



THE BIRDS OF THE SML RICE FIELDS IN SURINAME

APPENDIX

by

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FOREWORD

This appendix contains all the raw data collected by Peter Hicklin and Arie Spaans on the species, numbers and diets of birds which use the SML rice fields in Suriname, South America, between 9-19 November, 1989. Most of the data were collected from rice fields at different stages of cultivation. However, we concentrated our activities in recently flooded fields and in flooded fields which had been recently harrowed or plowed (or were in the process of being harrowed and plowed) or recently seeded. Those were the habitat types where birds were concentrated and, since we hoped to document as many species and numbers as possible in the short time we had to work, we concentrated our surveys in those fields.

This appendix also contains data on the numbers of birds using secondary irrigation and drainage canals and abandoned rice fields in order to i) increase the numbers of habitats surveyed, and available to birds, in cultivated rice fields, and ii) document the changes in the bird community using these areas when the cultivated fields are abandoned.

We prepared this appendix to accompany our CWS Technical Report with the expectation and hope that the SML rice fields will again be surveyed in later years so that any impact of rice cultivation activities on bird populations can be accurately assessed by making direct comparison with the data contained herein.

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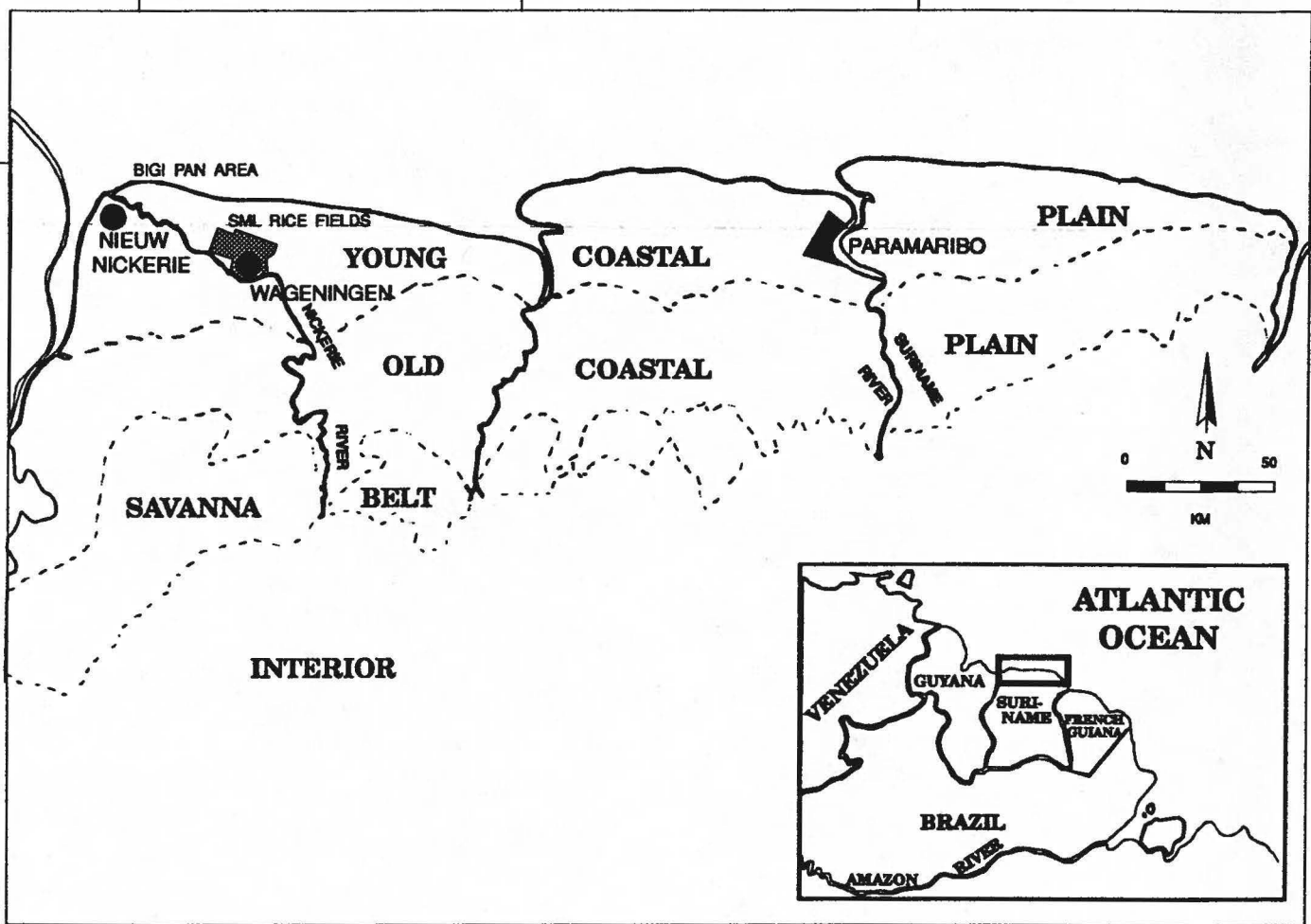
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Map 2. Map of the SML rice fields. Shaded areas indicate the fields which were surveyed for birds in this study. Each field number is indicated by a prefix and asuffix (shown at the base of each row of fields, beginning with number 1 (e.g. 32/1, 32/2...,32/6). Each field is subdivided into two or more parallel plots. Irrigation and drainage canals are indicated by full and dashed lines, respectively.

