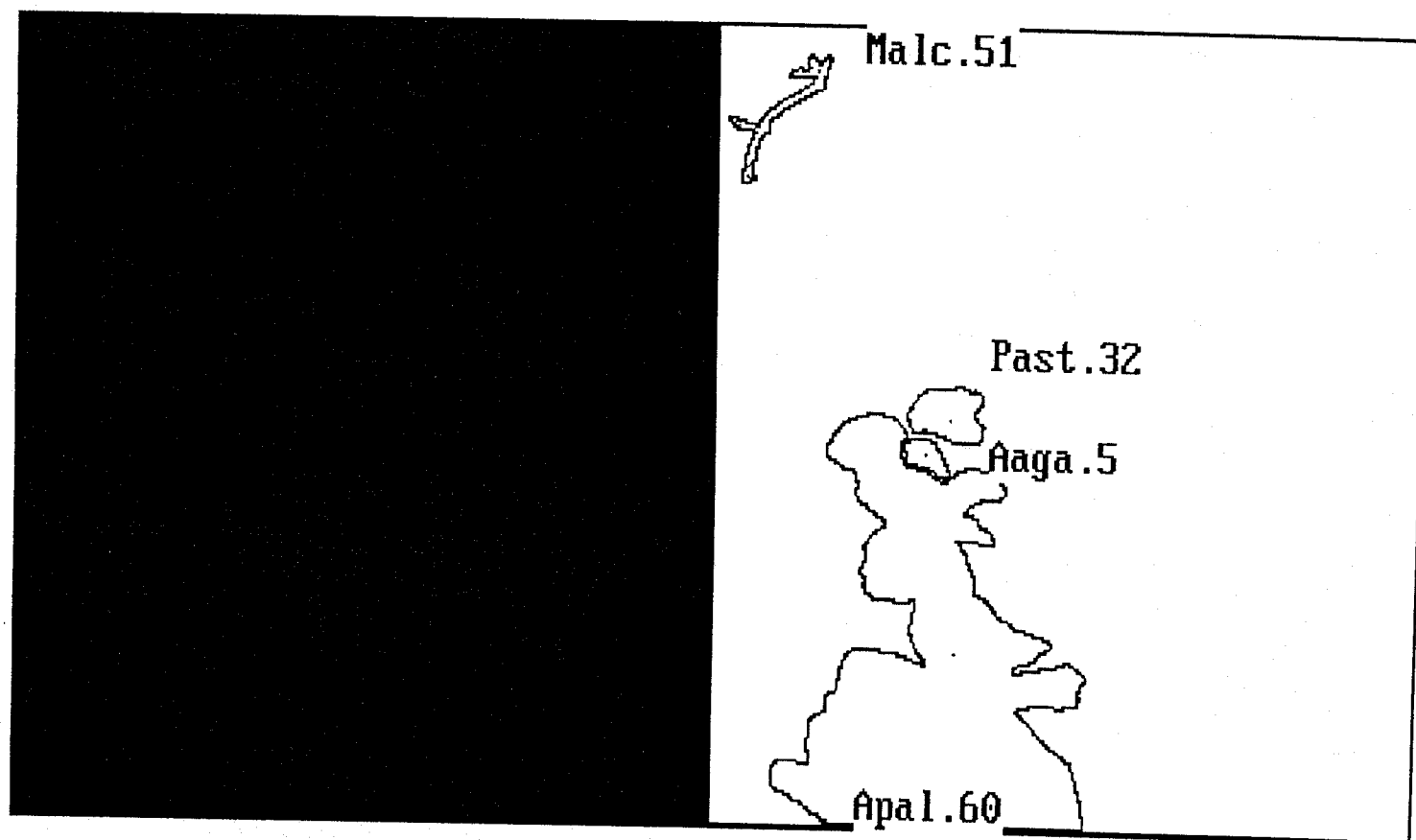
Points 178
A 5.cm²
P 10.cm



Mcom.1

3 Ppor.1

More Photo Frames (Y/N):



Malc.51

Past.32

Aaga.5

Apa1.60

C.I.A.

Biscayne Natl

Year 1989

Frame 34

Scale 1: 5

Res 0.03338cm

Disc c:\mp\

bp01Fr34.Y89

TACHOMETER

Species 4

Colonies 4

Points 738

A 13.cm²

P 42.cm

More Photo Frames (Y/N):

C.I.A.

Biscayne N.P.
Year 1989
Frame 34
Scale 1: 4
Res 0.03374cm
Disc c:\cs2\
bp02Fr34.Y89

TACHOMETER

Species 1
Colonies 1

Points 87
A 1.cm²
P 4.cm

o Malc.65

More Photo Frames (Y/N):

C.I.A.

Biscayne Natl

Malc.25 Year 1989

Frame 35

Scale 1: 4

Res 0.03358cm

Disc c:\mp\

bp01Fr35.Y89

TACHOMETER

Species 4

Colonies 6

Points 325

A 11.cm²

P 19.cm

Malc.23

Dcli.6

Malc.24

Past.29

Ffra.4

More Photo Frames (Y/N):

C.I.A.

Biscayne N.P.
Year 1989
Frame 33
Scale 1: 3
Res 0.03846cm
Disc c:\cs2\
bp02Fr33.Y89

TACHOMETER

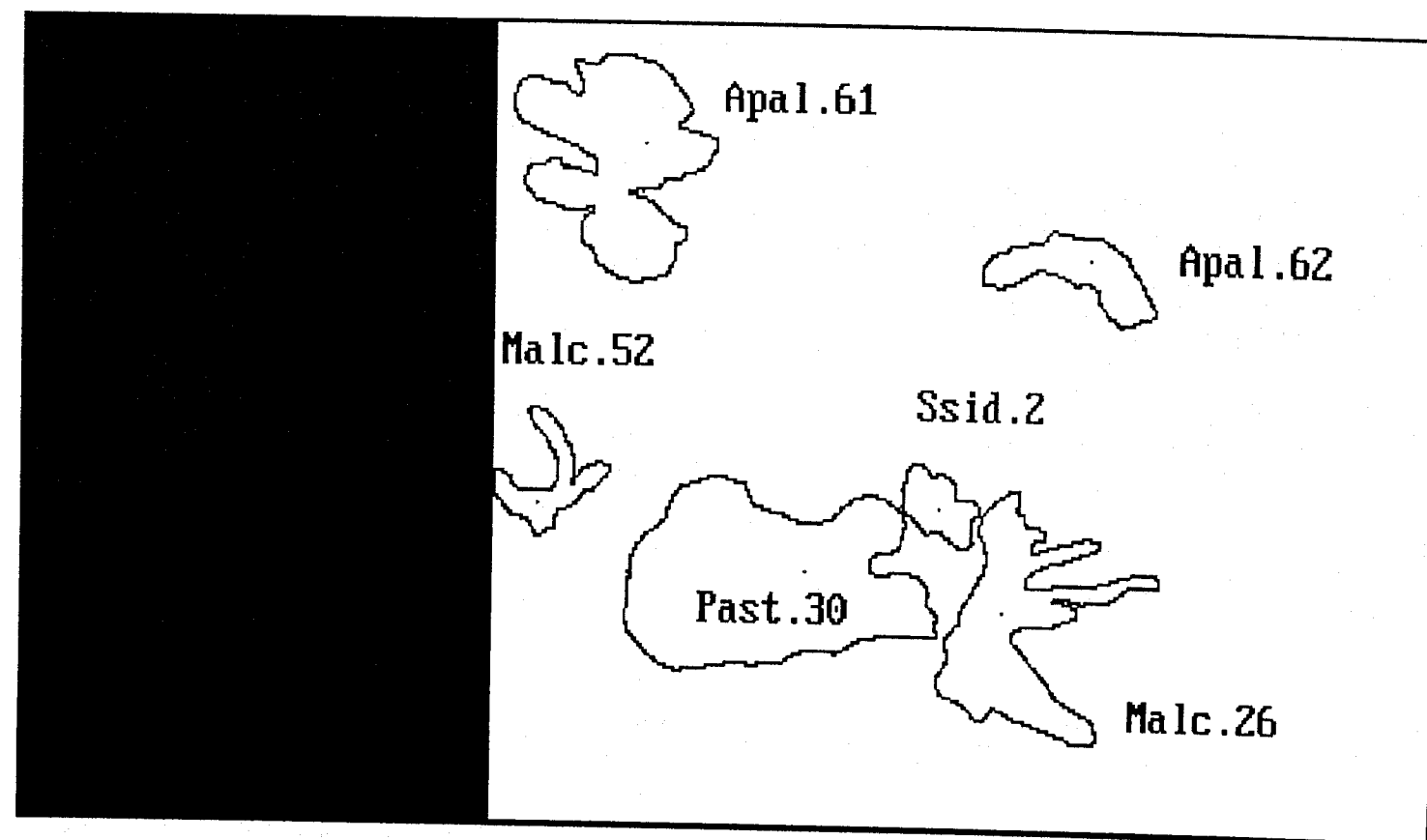
Species 2
Colonies 2

Points 101
A 2.cm²
P 5.cm

o Aga.11

Mamm.1

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
Year__1989
Frame__ 36
Scale 1: 4
Res 0.03364cm
Disc c:\mp\
bp01Fr36.Y89

TACHOMETER

Species 4
Colonies 6

Points 677
A 24.cm²
P 36.cm

More Photo Frames (Y/N): ☐

C.I.A.

Biscayne N.P.

Year 1989

Frame 32

Scale 1: 4

Res 0.04772cm

Disc c:\cs2\

bp02Fr32.Y89

TACHOMETER

Species 2

Colonies 2

Points 118

A 4.cm²

P 8.cm

Page.10

Past.15

More Photo Frames (Y/N):

Malc.36

SSid.3

C.I.A.

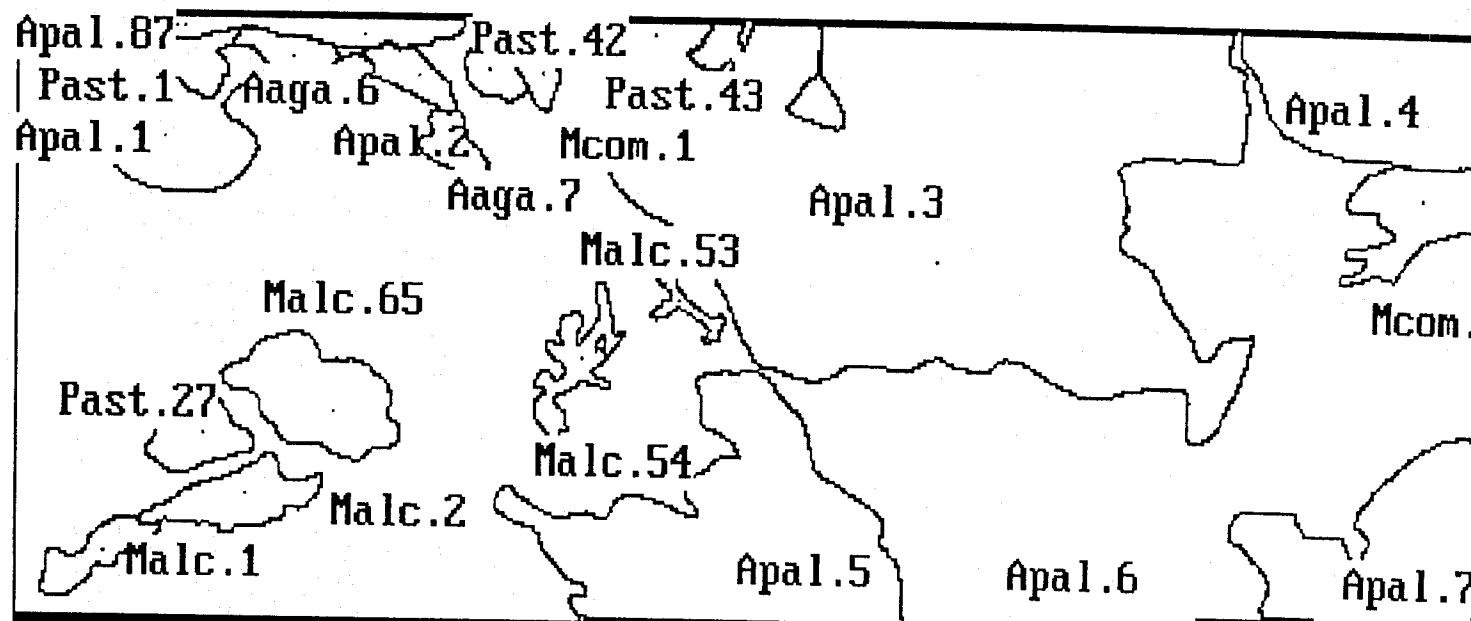
Biscayne N.P.
Year 1989
Frame 31
Scale 1: 5
Res 0.04540cm
Disc c:\cs2\bp02Fr31.y89

TACHOMETER

Species 2
Colonies 2

Points 154
A 4.cm²
P 8.cm

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl

Year 1990

Frame 1

Mcom.2 Scale 1: 4

Res 0.04733cm

Disc c:\mp\

bp01Fr01.Y90

TACHOMETER

Species 5

Colonies 21

Points 405

A 17.cm²

P 23.cm

More Photo Frames (Y/N):

C. P.

Biscayne N.F.
Year 1989
Frame 30
Scale 1: 4
Res 0.04402cm
Disc c:Nom2N
bp02Fr30.YB9