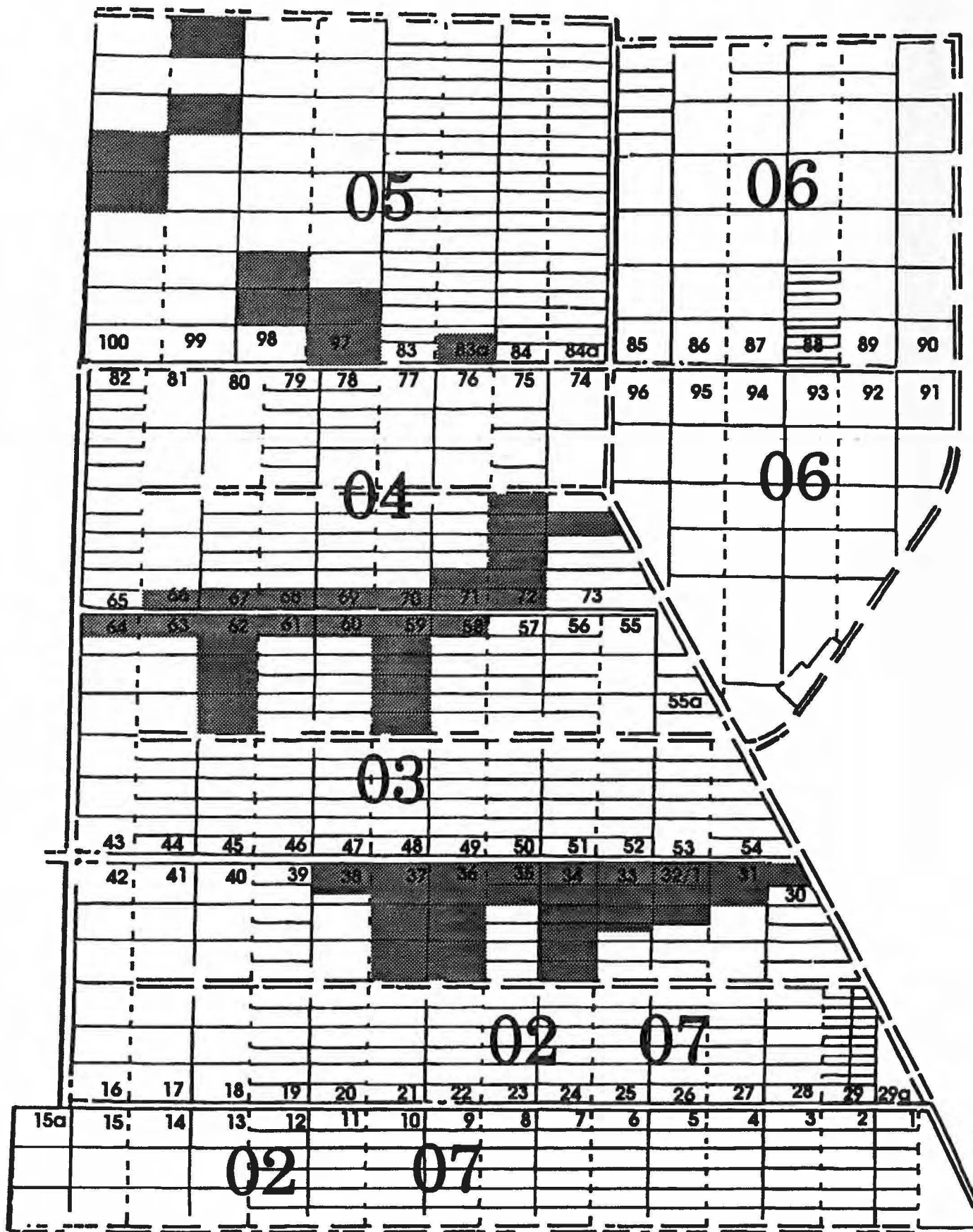




Figure 1. Technician at a newly-seeded rice field.



Figure 2. Arie Spaans searching for shorebirds in newly-seeded rice field.



Figure 3. Recently-harrowed rice field with tractor and harrow in adjoining field (upper left).



Figure 4. Harvested rice field being plowed and Arie Spaans (left) counting birds.

Appendix 1a. Numbers and species of birds using the SML rice fields between Wageningen and Coronie on 9-19 November, 1989.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 30/1

AREA: 8.3 ha

NO. SPECIES: 0

DATE: 9 November, 1989

TIME: 0830

TOTAL BIRDS: 0

SPECIES *NUMBERS*

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Ripe rice ready for harvest.

REMARKS: Not formally surveyed but we did not see any birds from the car. Harvesting of this plot was scheduled for 13 November.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 31/1

AREA: 26 ha

NO. SPECIES: 4

DATE: 10 November, 1989

TIME: 1345-1430

TOTAL BIRDS: 19

SPECIES

NUMBERS

White-necked Heron.....	1
Great Egret.....	7
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	1
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	10
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Harvested and burned field with stubble; partly rain-flooded.

REMARKS: This field was harvested on 29 October. We surveyed it on 10 November. We did not see any birds in this field from the car on 9 November. The Crake was originally identified as a "small rail with orange legs".

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 32/1

AREA: 13 ha

NO. SPECIES: 10

DATE: 9 November, 1989

TIME: 0845-1015

TOTAL BIRDS: 173

SPECIES NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	5
Little Blue Heron.....	1
Cattle Egret.....	140
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	3
Lesser Yellowlegs.....	8
Solitary Sandpiper.....	0
Spotted Sandpiper.....	1
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	5
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	8
Yellow-billed Tern.....	1
Large-billed Tern.....	1

HABITAT: Recently flooded field with 5 - 10 cm water.

REMARKS: This field was flooded on 6 November. The Cattle Egrets were mainly on the edge of the rice field near a ditch with *Phragmites*. The observation of a Yellow-billed Tern was of a single bird flying.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 32/2

AREA: 13 ha

NO. SPECIES: 8

DATE: 9 November, 1989

TIME: 0900-1000

TOTAL BIRDS: 707

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	4
Little Blue Heron.....	1
Cattle Egret.....	447
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	6
Greater Yellowlegs.....	47
Lesser Yellowlegs.....	190
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	11
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	1
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently flooded field with 2 - 3 cm water on average.

REMARKS: This field was flooded on 6 November. The Cattle Egrets were mainly on the edge of the rice field near a ditch with *Phragmites*. There were probably a few more Snowy Egrets than the four we identified.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 32/3

AREA: 13 ha

NO. SPECIES: 1

DATE: 9 November, 1989

TIME: 0915-0945

TOTAL BIRDS: 1

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	1
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently flooded field.

REMARKS: This field was flooded on 6 November. It looked dry from the dam and we walked through half of the first plot (3.25 ha) to survey birds. The single Solitary Sandpiper was flying when seen.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 33/1

AREA: 13 ha

NO. SPECIES: 1

DATE: 9 November, 1989

TIME: 1030-1045

TOTAL BIRDS: 3

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	3
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently flooded and harrowed field with 5 - 10 cm water.

REMARKS: This field was flooded on 4 November and harrowed on 7 November. Two of the three Gull-billed Terns were flying when seen.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 33/2

AREA: 13 ha

NO. SPECIES: 3

DATE: 9 November, 1989

TIME: 1045

TOTAL BIRDS: 4

SPECIES	NUMBERS
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White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	1
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	1
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	2
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently flooded and harrowed field with 5 - 10 cm water.

REMARKS: This field was flooded on 4 November and harrowed on 7 November. The Little Blue Heron and Yellow-crowned Night-Heron were along the edge of the field.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 33/3

AREA: 13 ha

NO. SPECIES: 6

DATE: 9 November, 1989

TIME: 1045-1100

TOTAL BIRDS: 805

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	1
Snowy Egret.....	15
Little Blue Heron.....	1
Cattle Egret.....	285
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	12
Lesser Yellowlegs.....	491
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Partly flooded and harrowed stubble field.

REMARKS: This field was flooded on 4 November and harrowed on 7 November. The Cattle Egrets were along the back edge of the field. The Greater Yellowlegs and 41 Lesser Yellowlegs were feeding at the very back edge of the field and the remainder of the Lessers flew in at 1200 hrs.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 34/1

AREA: 13 ha

NO. SPECIES: 0

DATE: 9 November, 1989

TIME: 1130-1200

TOTAL BIRDS: 0

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded and recently harrowed
(or plowed) field with 20 cm water.

REMARKS: This field was harrowed (or
plowed) on 6 or 7 November. We did not
see any birds in this field.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 34/2

AREA: 13 ha

NO. SPECIES: 1

DATE: 9 November, 1989

TIME: 1200

TOTAL BIRDS: 2

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	2
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded and recently harrowed (or plowed) field with 20 cm water.

REMARKS: This field was harrowed (or plowed) on 6 or 7 November.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 34/3

AREA: 13 ha

NO. SPECIES: 4

DATE: 9 November, 1989

TIME: 1200-1230

TOTAL BIRDS: 10

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	5
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	1
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	1
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	3
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded and recently harrowed (or plowed) field with 10 cm water and 10-20% and 5-10% exposed mud in the two plots.

REMARKS: This field was harrowed (or plowed) on 6 or 7 November. All the birds were in the first plot.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 34/4

AREA: 13 ha

NO. SPECIES: 3

DATE: 9 November, 1989

TIME: 1400-1430

TOTAL BIRDS: 24

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	8
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	15
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	1
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded and recently harrowed (or plowed) field with <5 cm water and 20-25% exposed mud in the plots.

REMARKS: This field was harrowed (or plowed) on 6 or 7 November. All the birds were in the second plot.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 34/5

AREA: 13 ha

NO. SPECIES: 3

DATE: 9 November, 1989

TIME: 1430

TOTAL BIRDS: 7

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	2
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	1
Lesser Yellowlegs.....	4
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded and recently harrowed (or plowed) field with <5 cm water and 35-40% and 25% exposed mud in the two plots.