TACHYMETER

Species 2
Colonies 6

Points 223
A 3.cm²
P 10.cm

Agg. 5

Agg. 9

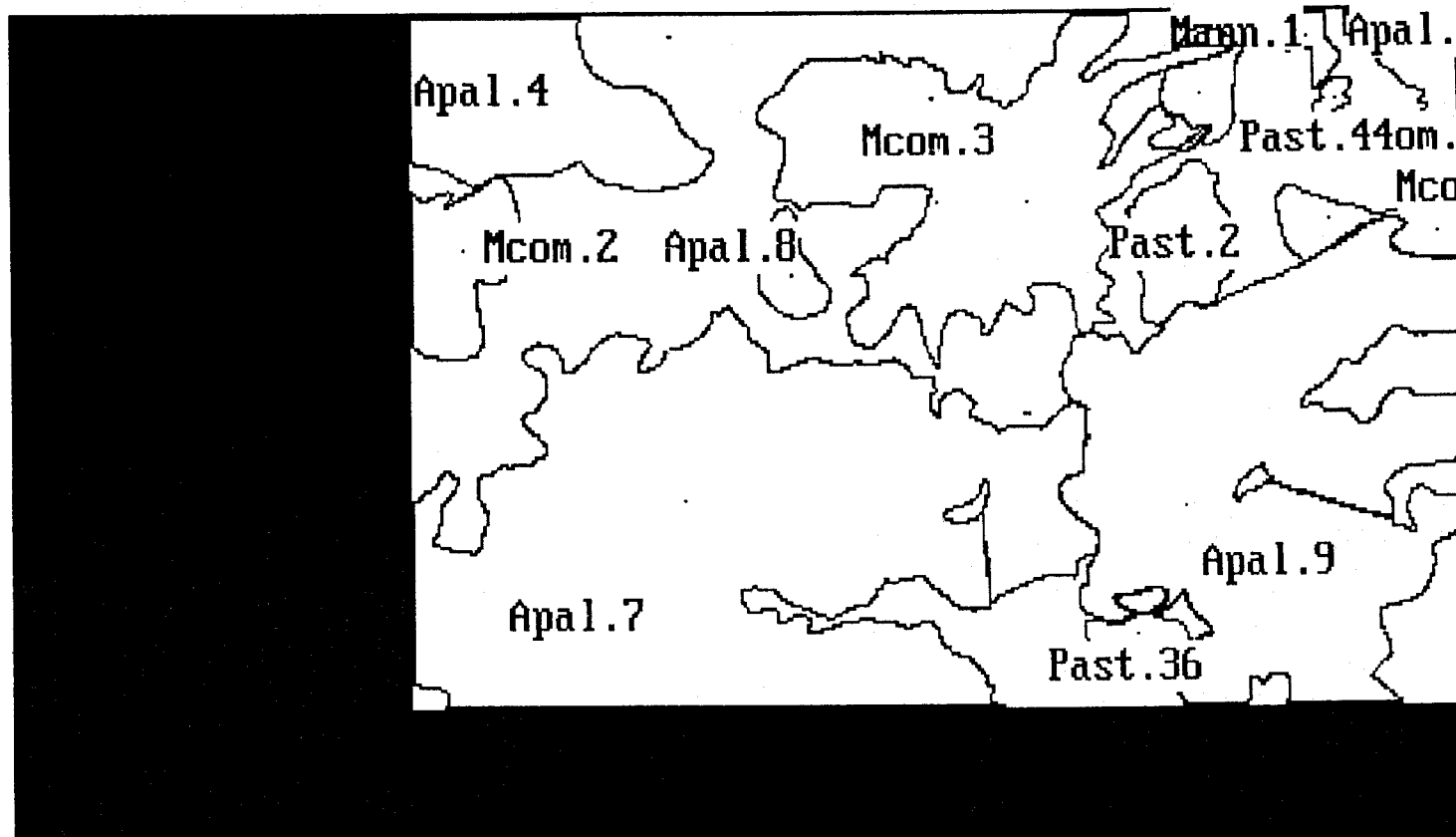
Agg. 8

Malc. 63

Agg. 7

Malc. 35

More Photo Frames (Y/N):



Apal.10 C.I.A.
Past.44om.6Biscayne Natl
Mcom.7ar___1990
Frame___2
Scale 1: 4
Res 0.04077cm
Disc c:\mp\
bp01Fr02.Y90

TACHOMETER

Species 4
Colonies 13

Points 330
A 24.cm²
P 22.cm

More Photo Frames (Y/N):

C.I.A.

Biscayne N.P.

Year 1989

Frame 29

Scale 1: 4

Res 0.04561cm

Disc c:\cs2\

bp02Fr29.Y89

TACHOMETER

Species 2

Colonies 3

Points 379

A 9.cm²

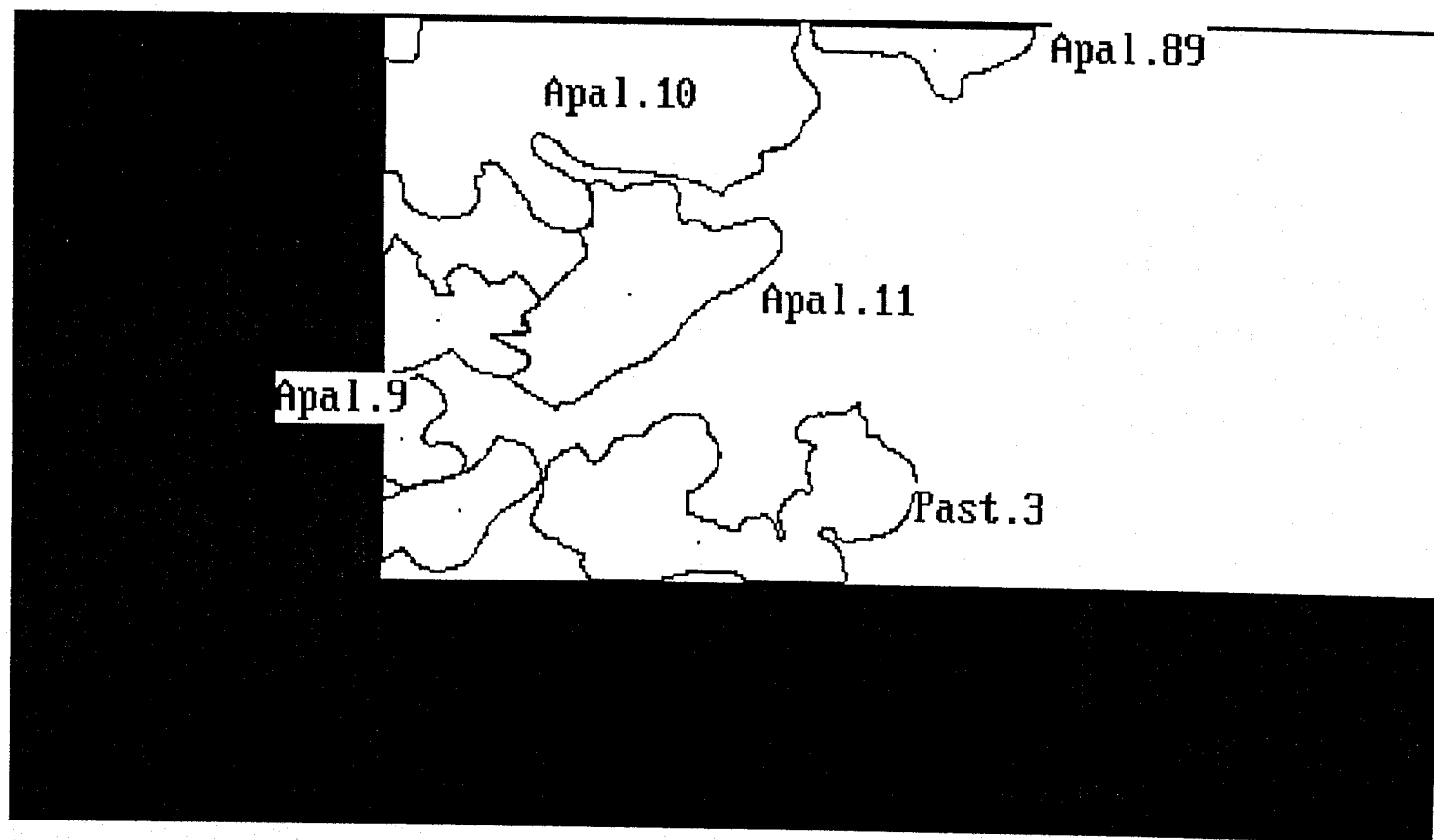
P 20.cm

Agg.6

Malc.33

Malc.34

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
Year 1990
Frame 3
Scale 1: 4
Res 0.04907cm
Disc c:\mp\
bp01Fr03.Y90

TACHOMETER

Species 2
Colonies 5

Points 339
A 51.cm²
P 40.cm

More Photo Frames (Y/N):

C.I.N.

Biscayne N.P.

Year 1989

Frame 28

Scale 1: 5

Res 0.04662cm

Disc c:\cs2\

bp02Fr28.Y89

TACHYMETER

Species 1

Colonies 1

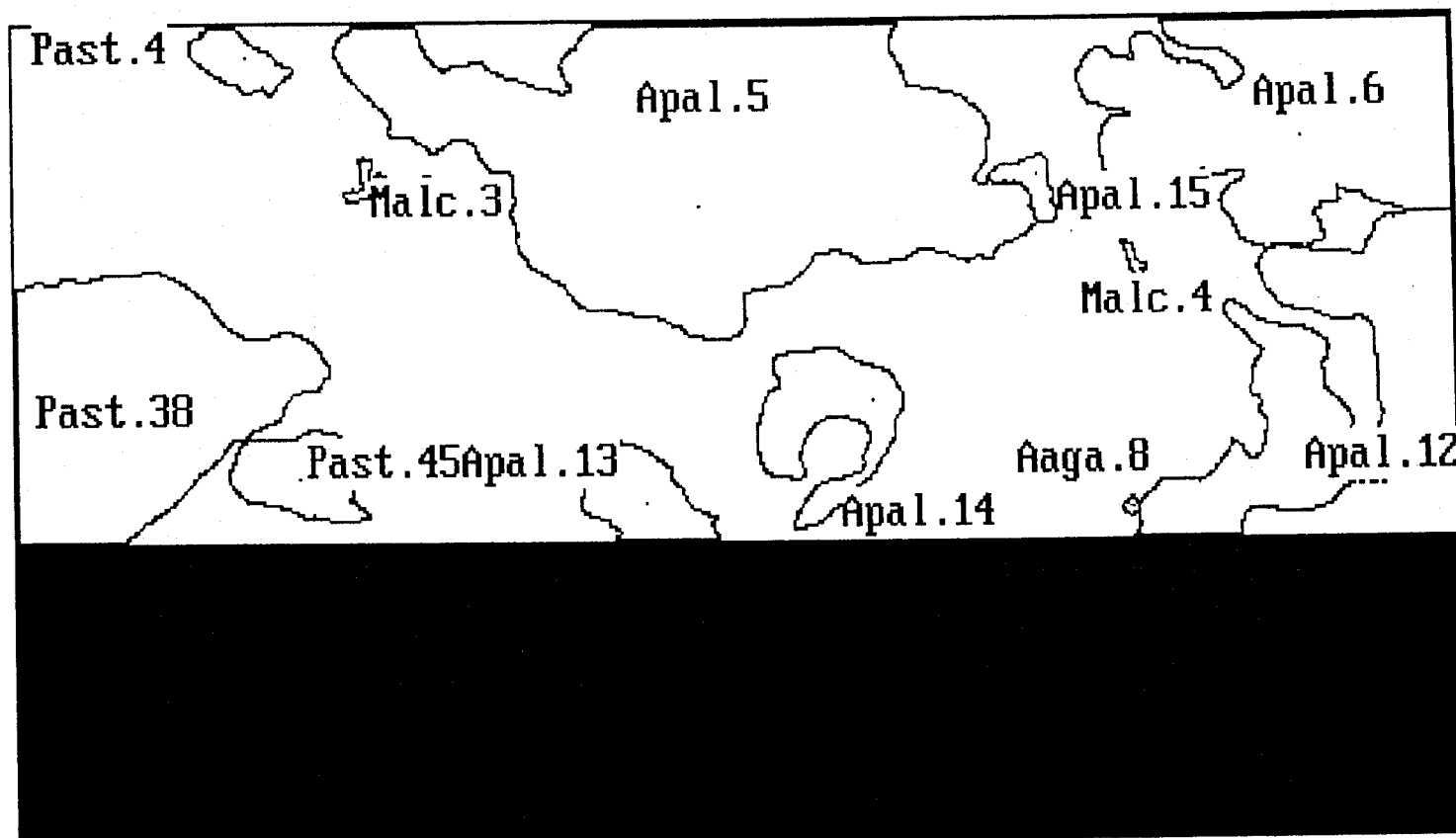
Points 405

A 11.cm²

P 25.cm

Malc.32

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
 Year 1990
 Frame 4
 Scale 1: 4
 Res 0.05411cm
 Disc c:\mp\
 bp01Fr04.Y90

TACHOMETER

Species 4
 Colonies 12

Points 308
 A 20.cm²
 P 20.cm

More Photo Frames (Y/N):

C.I.A.

Biscayne N.P.
Year 1989
Frame 27
Scale 1: 4
Res 0.03848cm
Disc c:\cs2\
bp02Fr27.Y89

TACHYMETER

Species 4
Colonies 5

Points 346
A 17.cm²
P 18.cm

Past.14

Past.19

Malc.31

Aaga.5

DCI.1

More Photo Frames (Y/N):

Apal.6

Apal.7

Apal.9

Afra.1

Past.6

Malc.5

Mcau.2 Apal.17

Apal.18

Apal.100

Apal.16

Apal.12

Apal.19

Past.7 Disc c:\mp\
bp01Fr05.Y90

C.I.A.

Biscayne Natl

Year 1990

Frame 5

Scale 1: 4

Res 0.04492cm

TACHOMETER

Species 5

Colonies 14

Points 476

A 25.cm²

P 36.cm

More Photo Frames (Y/N):

C.I.A.

Biscayne N.P.
Year 1989
Frame 26
Scale 1: 4
Res 0.04012cm
Disc c:\cs2\
bp02Fr26.Y89

TACHOMETER

Species 2
Colonies 4

Points 762
A 17.cm²
P 36.cm

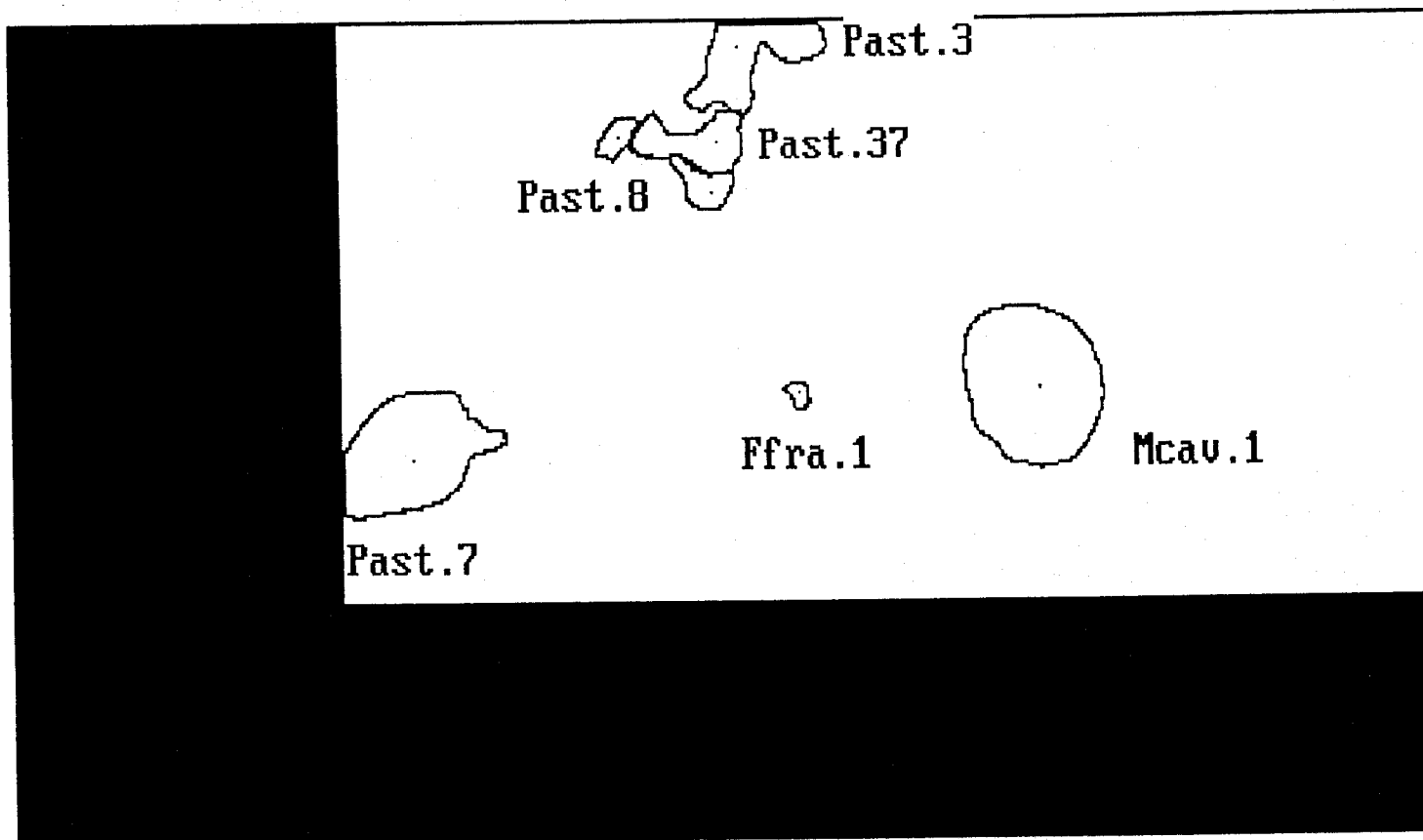
Malc.60

Malc.29

Dste.4

Malc.30

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
Year__1990
Frame__ 6
Scale 1: 4
Res 0.04784cm
Disc c:\mp\
bp01Fr06.Y90

TACHOMETER

Species 3
Colonies 6

Points 599
A 4.cm²
P 33.cm

More Photo Frames (Y/N): ■

C.I.N.

Biscayne N.P.

Year 1989

Frame 25

Scale 1: 4

Res 0.04014cm

Disc c:\cs2\

bp02Fr25.Y89

TACHOMETER

Species 1

Colonies 1

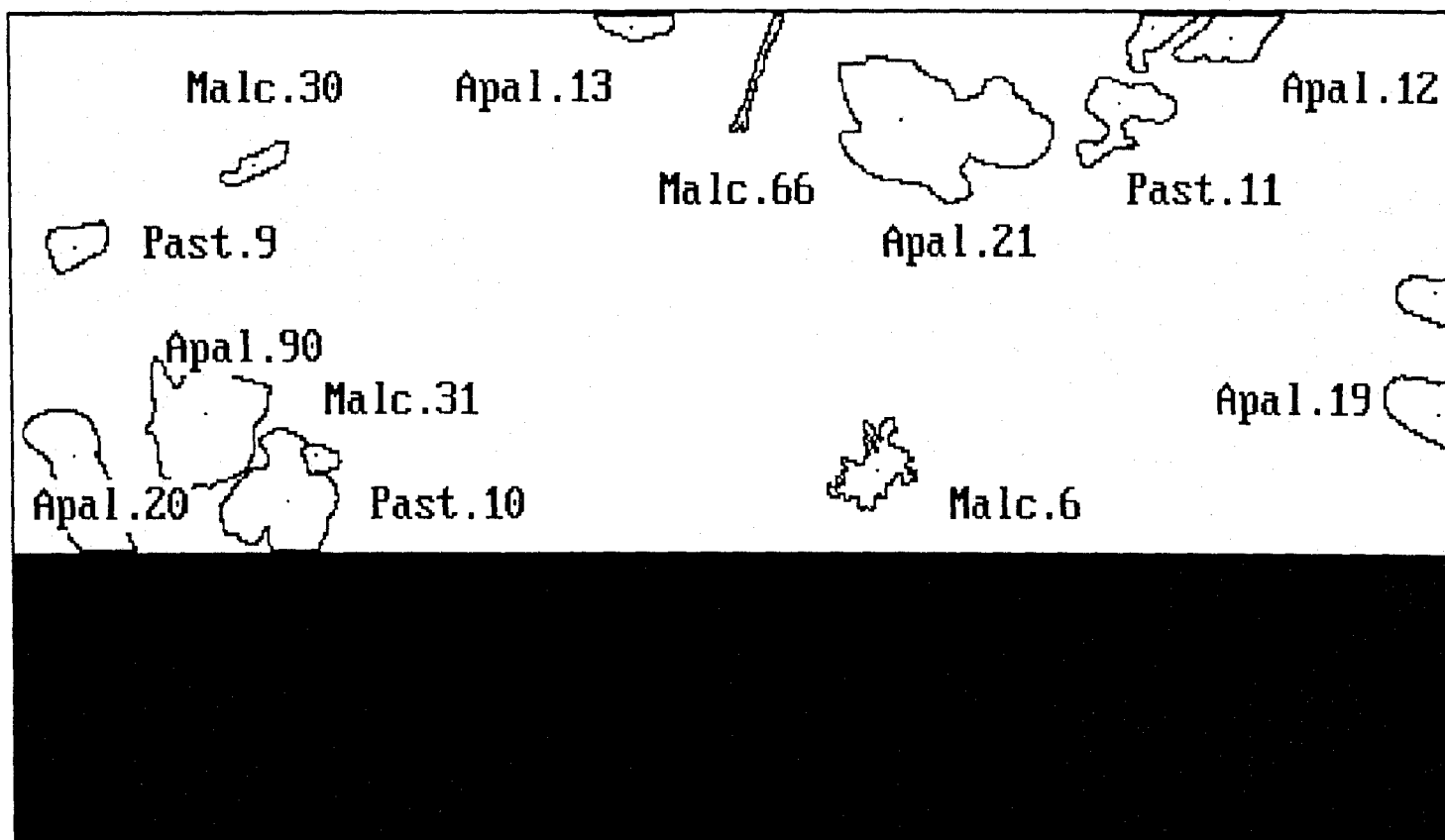
Points 336

A 34.cm²

P 21.cm

Smic.2

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
Year__1990
Frame__ 7
Scale 1: 4
Res 0.05297cm
Disc c:\mp\
bp01Fr07.Y90

TACHOMETER

Species 3
Colonies 13

Points 640
A 31.cm²
P 40.cm

More Photo Frames (Y/N): ☐

C.I.N.

Biscayne N.P.
Year 1989
Frame 24
Scale 1: 3
Res 0.03383cm
Disc c:\cs2\
bp02Fr24.Y89

TACHOMETER

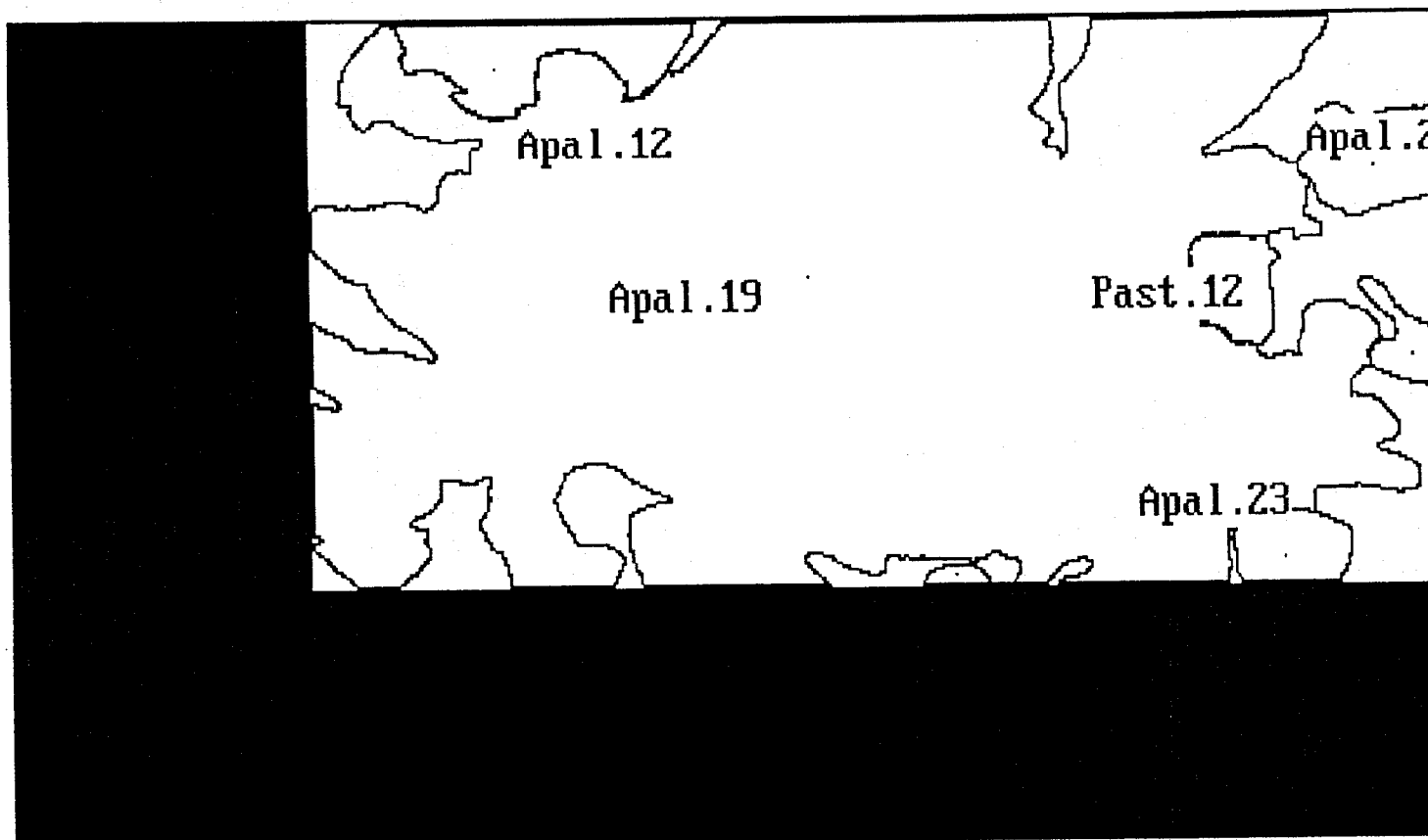
Species 1
Colonies 1

Points 784
A 10.cm²
P 34.cm

Malc.28



More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
Year 1990
Frame 8
Scale 1: 4
Res 0.04932cm
Disc c:\mp\
bp01Fr08.Y90

TACHOMETER

Species 2
Colonies 5

Points 406
A 44.cm²
P 27.cm

More Photo Frames (Y/N):

C.I.A.