REMARKS: This field was harrowed (or plowed) on 6 or 7 November. All the birds were in the first plot.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 34/6

AREA: 10.4 ha

NO. SPECIES: 2

DATE: 9 November, 1989

TIME: 1445

TOTAL BIRDS: 25

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	3
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	22
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded and recently harrowed (or plowed) field with 15 cm water and 5% exposed mud.

REMARKS: This field was harrowed (or plowed) on 6 or 7 November. All the birds were in the second plot.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 35/1, 35/2

AREA: 26 ha

NO. SPECIES: 0

DATE: 9 November, 1989

TIME: 1500

TOTAL BIRDS: 0

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Ripe rice ready for harvest.
Fields dry.

REMARKS: Harvesting of these fields was planned for 21 November. We did not find any birds.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 36/1 (plots 1-3) AREA: 19.5 ha NO. SPECIES: 15

DATE: 9 November, 1989 TIME: 1530-1600 TOTAL BIRDS: 96

SPECIES *NUMBERS*

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	2
Little Blue Heron.....	4
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	9
Lesser Golden Plover.....	18
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	4
Greater Yellowlegs.....	14
Lesser Yellowlegs.....	28
Solitary Sandpiper.....	1
Spotted Sandpiper.....	1
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	2
Least Sandpiper.....	1
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	1
Common Snipe.....	0
Gull-billed Tern.....	1
Yellow-billed Tern.....	9
Large-billed Tern.....	1

HABITAT: Partly flooded field with < 10 cm water and 30%, 5% and 20% exposed mud in the three plots, respectively.

REMARKS: On this date, we only surveyed the first three plots; the fourth was censused on 10 November. The Large-billed Tern was flying when seen.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 36/1 (plot 4)

AREA: 6.5 ha

NO. SPECIES: 3

DATE: 10 November, 1989

TIME: 0855-0905

TOTAL BIRDS: 23

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	9
Lesser Golden Plover.....	4
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	10
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded field with 10 cm water and 30% exposed mud.

REMARKS: Only the fourth plot was censused. The other three plots were surveyed on 9 November. Nine of the Greater Yellowlegs flew in at 0920 hrs.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 36/2

AREA: 26 ha

NO. SPECIES: 5

DATE: 10 November, 1989

TIME: 0855-0945

TOTAL BIRDS: 125

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	48
Lesser Golden Plover.....	30
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	22
Lesser Yellowlegs.....	24
Solitary Sandpiper.....	1
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded field with <10 cm water and 5%, 20%, 40% and 50% exposed mud on the three plots surveyed.

REMARKS:

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 36/3

AREA: 23.4 ha

NO. SPECIES: 12

DATE: 10 November, 1989

TIME: 0915-0945

TOTAL BIRDS: 137

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	9
Snowy Egret.....	7
Little Blue Heron.....	0
Cattle Egret.....	1
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	10
Lesser Golden Plover.....	4
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	12
Lesser Yellowlegs.....	3
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	4
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	1
Common Snipe.....	0
Gull-billed Tern.....	42
Yellow-billed Tern.....	37
Large-billed Tern.....	7

HABITAT: Flooded field with 10+ cm, 5 cm, 5-10 cm and 10 cm water on the four plots surveyed and 0%, <5%, 30%, and 75% exposed mud, respectively. The last three plots were being harrowed during the survey.

REMARKS: All the Gull-billed Terns and most of the Yellow-billed Terns (30) and Large-billed Terns (5) appeared to be attracted to these fields, from elsewhere, by the harrowing process. One of the Lesser Golden Plovers and all four Least Sandpipers were flying when seen.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 37/1

AREA: 25.5 ha

NO. SPECIES: 5

DATE: 10 November, 1989

TIME: 1015-1045

TOTAL BIRDS: 15

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	7
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	1
Lesser Golden Plover.....	1
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	5
Lesser Yellowlegs.....	1
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded and recently harrowed field with 10 cm, < 10 cm, 10 cm and > 10 cm water on the four plots surveyed and 2%, <5%, 25% and <5% exposed mud, respectively.

REMARKS: This field was harrowed on 9 November.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 37/2

AREA: 26 ha

NO. SPECIES: 7

DATE: 10 November, 1989

TIME: 1045-1115

TOTAL BIRDS: 111

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	14
Little Blue Heron.....	1
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	2
Lesser Golden Plover.....	23
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	28
Lesser Yellowlegs.....	40
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	3
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded and recently harrowed field with 10 cm water (but fourth plot deeper) and <1%, 8%, 10% and 3% exposed mud, respectively.

REMARKS: This field was harrowed on 9 November. Three Snowy Egrets counted in the first plot might have been three egrets which flew out of the fourth plot of field 37.1 Also the three Least Sandpipers were flying when first seen.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 37/3

AREA: 23.4 ha

NO. SPECIES: 5

DATE: 10 November, 1989

TIME: 1115-1130

TOTAL BIRDS: 18

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	3
Lesser Golden Plover.....	1
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	3
Greater Yellowlegs.....	9
Lesser Yellowlegs.....	2
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Ruddy Turnstone.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded and recently harrowed field with > 10 cm, 10-15 cm, 10-15 cm and 5-10 cm water and < 1%, 3%, 3%, and 5% exposed mud, respectively, on the four plots surveyed.