Biscayne N.P.

Year 1989

Frame 23

Scale 1: 3

Res 0.03392cm

Disc c:\cs2\

bp02Fr23.Y89

TACHOMETER

Species 1

Colonies 3

Points 396

A 24.cm²

P 20.cm

Past.11

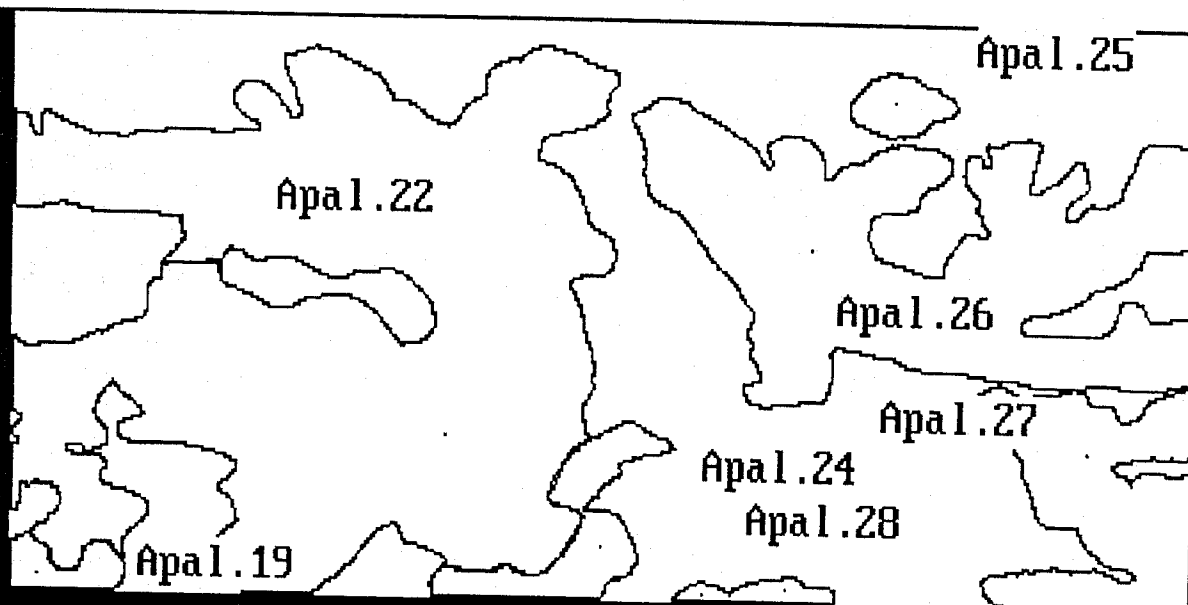


Past.12

Past.13



More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
Year 1990
Frame 9
Scale 1: 4
Res 0.04915cm
Disc c:\mp\
bp01Fr09.Y90

TACHOMETER

Species 1
Colonies 7

Points 354
A 26.cm²
P 20.cm

More Photo Frames (Y/N):

C.I.A.

Biscayne N.P.
Year 1989
Frame 22
Scale 1: 3
Res 0.03362cm
Disc c:Ncs2N
bp02Fr22.Y89

TACHOMETER

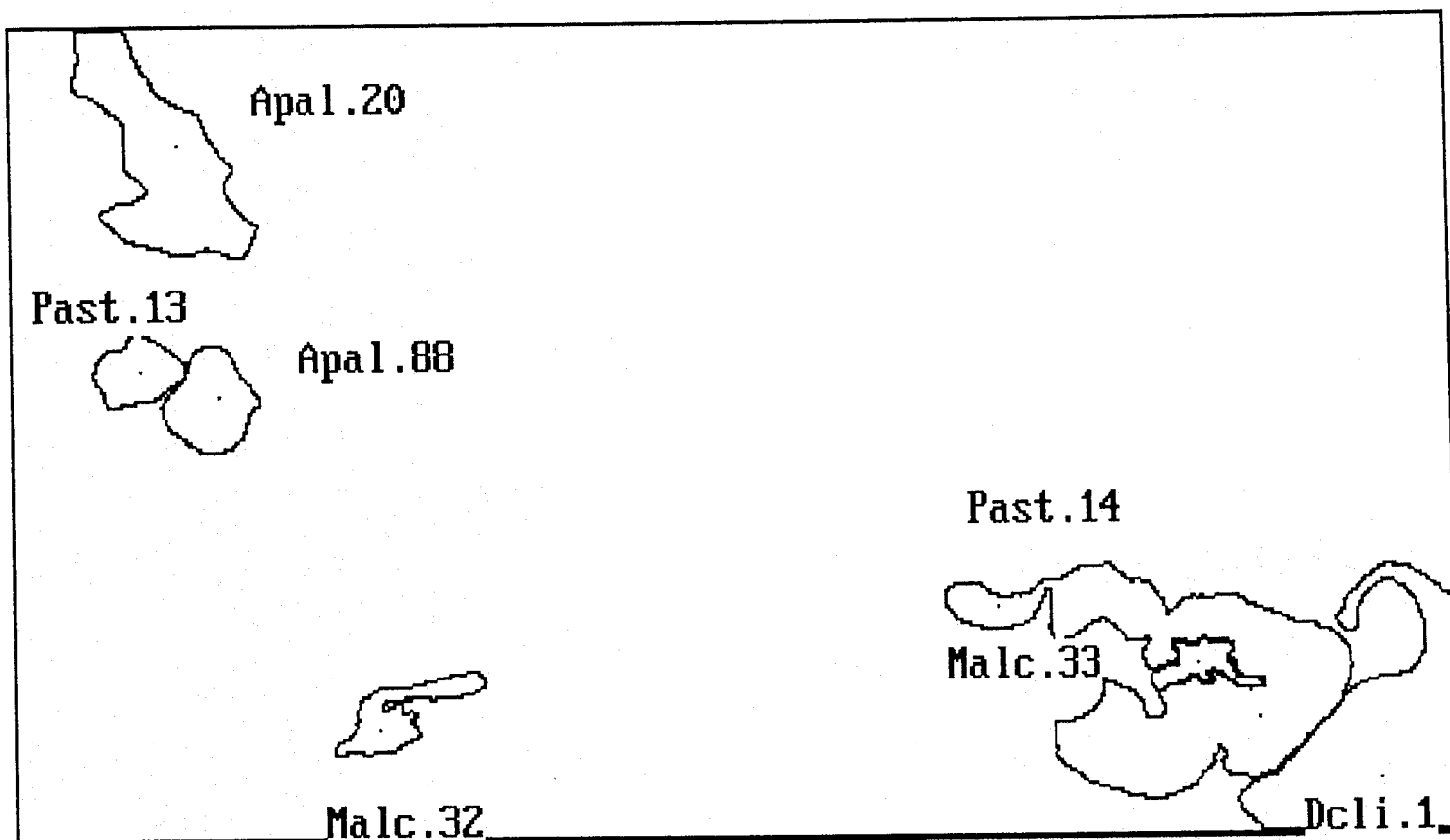
Species 2
Colonies 2

Points 179
A 2.cm²
P 8.cm

Page 4

Malc.27

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
 Year 1990
 Frame 10
 Scale 1: 3
 Res 0.03415cm
 Disc c:\mpx\
 bp01Fr10.Y90

TACHOMETER

Species 4
 Colonies 7

Points 503
 A 9.cm²
 P 19.cm

More Photo Frames (Y/N):

C.I.A.

Biscayne N.P.
Year 1989
Frame 21
Scale 1: 4
Res 0.04571cm
Disc c:\cs2\
bp02Fr21.Y89

TACHOMETER

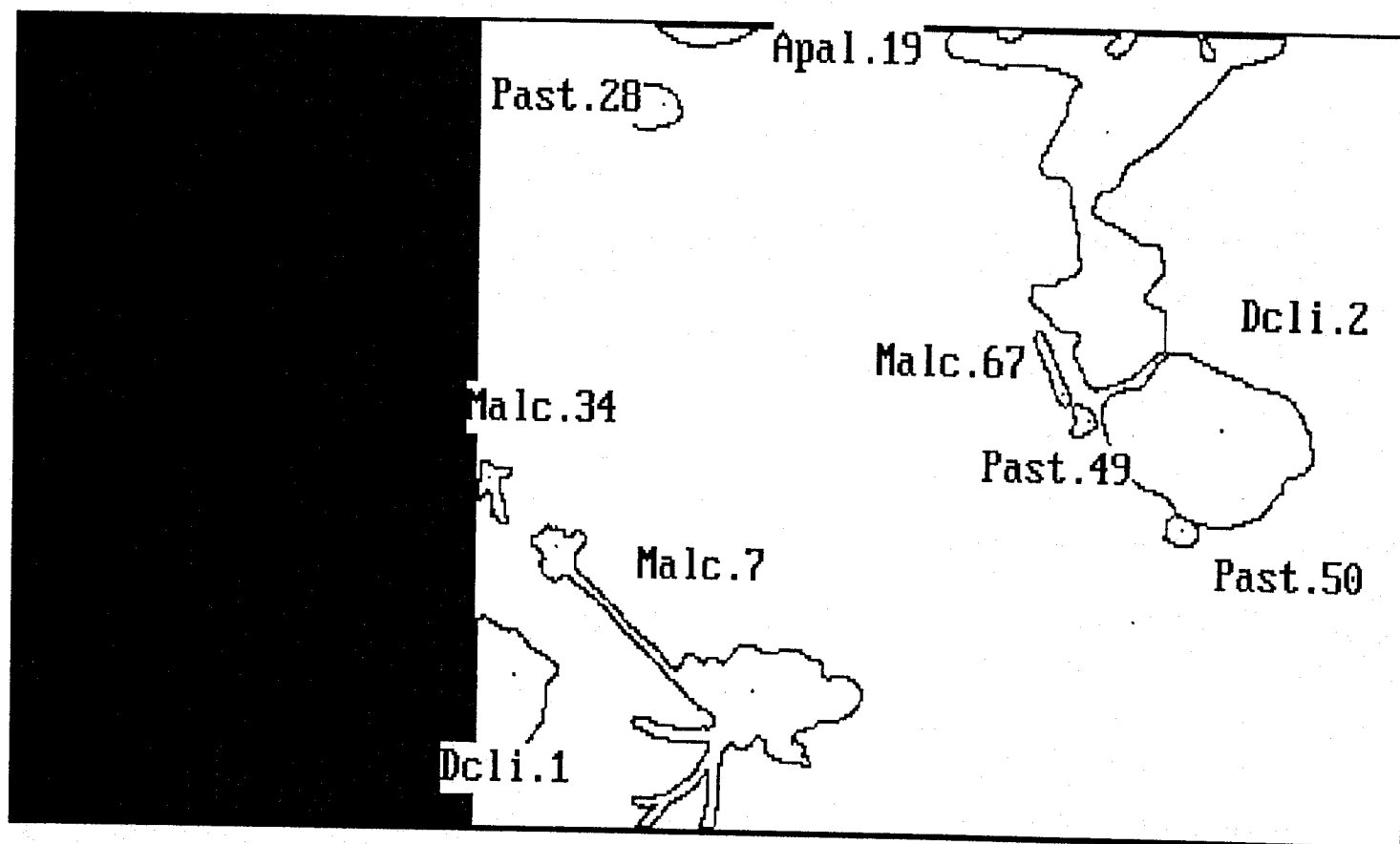
Species 1
Colonies 2

Points 428
A 8.cm²
P 23.cm

Malc.58

Malc..26

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
Year 1990
Frame 11
Scale 1: 4
Res 0.03436cm
Disc c:\mpx\
bp01Fr11.Y90

TACHOMETER

Species 4
Colonies 9

Points 310
A 43.cm²
P 30.cm

More Photo Frames (Y/N):

C.I.N.

Biscayne N.P.
Year 1989
Frame 20
Scale 1: 4
Res 0.03825cm
Disc c:\cs2\
bp02Fr20.Y89

TACHOMETER

Species 2
Colonies 2

Points 89
A 1.cm²
P 4.cm

Ffra.1 Ssid.2

More Photo Frames (Y/N):

C.I.A.

Biscayne Natl
Year 1990
Frame 12
Scale 1: 4
Res 0.03418cm
Disc c:\mpx\
bp01Fr12.Y90

TACHOMETER

Species 3
Colonies 7

Points 777
A 33.cm²
P 48.cm

Apal.24

Apal.28

Apal.27

Ffra.6

Apal.30

Aaga.3

Apal.91

More Photo Frames (Y/N):

C.I.A.

Biscayne N.P.

Year 1989

Frame 19

Scale 1: 4

Res 0.04137cm

Disc c:\ncs2\

bp02Fr19.Y89

TACHOMETER

Species 1

Colonies 1

Points 943

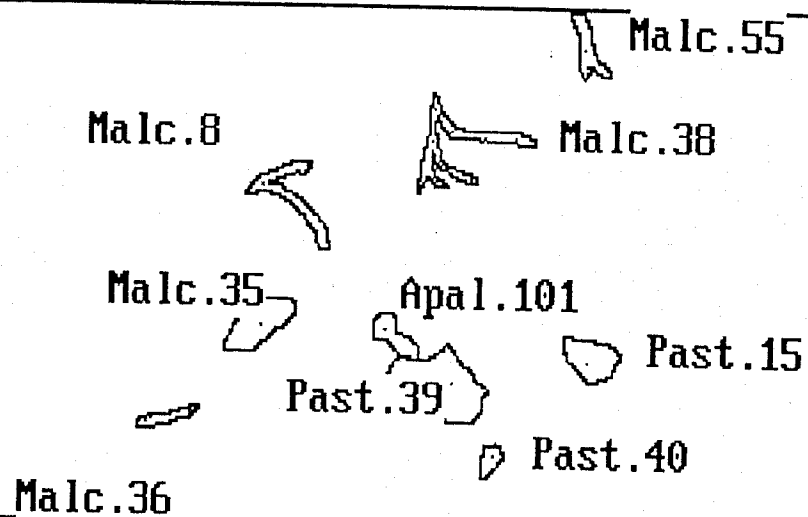
A 109.cm²

P 54.cm

Smic.1



More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
Year 1990
Frame 13
Scale 1: 5
Res 0.05528cm
Disc c:\mpx\
bp01Fr13.Y90

TACHOMETER

Species 3
Colonies 9

Points 220
A 9.cm²
P 14.cm

More Photo Frames (Y/N):

C.I.A.

Biscayne N.P.
Year 1989
Frame 18
Scale 1: 4
Res 0.04472cm
Disc c:\cs2\
bp02Fr18.Y89

TACHOMETER

Species 1
Colonies 1

Points 219
A 9.cm²
P 12.cm

Past. 10

More Photo Frames (Y/N):



Malc.9



Malc.10



Malc.11

C.I.A.

Biscayne Natl

Year__1990

Frame__14

Scale 1: 5

Res 0.05429cm

Disc c:\mpx\

bp01Fr14.Y90

TACHOMETER

Species 1

Colonies 3

Points 1252

A 212.cm²

P 93.cm

More Photo Frames (Y/N): ☐

3 Past.9

Dste.3

Agga.3

Malc.25

C.I.A.

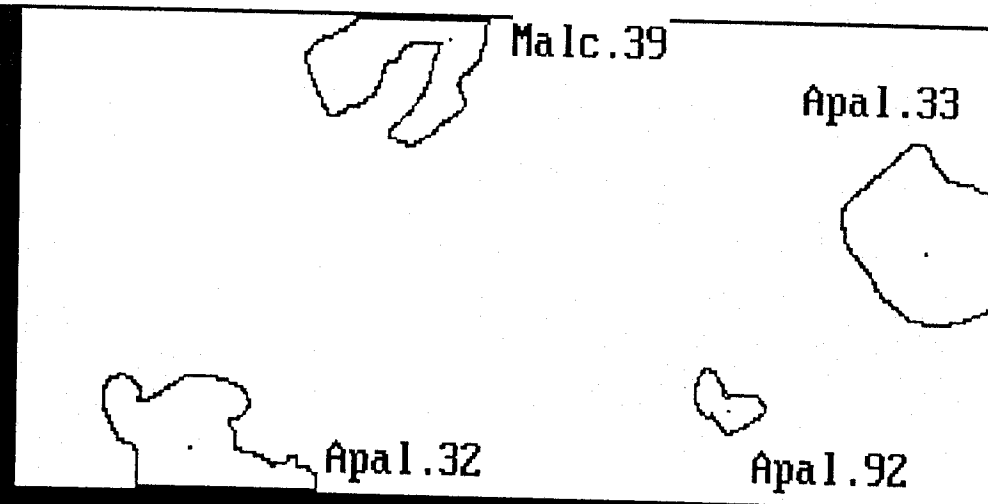
Biscayne N.P.
Year 1989
Frame 17
Scale 1: 3
Res 0.03632cm
Disc c:\ncs2\
bp02Fr17.Y89

TACHOMETER

Species 4
Colonies 4

Points 248
A 3.cm²
P 12.cm

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
Year__1990
Frame__15
Scale 1: 5
Res 0.05884cm
Disc c:\mpx\
bp01Fr15.Y90

TACHOMETER

Species 2
Colonies 4

Points 721
A 100.cm²
P 65.cm

More Photo Frames (Y/N): ☐

Malc.23

Malc.24

Agaga.3

C.I.A.

Biscayne N.P.
Year 1989
Frame 16
Scale 1: 4
Res 0.04046cm
Disc c:\cs2\bp02Fr16.Y89

TACHOMETER

Species 2
Colonies 3

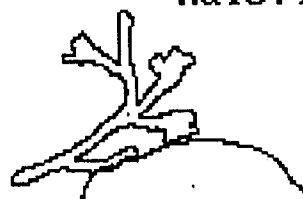
Points 299
A 18.cm²
P 18.cm

More Photo Frames (Y/N):

C.I.A.

Past.16

Malc.40



Ssid.1

Biscayne Natl
Year 1990
Frame 16
Scale 1: 5
Res 0.05703cm
Disc c:\mpx\
bp01Fr16.Y90

TACHOMETER

Species 3
Colonies 3

Points 196
A 9.cm²
P 13.cm

More Photo Frames (Y/N):

C.I.A.

Biscayne N.P.
Year 1989
Frame 15
Scale 1: 4
Res 0.04519cm
Disc c:Ncs2\
bp02Fr15.Y89

TACHOMETER

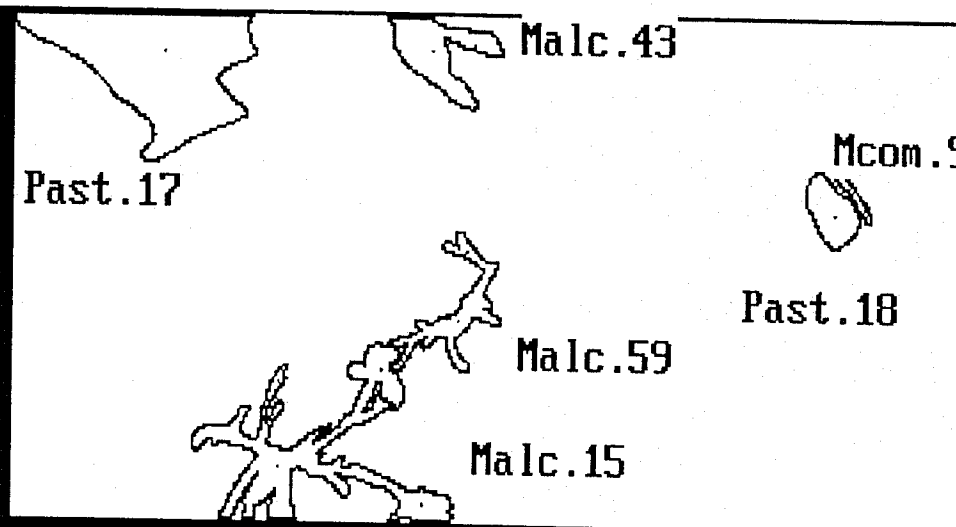
Species 2
Colonies 2

Points 148
A 4.cm²
P 8.cm

Ma lc.22

Mcau.6

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
Year 1990
Frame 17
Scale 1: 5
Res 0.05602cm
Disc c:\mpx\
bp01Fr17.Y90

TACHOMETER

Species 3
Colonies 6

Points 552
A 145.cm²
P 62.cm

More Photo Frames (Y/N):

Biscayne N.P.
 Year 1989
 Frame 14
 Scale 1: 4
 Res 0.03849cm
 Disc a:
 bp02Fr14.Y89

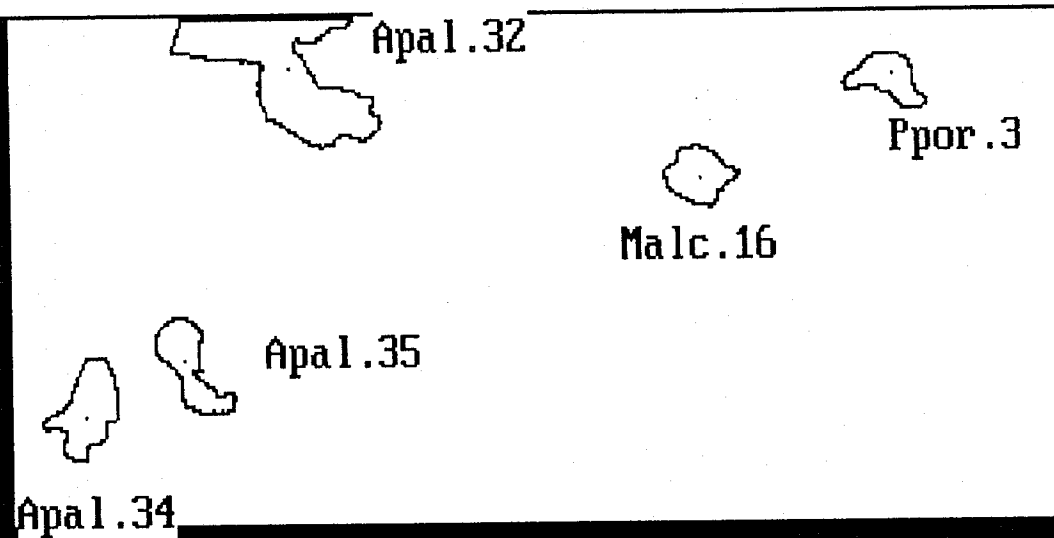
TACHYMETER

Species 1
 Colonies 1

Points 453
 A 5.cm²
 P 22.cm

Malc.21

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
Year 1990
Frame 18
Scale 1: 5
Res 0.05583cm
Disc c:\mpx\
bp01Fr18.Y90

TACHOMETER

Species 3
Colonies 5

Points 320
A 18.cm²
P 20.cm

More Photo Frames (Y/N):

G.I.M.

Biscayne N.P.
Year 1989
Frame 13
Scale 1: 4
Res 0.03827cm
Disc c:\cs2\
bp02Fr13.Y89

TACHOMETER

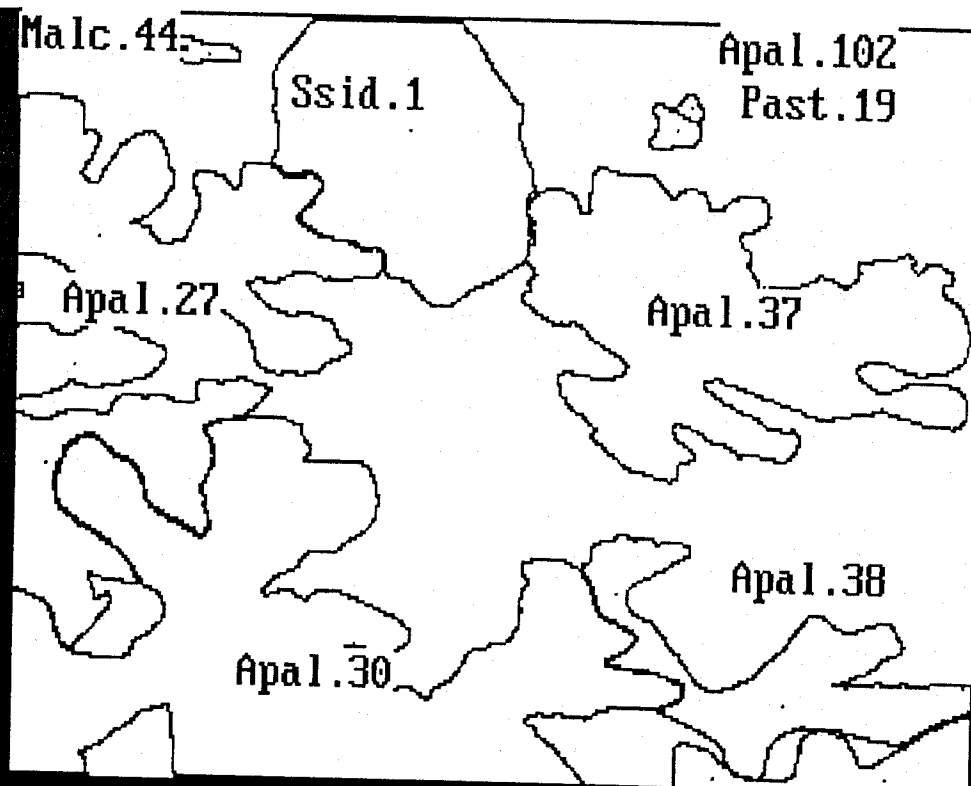
Species 1
Colonies 1

Points 870
A 76.cm²
P 44.cm



Mcau.4

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
Year 1990
Frame 19
Scale 1: 4
Res 0.03703cm
Disc c:\mpx\
bp01Fr19.Y90

TACHOMETER

Species 4
Colonies 8

Points 2016
A 154.cm²
P 108.cm

More Photo Frames (Y/N):

U.S.N.S.

Mnea. 1

Past. 8

Malc. 20

Aaga. 2

Biscayne N.P.