REMARKS: This field was harrowed on 9 November. The three Jacanas were flying over the field when they were seen.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 38/1

AREA: 19 ha

NO. SPECIES: 4

DATE: 10 November, 1989

TIME: 1200*

TOTAL BIRDS: 25

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	1
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	15
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	1
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	8
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: This field was recently harvested and partly burned with 40 cm high stubble remaining. The field was partly rain-flooded.

REMARKS: *We surveyed only the first 3 plots of this field; the first plot was surveyed at 1200 hrs and the second and third plots from 1445 to 1515 hrs. This field was harvested on 13 October. The Crake was originally identified as a "small rail with orange legs".

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 58/1

AREA: 13 ha

NO. SPECIES: 0

DATE: 11 November, 1989

TIME: 1400

TOTAL BIRDS: 0

<i>SPECIES</i>	<i>NUMBERS</i>
White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Ripe rice ready for harvest.

REMARKS: This field was not formally surveyed but we did not see any birds from the car.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 59/1 - 59/6

AREA: 75.4 ha

NO. SPECIES: 2

DATE: 11 November, 1989

TIME: 1415-1515

TOTAL BIRDS: 5

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	1
Spotted Sandpiper.....	4
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded and harrowed (or plowed) fallow fields with 20 and 20-30 cm water and no exposed mud except for < 1% in the second plot of field 59/3 and a few grassy patches in the second plot of field 59/1.

REMARKS: These fields were flooded (after having been harrowed twice before) from 18 to 21 October, harrowed or plowed on 2 or 3 November and from 4 to 7 November and sprayed with Brestan on 10 November. Seeding was scheduled for 13 November. The five birds were only seen in field 59/1 and in the first plot of field 59/3.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 60/1

AREA: 13 ha

NO. SPECIES: 0

DATE: 11 November, 1989

TIME: 1530

TOTAL BIRDS: 0

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Ripe rice ready for harvest.

REMARKS: This field was not formally surveyed but we did not see any birds from the car.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 61/1

AREA: 13 ha

NO. SPECIES: 0

DATE: 11 November, 1989

TIME: 1530

TOTAL BIRDS: 0

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Ripe rice ready for harvest.

REMARKS: This field was not formally surveyed but we did not see any birds from the car.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 62/1

AREA: 26 ha

NO. SPECIES: 10

DATE: 11-12 November, 1989

TIME: 1530-1545

TOTAL BIRDS: 532

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	39
Snowy Egret.....	6
Little Blue Heron.....	0
Cattle Egret.....	2
Striated Heron.....	0
Black-crowned Night-Heron...	1
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	2
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	1
Greater Yellowlegs.....	48
Lesser Yellowlegs.....	423
Solitary Sandpiper.....	3
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	7
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently flooded field. The first two plots had scattered "spots" with 2 cm water. The third and fourth plots had about 10 cm water and 40% - 50% exposed mud.

REMARKS: This field was flooded (after having been harrowed once before) from 8 to 11 November. The shorebirds on this field were counted on 12 November (0800-0900 hrs). On 11 November (1530-1545 hrs) there were 31 Greater Yellowlegs and 217 Lesser Yellowlegs in 8000 m² of the first plot.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 62/2

AREA: 26 ha

NO. SPECIES: 5

DATE: 12 November, 1989

TIME: 0930-0945

TOTAL BIRDS: 81

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	9
Little Blue Heron.....	0
Cattle Egret.....	43
Striated Heron.....	0
Black-crowned Night-Heron...	1
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	11
Lesser Yellowlegs.....	17
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded field; plots with 30 cm, 30 cm, 20 cm and 15-20 cm water and <1%, 0%, 1% and 25% exposed mud, respectively.

REMARKS: This field was flooded (after having been harrowed once before) from 8 to 10 November. No birds were present in the two central plots and 82% of each species of Yellowlegs seen were in the fourth plot. All the egrets were seen in the vegetation along the edge of the dykes between the fields.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 62/3

AREA: 23.4 ha

NO. SPECIES: 8

DATE: 12 November, 1989

TIME: 0945-1130

TOTAL BIRDS: 114

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	6
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	2
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	1
Greater Yellowlegs.....	13
Lesser Yellowlegs.....	75
Solitary Sandpiper.....	3
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	1
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	13
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded field; plots with 10-20 cm, 15 cm, 10 cm and > 10 cm water, and 90%, 70%, 5% and <5% exposed mud, respectively. The first plot was interspersed with tall grasses.

REMARKS: This field was flooded (after having been harrowed once before) from 8 to 10 November. We walked through the first plot. The two Peregrines were "roosting" on the ground. Over 60% of the shorebirds recorded were seen in the first plot.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 63/1

AREA: 13 ha NO. SPECIES: 2

DATE: 12 November, 1989

TIME: 1145-1200 TOTAL BIRDS: 2

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	1
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	1
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently harrowed field; not flooded except for some rain water (<2 cm).

REMARKS: We surveyed only the first two plots.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 64/1

AREA: 13 ha NO. SPECIES: 0

DATE: 12 November, 1989

TIME: 1200

TOTAL BIRDS: 0

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently harrowed field; not flooded except for some rain water (<2 cm).