Year 1989

Frame 12

Scale 1: 3

Res 0.03408cm

Disc c:\ncs2\

bp02Fr12.Y89

TACHOMETER

Species 4

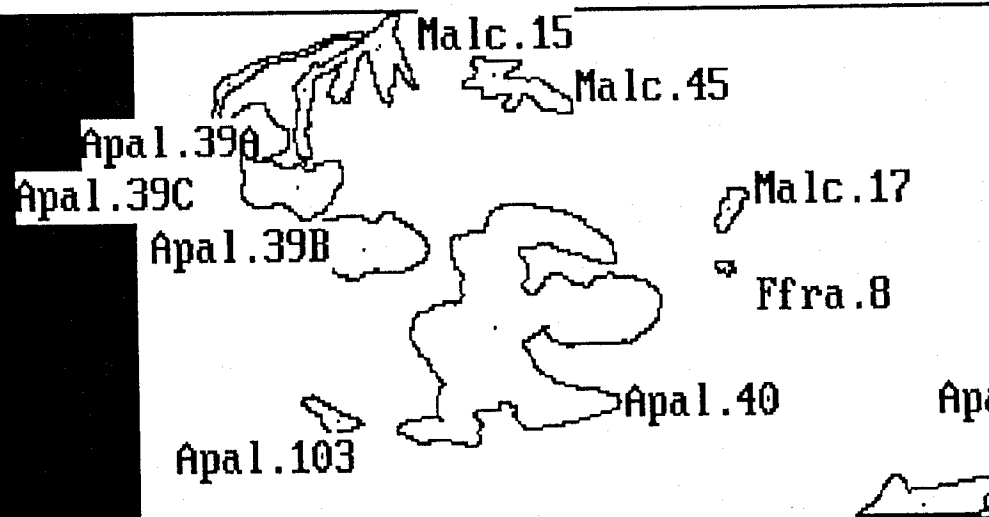
Colonies 4

Points 933

A 13.cm²

P 41.cm

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl

Year 1990

Frame 20

Scale 1: 5

Res 0.05545cm

Apal.107isc c:\mpx\

bp01Fr20.Y90

TACHOMETER

Species 3

Colonies 10

Points 336

A 29.cm²

P 30.cm

More Photo Frames (Y/N):

C.I.A.

Biscayne N.P.
Year 1989
Frame 11
Scale 1: 3
Res 0.03382cm
Disc c:\ncs2\
bp02Fr11.Y89

TACHOMETER

Species 3
Colonies 7

Points 343
A 4.cm²
P 15.cm

Mmea.1

Malc.18

Malc.50

Ssid.1

Malc.55

Malc.19

Malc.54

More Photo Frames (Y/N):

Dstr.1

C.I.A.

Biscayne Natl

Year 1990

Frame 21

Scale 1: 5

Res 0.05336cm

Disc c:\mpx\

Malc.47bp01Fr21.Y90

TACHOMETER

Species 3

Colonies 7

Points 240

A 18.cm²

P 18.cm

Malc.18

Malc.19

Malc.46

Past.20

Past.51

More Photo Frames (Y/N):

Malc.17

C.I.N.

Biscayne N.P.

Year 1989

Frame 10

Scale 1: 3

Res 0.03351cm

Disc c:\ncs2\

bp02Fr10.Y89

TACHOMETER

Species 2

Colonies 6

Points 132

A 1.cm²

P 5.cm

Malc.48

Malc.14

Malc.15

Malc.16

Mcau.3

More Photo Frames (Y/N):

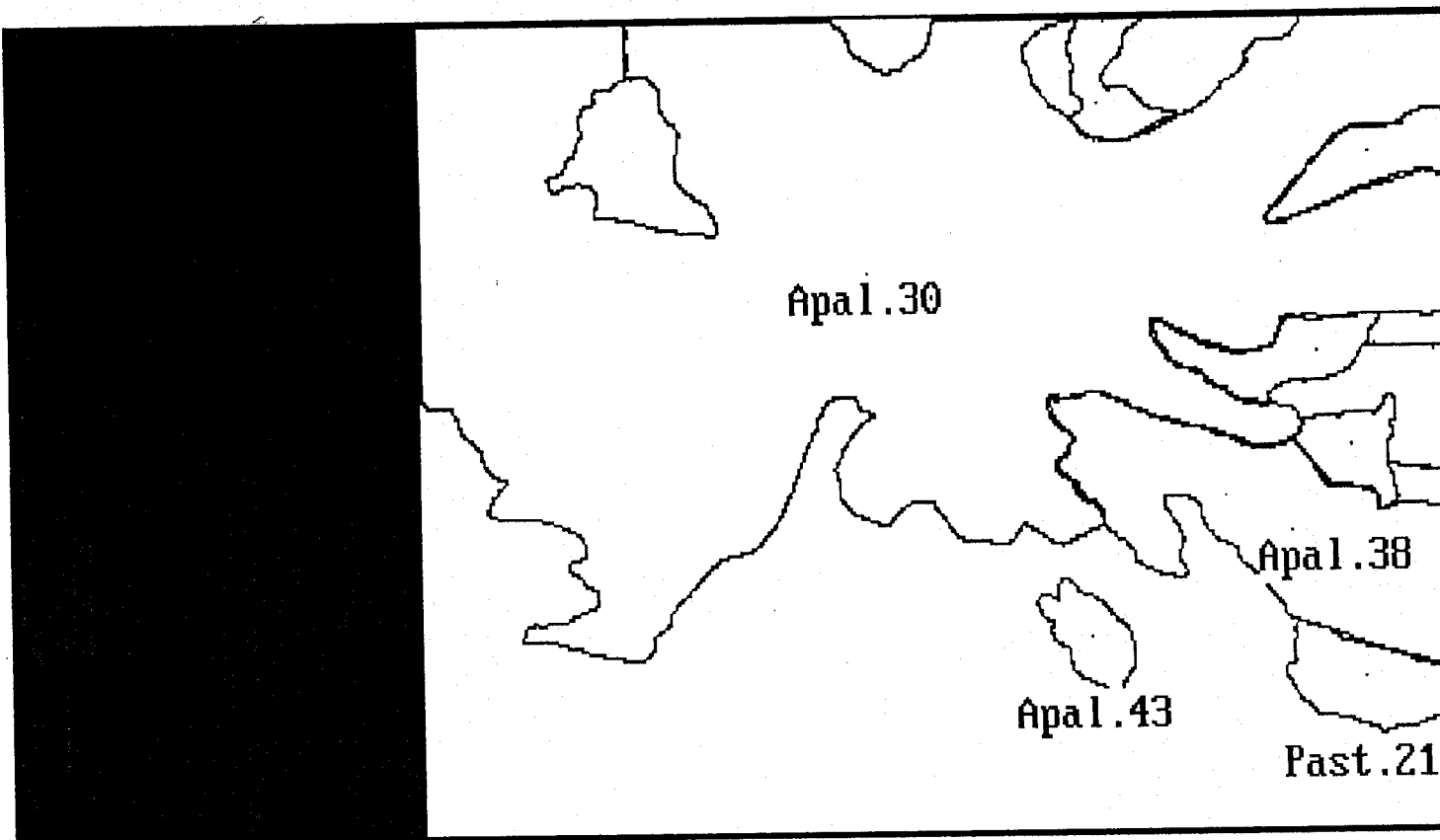
C.I.A.

Biscayne Natl
Year__1990
Frame__ 22
Scale 1: 4
Res 0.03421cm
Disc c:\mpx\
bp01Fr22.Y90

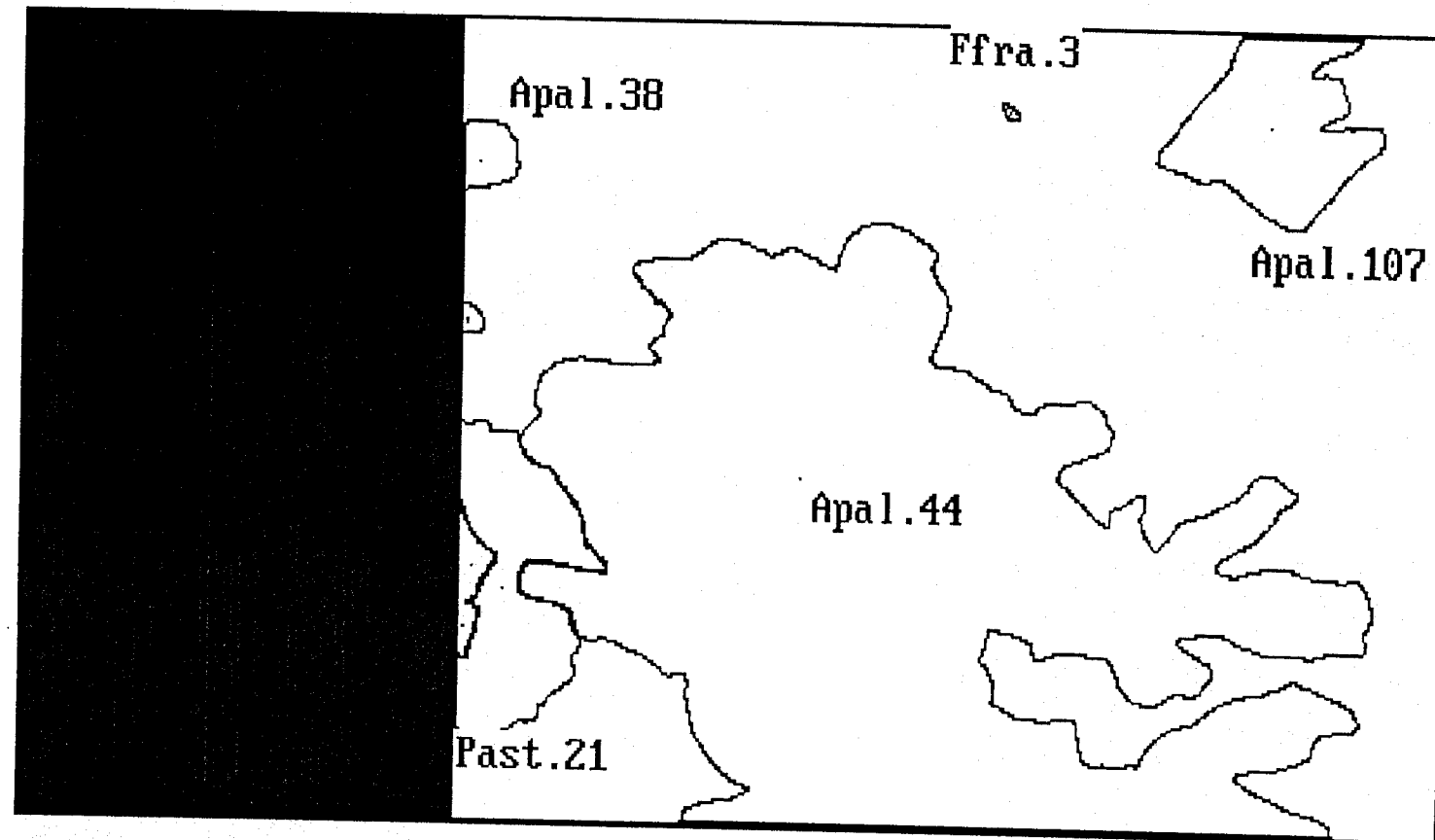
TACHOMETER

Species 2
Colonies 4

Points 338
A 28.cm²
P 24.cm



More Photo Frames (Y/N): ■



C.I.A.

Biscayne Nat'
Year 1990
Frame 23
Scale 1: 4
Res 0.03422cm
Disc c:\mpx\
bp01Fr23.Y90

TACHOMETER

Species 3
Colonies 5

Points 767
A 122.cm²
P 56.cm

More Photo Frames (Y/N):

Past.6

Mcau.2

Malc.13

Mmea.1

C.I.A.

Biscayne N.P.

Year 1989

Frame 9

Scale 1: 4

Res 0.03993cm

Disc c:Ncs2

bp02Fr09.Y89

TACHOMETER

Species 4

Colonies 4

Points 177

A 7.cm²

P 14.cm

Frames (Y/N):

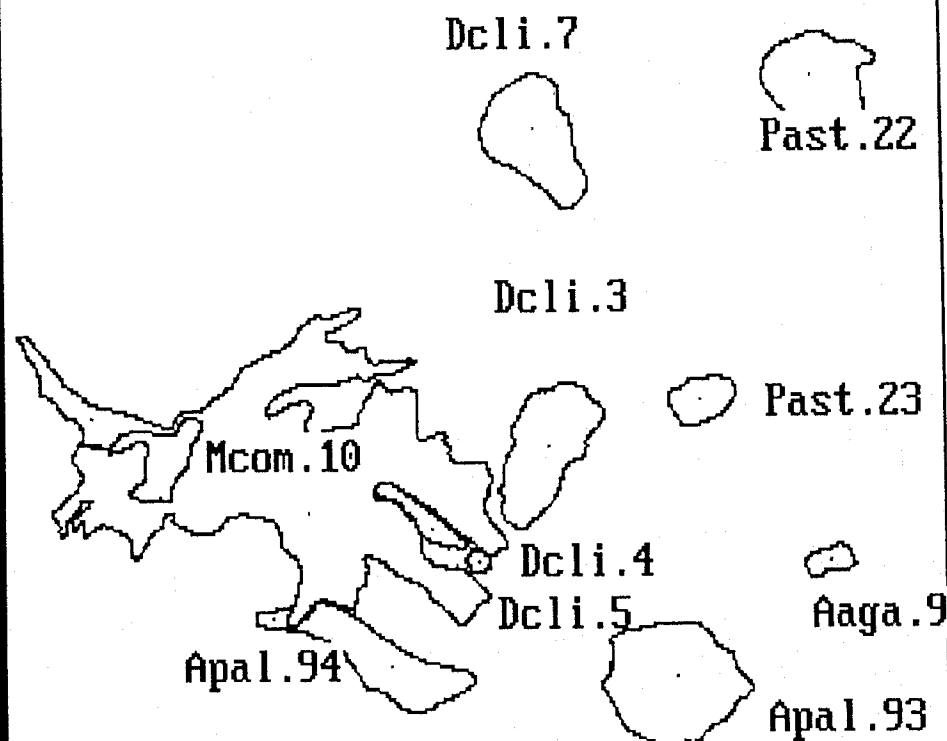
C.I.A.