REMARKS: This field was not formally surveyed but we did not see any birds from the car in the first two plots, the only plots we were able to scan.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 66/1

AREA: 13 ha NO. SPECIES: 0

DATE: 11 November, 1989

TIME: 1345

TOTAL BIRDS: 0

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently harvested field.

REMARKS: This field was not formally surveyed but we did not see any birds from the car in the first two plots, the only plots we were able to scan.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 67/1

AREA: 13 ha NO. SPECIES: 0

DATE: 11 November, 1989

TIME: 1345

TOTAL BIRDS: 0

SPECIES NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently harvested field.

REMARKS: This field was not formally surveyed but we did not see any birds from the car.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 68/1

AREA: 13 ha

NO. SPECIES: 0

DATE: 11 November, 1989

TIME: 1345

TOTAL BIRDS: 0

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Ripe rice ready for harvest.

REMARKS: This field was not formally surveyed but we did not see any birds from the car.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 69/1

AREA: 13 ha

NO. SPECIES: 0

DATE: 11 November, 1989

TIME: 1330

TOTAL BIRDS: 0

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Ripe rice ready for harvest.

REMARKS: This field was not formally surveyed but we did not see any birds from the car.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 70/1

AREA: 13 ha

NO. SPECIES: 1

DATE: 11 November, 1989

TIME: 1130-1215

TOTAL BIRDS: 1

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	1
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Harvested field (quite dry)
with 40 cm rice stubble.

REMARKS: This field was harvested on 3
and 4 October. The Crake was originally
identified as a "small rail".

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 71/1

AREA: 9.9 ha

NO. SPECIES: 2

DATE: 10 November, 1989

TIME: 1545-1600

TOTAL BIRDS: 2

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	1
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	1
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Harvested and burned field (only partly wet) with 40 cm stubble and 50% green grass.

REMARKS: This field was harvested on 4 or 5 October. The Crake was originally identified as a "rail".

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 71/2

AREA: 13 ha NO. SPECIES: 2

DATE: 10 November, 1989

TIME: 1600-1615 TOTAL BIRDS: 2

SPECIES NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	1
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crane.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	1
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Harvested and burned field
(only partly wet) with 40 cm stubble and
50% green grass.

REMARKS: This field was harvested on 4
or 5 October.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 72/1

AREA: 12.5 ha

NO. SPECIES: 14

DATE: 11 November, 1989

TIME: 0830-0845

TOTAL BIRDS: 170

<i>SPECIES</i>	<i>NUMBERS</i>
White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	20
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	6
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	1
Wattled Jacana.....	40
Greater Yellowlegs.....	5
Lesser Yellowlegs.....	10
Solitary Sandpiper.....	3
Spotted Sandpiper.....	1
Upland Sandpiper.....	1
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	12
Least Sandpiper.....	23
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	10
Yellow-billed Tern.....	37
Large-billed Tern.....	1

HABITAT: Recently flooded and harrowed fallow field with 5 cm water and 50% exposed mud. Harrowing was proceeding in this field during the survey.

REMARKS: This field was flooded (after having been harrowed twice before) between 28 October and 3 November and harrowed on 3 or 4 and on 11 (and 10?) November. The Yellow-billed Terns were roosting when they were seen. Both the Gull-billed and Large-billed Terns were not seen before 0945 hrs.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 72/2

AREA: 13 ha

NO. SPECIES: 10

DATE: 11 November, 1989

TIME: 0845-0945

TOTAL BIRDS: 355

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	1
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	1
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	7
Wattled Jacana.....	42
Greater Yellowlegs.....	1
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	7
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	100
Least Sandpiper.....	150
White-rumped Sandpiper.....	40
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	6
Large-billed Tern.....	0

HABITAT: Recently flooded and harrowed fallow field with 5 - 10 cm water and 20% exposed grassy mud. Harrowing was proceeding during the survey.

REMARKS: This field was flooded (after having been harrowed twice before) between 28 October and 3 November and harrowed on 3 or 4 November and on 11 (and 10?) November. The Semipalmated Sandpipers were mixed with Western Sandpipers. On 10 November, 43 Gull-billed, 15 Yellow-billed and 3 Large-billed Terns were present at 1600 hrs when flooding and harrowing started.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 72/3

AREA: 13 ha

NO. SPECIES: 8

DATE: 11 November, 1989

TIME: 1000-1045

TOTAL BIRDS: 18

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	1
Osprey.....	0
(Yellow-breasted) Crake.....	1
Azure Rail.....	1
Limpkin.....	1
Black-bellied Plover.....	4
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	1
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	2
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	2
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	5
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently flooded and harrowed fallow field with 10 cm water and 30% exposed mud.

REMARKS: This field was flooded (after having been harrowed twice before) between 28 October and 3 November and harrowed on 3 or 4 November (and possibly again on 10 or 11 November). We also saw three unidentified rails on the dam.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 72/4

AREA: 13 ha

NO. SPECIES: 2

DATE: 11 November, 1989

TIME: 1000-1045

TOTAL BIRDS: 5

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	3
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	2
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Ruddy Turnstone.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently flooded and harrowed fallow field with 5-10 cm water and 70% exposed mud.

REMARKS: This field was flooded (after having been harrowed twice before) between 28 October and 3 November and harrowed on 3 or 4 November (and possibly again on 10 or 11 November).

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 72/5

AREA: 13 ha

NO. SPECIES: 5

DATE: 11 November, 1989

TIME: 1045-1130

TOTAL BIRDS: 48

<i>SPECIES</i>	<i>NUMBERS</i>
White-necked Heron.....	0
Great Egret.....	1
Snowy Egret.....	29
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	1
Azure Rail.....	1
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	16
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently flooded and harrowed fallow field with 5 cm water and 15% exposed mud with vegetation throughout. Harrowing was proceeding during the survey.

REMARKS: This field was flooded (after having been harrowed twice before) between 28 October and 3 November and harrowed on 3 or 4 November and on 11 (and possibly on 10) November. The single Crake observed was originally identified by Hicklin as an Ocellated Crake but later corrected as (more likely) having been a Yellow-breasted Crake and the Azure Rail was originally described in Hicklin's notes as a "large black-naped rail".

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 72/6

AREA: 10.4 ha NO. SPECIES: 7

DATE: 11 November, 1989

TIME: 1100-1145 TOTAL BIRDS: 79

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	9
Snowy Egret.....	8
Little Blue Heron.....	1
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	36
Greater Yellowlegs.....	2
Lesser Yellowlegs.....	8
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	15
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently flooded and harrowed fallow field with 10 cm water and 30% exposed mud with vegetation throughout but less densely vegetated than in field 72/5.

REMARKS: This field was flooded (after having been harrowed twice before) between 28 October and 3 November and harrowed on 3 or 4 November (and possibly again on 10 or 11 November).

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 73/5

AREA: 15 ha

NO. SPECIES: 10

DATE: 12 November, 1989

TIME: 1200-1230

TOTAL BIRDS: 1,837

SPECIES

NUMBERS

White-necked Heron.....	3
Great Egret.....	243
Snowy Egret.....	143
Little Blue Heron.....	1
Cattle Egret.....	3
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	4
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	150
Lesser Yellowlegs.....	950
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	40
Yellow-billed Tern.....	300
Large-billed Tern.....	0

HABITAT: Flooded and harrowed field with a few cm water. One of the plots was being levelled.

REMARKS: This field was flooded (after having been harrowed twice before) from 25 to 29 October and harrowed on 2 November and from 10 to 12 November. Of the 1100 Yellowlegs, 12% were Greater, on average. The day following this survey, on 13 November, the fields were flooded with more water and no birds were present.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 83A/1, 83A/2

AREA: 16.5 ha

NO. SPECIES: 10

DATE: 17 November, 1989

TIME: 1115-1215

TOTAL BIRDS: 205

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	2
Snowy Egret.....	10
Little Blue Heron.....	2
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	4
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	1
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	10
Greater Yellowlegs.....	45
Lesser Yellowlegs.....	128
Solitary Sandpiper.....	2
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	1
Large-billed Tern.....	0

HABITAT: The first plot of field number 83A/1 and field number 83A/2 were flooded and harrowed with 10-15 cm and 15-20 cm water, respectively, and 10% and 15% exposed mud, respectively. The second plot of field number 83A/1 was flooded with 80% emergent vegetation and stubble with a 10-20 cm deep and 10 m-wide strip of water in the center which had been harrowed.

REMARKS: These fields were flooded on 8 November and harrowed 13, 14 or 15, November. In field number 83A/2, we surveyed only the first plot and we walked through the second plot of field number 83A/1. The Crakes were originally identified as "small rails with orange legs".

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 97/1

AREA: 29.25 ha NO. SPECIES: 7

DATE: 18 November, 1989

TIME: 0900-1000 TOTAL BIRDS: 41

SPECIES NUMBERS

White-necked Heron.....	0
Great Egret.....	1
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	1
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	6
Solitary Sandpiper.....	1
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	1
Least Sandpiper.....	26
White-rumped Sandpiper.....	5
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently-seeded flooded field with 10 cm, <10 cm and 10 cm water, respectively, and 30%, 50% and 60% exposed mud, respectively. The mud was very soft.

REMARKS: This field was seeded on 16 November. We walked through the first and third plots to look for small shorebirds. Except for 1 Least Sandpiper in the first plot, all the birds were in the third plot.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 97/2

AREA: 19.5 ha

NO. SPECIES: 11

DATE: 18 November, 1989

TIME: 0900-1000

TOTAL BIRDS: 466

SPECIES NUMBERS

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	41
Lesser Golden Plover.....	1
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	9
Wattled Jacana.....	0
Greater Yellowlegs.....	2
Lesser Yellowlegs.....	5
Solitary Sandpiper.....	1
Spotted Sandpiper.....	1
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	1
Sanderling.....	0
Semipalmated Sandpiper.....	15
Least Sandpiper.....	321
White-rumped Sandpiper.....	69
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently-seeded flooded field with 10 cm water and 70%, 70% and 80% exposed mud in the three plots surveyed.