Biscayne Nat'
Year__1990
Frame__24
Scale 1: 4
Res 0.03408cm
Disc c:\mpx\
bp01Fr24.Y90

TACHOMETER

Species 5
Colonies 10

Points 401
A 42.cm²
P 29.cm



More Photo Frames (Y/N): ■

C.I.A.

Biscayne N.P.
Year 1989
Frame 8
Scale 1: 4
Res 0.03825cm
Disc c:\cs2\bp02Fr08.Y89

TACHOMETER

Species 4
Colonies 5

Points 195
A 18.cm²
P 19.cm

Malc.11

Past.?

Mcau.2

Malc.12

Mmea.1

More Photo Frames (Y/N):

Apal.33

Mcom.14

C.I.A.

Biscayne Natl
Year__1990
Frame__25
Scale 1: 6
Res 0.06048cm
Disc c:\mpx\
bp01Fr25.Y90

TACHOMETER

Species 2
Colonies 2

Points 1311
A 11.cm²
P 145.cm

More Photo Frames (Y/N): ☐

C.I.N.

Biscayne N.P.
Year 1989
Frame 7
Scale 1: 3
Res 0.04141cm
Disc c:\cns2\
bp02Fr07.Y89

TACHYMETER

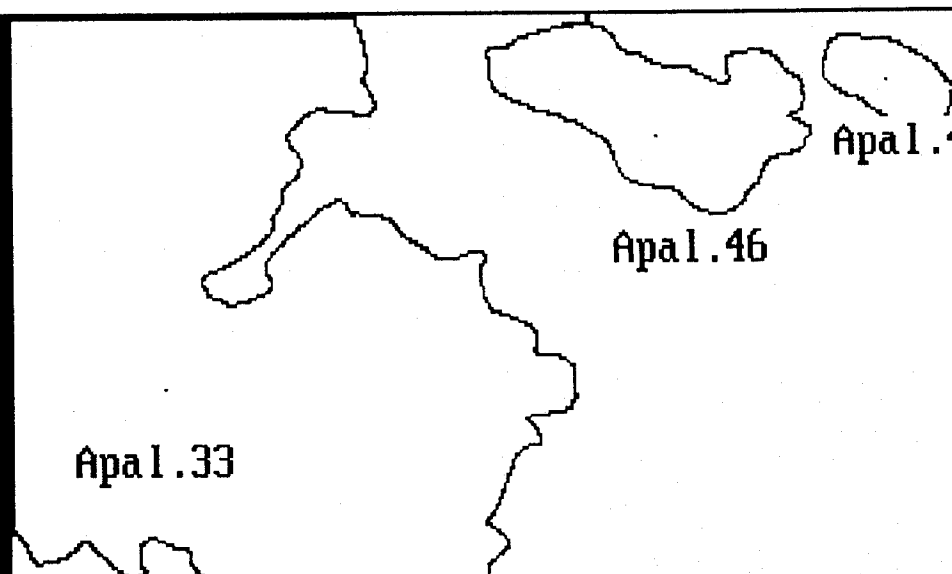
Species 1
Colonies 1

Points 223
A 6.cm²
P 10.cm

Page 1

More Photo Frames (Y/N):

C.I.A.



Apal.47 Biscayne Natl

Year 1990

Frame 26

Scale 1: 5

Res 0.05043cm

Disc c:\mpx\

bp01Fr26.Y90

TACHOMETER

Species 1

Colonies 3

Points 445

A 57.cm²

P 36.cm

More Photo Frames (Y/N):

Malc.9

G Malc.8

Past.5

C.I.A.
Biscayne N.P.
Year 1989
Frame 6
Scale 1: 4
Res 0.04188cm
Disc c:\ncs2\
bp02Fr06.Y89

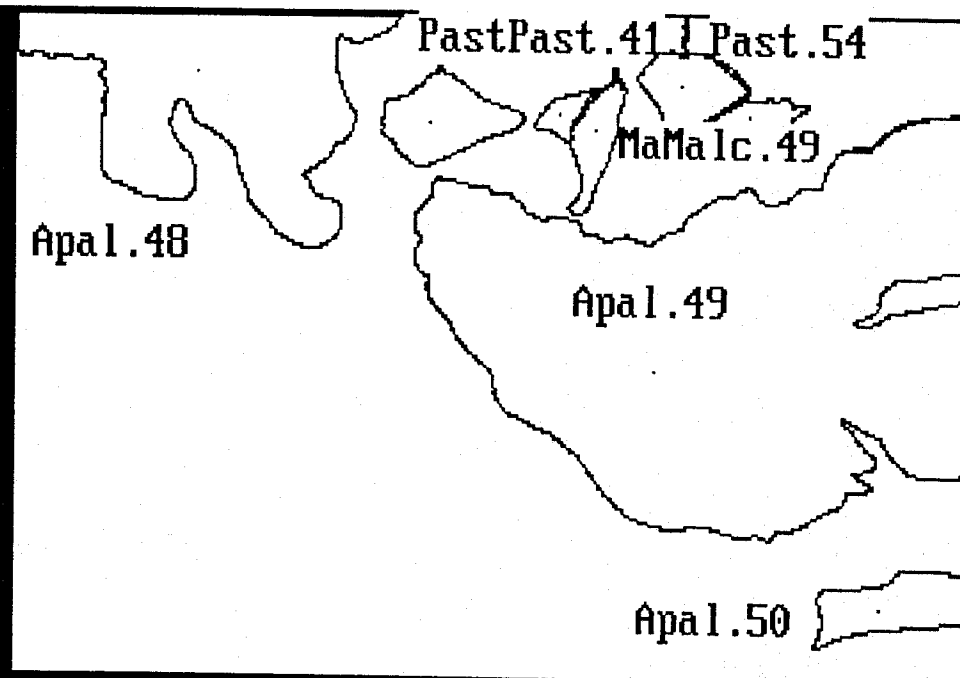
TACHOMETER

Mcau.1

Species 3
Colonies 5

Points 228
A 9.cm²
P 12.cm

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl
Year__1990
Frame__27
Scale 1: 4
Res 0.04269cm
Disc c:\mpx\
bp01Fr27.Y90

TACHOMETER

Species 3
Colonies 8

Points 379
A 45.cm²
P 33.cm

More Photo Frames (Y/N): ☐

C.I.A.

Biscayne N.P.
Year 1989
Frame 5
Scale 1: 4
Res 0.03744cm
Disc c:\cs2\
bp02Fr05.Y89

TACHOMETER

Species 2
Colonies 2

Points 422
A 29.cm²
P 20.cm

Malc.7

Dste.2

More Photo Frames (Y/N):

Mcom.11

Past.24

Malc.22

C.I.A.

Biscayne Natl

Year 1990

Frame 28

Scale 1: 6

Res 0.05559cm

Disc c:\mpx\

bp01Fr28.Y90

TACHOMETER

Species 3

Colonies 3

Points 726

A 33.cm²

P 62.cm

More Photo Frames (Y/N):

Dste.1

Malc.6

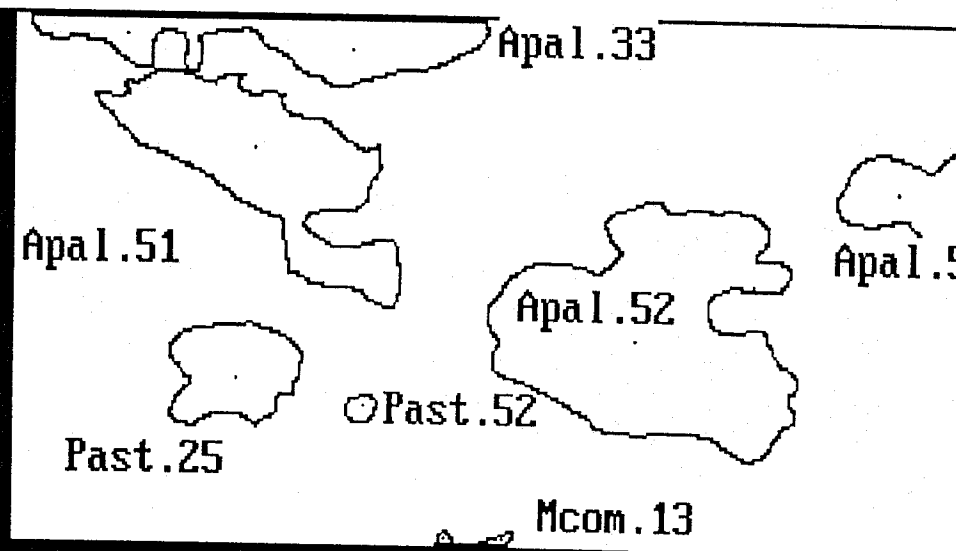
C.I.A.
Biscayne N.P.
Year 1989
Frame 4
Scale 1: 3
Res 0.03715cm
Disc c:\cs2\
bp02Fr04.Y89

TACHOMETER

Species 2
Colonies 2

Points 917
A 16.cm²
P 39.cm

More Photo Frames (Y/N):



C.I.A.

Biscayne Natl

Year 1990

Apal.53Frame 29

Scale 1: 5

Res 0.05397cm

Disc c:\mpx\

bp01Fr29.Y90

TACHOMETER

Species 3

Colonies 7

Points 1290

A 219.cm²

P 91.cm

More Photo Frames (Y/N):

C.I.A.

Biscayne N.P.
Year 1989
Frame 3
Scale 1: 4
Res 0.03734cm
Disc c:Ncs2\
bp02Fr03.Y89

TACHYMETER

Species 2
Colonies 2

Points 336
A 9.cm²
P 15.cm

Malc.5

Past.4

More Photo Frames (Y/N):

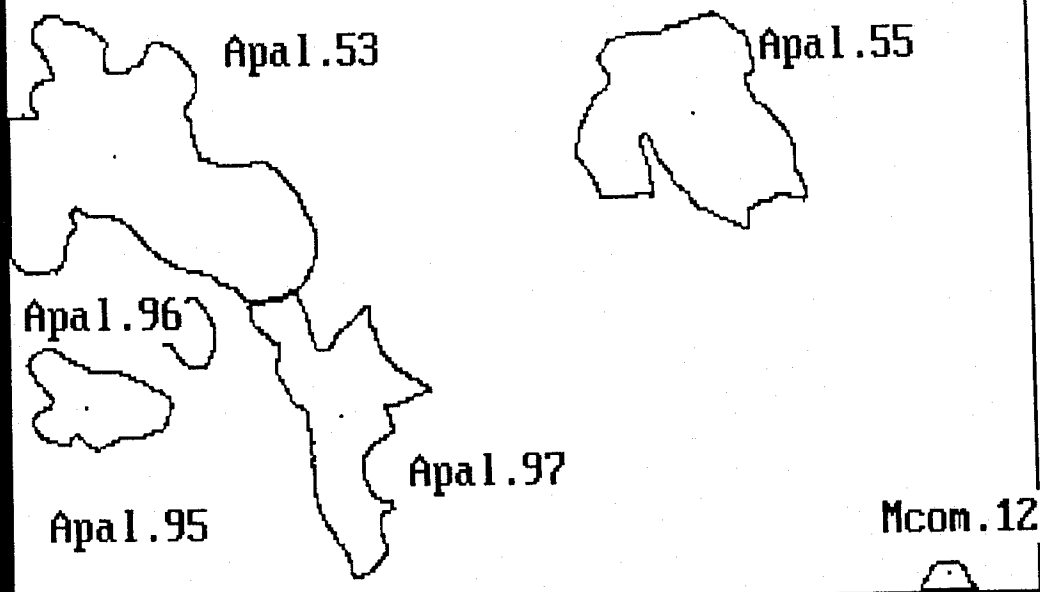
C.I.A.

Biscayne Natl
Year 1990
Frame 30
Scale 1: 4
Res 0.04568cm
Disc c:\mpx\
bp01Fr30.Y90

TACHOMETER

Species 2
Colonies 6

Points 148
A 6.cm²
P 11.cm



More Photo Frames (Y/N): ☐

C.I.A.

Biscayne N.P.
Year 1989
Frame 2
Scale 1: 3
Res 0.03367cm
Disc c:Ncs2N
bp02Fr02.Y89

TACHOMETER

Species 3
Colonies 7

Points 364
A 15.cm²
P 17.cm

Dstr.1

Past.3

Malc.4

Malc.40

Past.1

Past.2

Malc.3

More Photo Frames (Y/N):



Malc.22

C.I.A.

Biscayne Natl
Year___1990
Frame___31
Scale 1: 6
Res 0.05336cm
Disc c:\mpx\
bp01Fr31.Y90

TACHOMETER

Species 1
Colonies 1

Points 861
A 33.cm²
P 61.cm

More Photo Frames (Y/N): ☐

C.I.A.

Biscayne N.P.

Year 1989

Frame 1

Scale 1: 3

Res 0.03890cm

Disc c:\cs2\

bp02Fr01.Y89

TACHOMETER

Species 2

Colonies 3

Points 258

A 4.cm²

P 11.cm

Malc.1

Malc.2

Dste.1

More Photo Frames (Y/N):



Mcom.13

Past.27

Dcli.6

Malc.50



C.I.A.

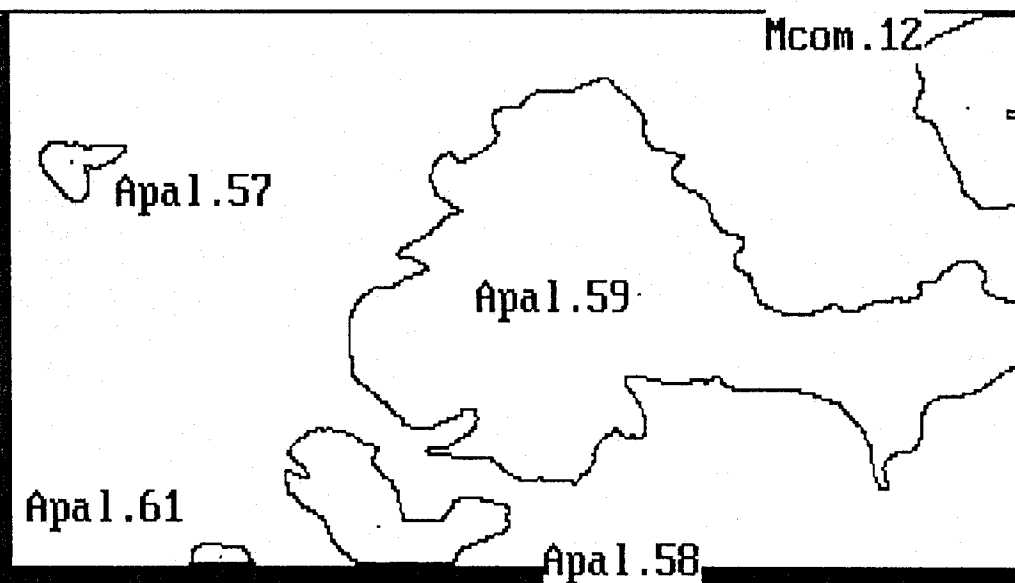
Biscayne Natl
Year__1990
Frame__ 32
Scale 1: 5
Res 0.05023cm
Disc c:\mpx\
bp01Fr32.Y90

TACHOMETER

Species 4
Colonies 4

Points 278
A 13.cm²
P 19.cm

More Photo Frames (Y/N): ☐



C.I.A.

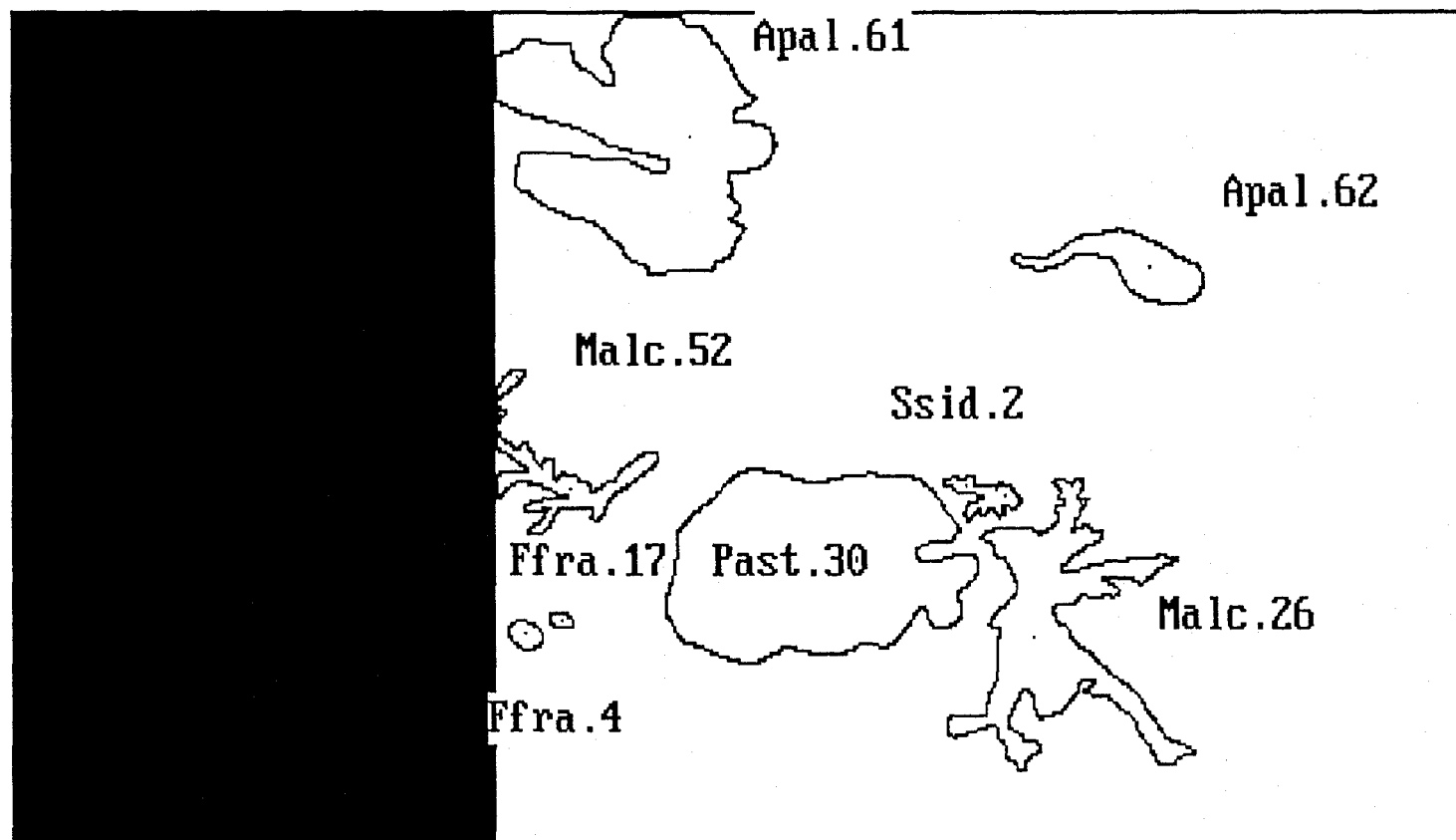
Biscayne Natl
Year____1990
Frame____33
Scale 1: 5
Res 0.05141cm
Disc c:\mpx\
bp01Fr33.Y90

TACHOMETER

Species 2
Colonies 5

Points 277
A 18.cm²
P 20.cm

More Photo Frames (Y/N): ☐



C.I.A.

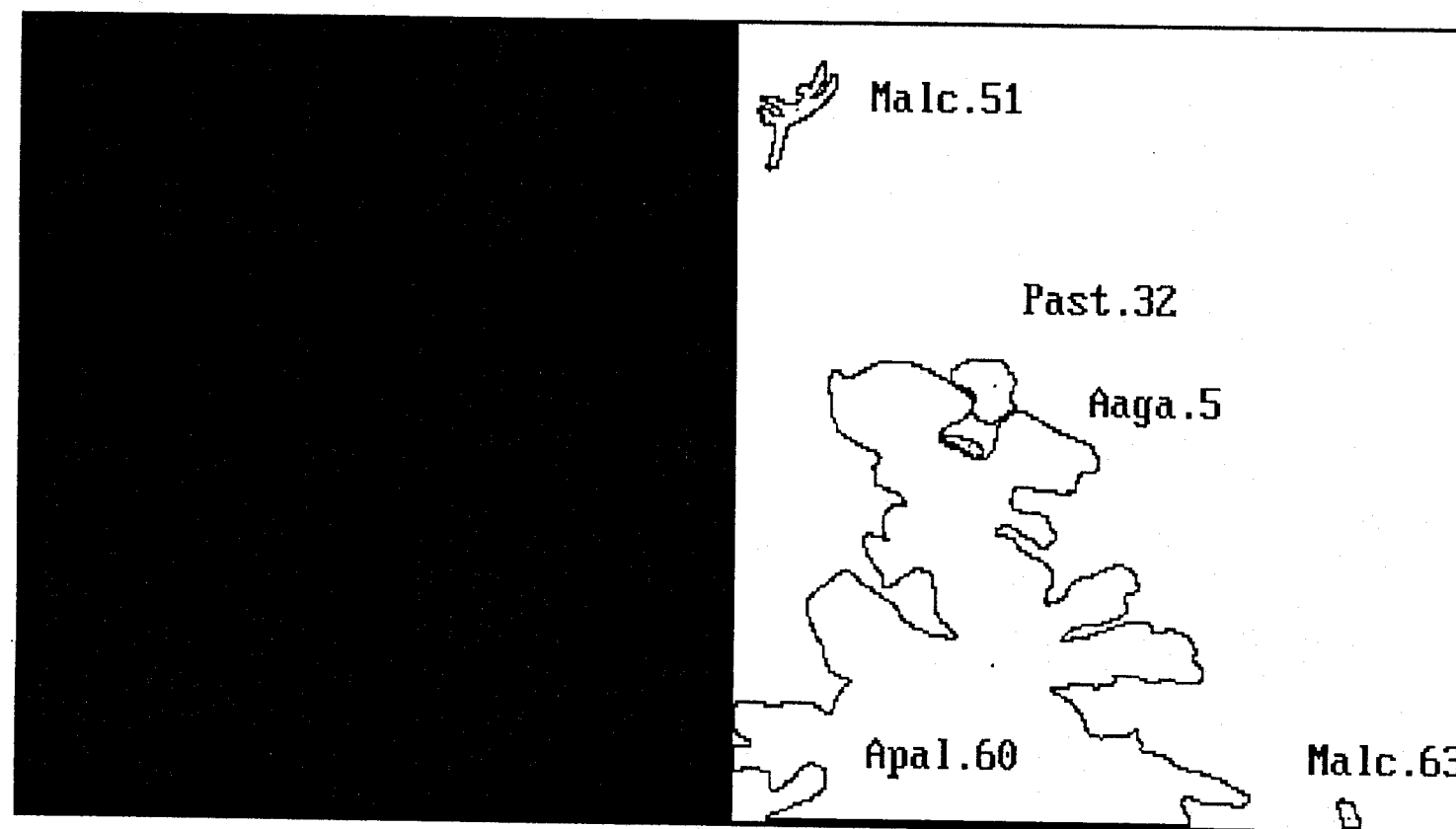
Biscayne Natl
Year__1990
Frame__36
Scale 1: 4
Res 0.03423cm
Disc c:\mpx\
bp01Fr36.Y90

TACHOMETER

Species 5
Colonies 8

Points 1920
A 104.cm²
P 115.cm

More Photo Frames (Y/N): ☐



C.I.A.

Biscayne Natl
Year 1990
Frame 34
Scale 1: 5
Res 0.03425cm
Disc c:\mpx\
bp01Fr34.Y90

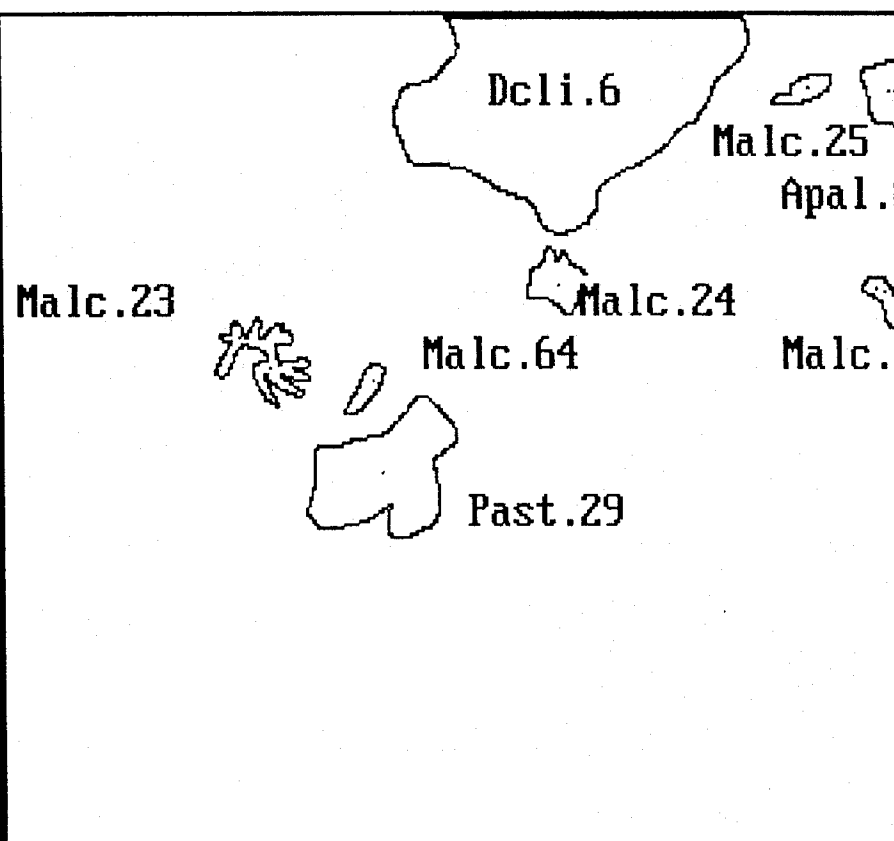
TACHOMETER

Species 4
Colonies 5

Points 633
A 15.cm²
P 39.cm

More Photo Frames (Y/N):

C.I.A.



Biscayne Natl

Apal.61Year__1990

Frame__35

Scale 1: 4

Malc.52Res 0.03398cm

Disc c:\mpx\

bp01Fr35.Y90

TACHOMETER

Species 4

Colonies 8

Points 489

A 64.cm²

P 39.cm

More Photo Frames (Y/N):