REMARKS: This field was seeded on 17 November. Both plots 1 and 3 were walked through but not plot number 2 (9.75 ha, 10 cm water and 70% exposed mud). The birds seen in plot 2 were 17 Black-bellied Plovers, 1 Lesser Yellowlegs and 4 Least Sandpipers but because it was not surveyed carefully like the other two, the results from plot 2 are not included in the totals above nor incorporated in the list.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 98/2

AREA: 29.25 ha NO. SPECIES: 8

DATE: 14 November, 1989

TIME: 1400-1445 TOTAL BIRDS: 1,839

SPECIES

NUMBERS

White-necked Heron.....	2
Great Egret.....	1305
Snowy Egret.....	62
Little Blue Heron.....	2
Cattle Egret.....	450
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	2
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	11
Lesser Yellowlegs.....	5
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded fallow field with 10 cm, 10 cm and 5 cm water and 20%, 0% and 90% exposed mud, respectively. Emergent vegetation throughout with up to 80% - 90% coverage in the second plot. In the third plot, two tractors were busy harrowing.

REMARKS: This field was flooded (after having been harrowed once before) on 8 November. Most of the birds were seen in the second and third plots. Hicklin wrote in his notes during the survey that " #98/1 had many shorebirds yesterday but none today". In other words, there were likely a lot more Yellowlegs in these fields the previous day but more egrets and herons on this day when we undertook the survey. Could this be due to the extensive harrowing activities on this field?

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 98/3

AREA: 29.25 ha NO. SPECIES: 10

DATE: 14 November, 1989

TIME: 1445-1530 TOTAL BIRDS: 254

SPECIES NUMBERS

White-necked Heron.....	0
Great Egret.....	29
Snowy Egret.....	1
Little Blue Heron.....	1
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	1
Peregrine Falcon.....	1
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	1
Black-bellied Plover.....	22
Lesser Golden Plover.....	4
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	107
Lesser Yellowlegs.....	87
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Recently flooded and harrowed (or plowed) field with 10 cm water and 25%, <10% and 5% exposed mud in the three plots surveyed and 5-10% (third plot) to 15% (first and second plots) emergent vegetation.

REMARKS: This field was flooded (after having been harrowed once before) on 8 November and harrowed (or plowed) on 14 November. The Peregrine Falcon was an adult female.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 99/7

AREA: 29.25 ha NO. SPECIES: 8

DATE: 13 November, 1989

TIME: 1145-1230 TOTAL BIRDS: 24

<i>SPECIES</i>	<i>NUMBERS</i>
White-necked Heron.....	0
Great Egret.....	1
Snowy Egret.....	1
Little Blue Heron.....	2
Cattle Egret.....	0
Striated Heron.....	1
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	3
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	4
Lesser Yellowlegs.....	1
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	11
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded field with >2 cm water and growing, recently-seeded (10-15 cm) rice. Some parts of the field were dry (local patches) and the first plot was greener than the other two.

REMARKS: This field was seeded on 3 November after having been sprayed with Brestan against *Pomacea* snails on 1 November. Least Sandpipers were counted from small dykes between the plots. The total area censused this way was 7.31 ha.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 99/9

AREA: 29.25 ha NO. SPECIES: 9

DATE: 13 November, 1989

TIME: 1045-1115 TOTAL BIRDS: 122

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	12
Snowy Egret.....	4
Little Blue Heron.....	1
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	3
Collared Plover.....	1
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	32
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	2
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	4
Semipalmated Sandpiper.....	0
Least Sandpiper.....	63
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Flooded field with 2 cm water and growing, recently-seeded (5-10 cm) rice. Some parts of the fields were dry (local patches).

REMARKS: This field was seeded on 3 November after having been sprayed with Brestan against *Pomacea* snails on 1 November. Least and Spotted Sandpipers were counted from the small dykes between the fields. The total area covered this way was 14.63 ha. The Sanderlings were seen "swimming" for a while.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 100/5

AREA: 29.25 ha NO. SPECIES: 3

DATE: 13 November, 1989

TIME: 0845-0915 TOTAL BIRDS: 305

SPECIES

NUMBERS

White-necked Heron.....	4
Great Egret.....	250
Snowy Egret.....	51
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Harvested and burned field with grasses and some growing rice from rhizomorph growth, not from seed (90%, 20% and <5%, respectively). Some rain water on the fields.

REMARKS: This field was harvested on 3 September and left as fallow land afterwards. Most of the Great Egrets were seen in the first plot; no shorebirds were present. Many *Pomacea* snail shells were seen. We walked through the second and third plots.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

FIELD NO: 100/6

AREA: 29.25 ha NO. SPECIES: 8

DATE: 13 November, 1989

TIME: 0915-1045 TOTAL BIRDS: 164

SPECIES NUMBERS

White-necked Heron.....	1
Great Egret.....	12
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	1
(Yellow-breasted) Crake.....	0
Azure Rail.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	1
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	1
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	2
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	144
White-rumped Sandpiper.....	2
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Harvested and burned field with grasses and some growing rice from rhizomorph growth, not from seed (5%, 5-10%, and 1%, respectively). Some rain water on the fields.

REMARKS: This field was harvested on 3 September and left as fallow land afterwards. All three plots were walked through by both observers. Small dead fish were seen in a ditch.

Appendix 1b. Numbers and species of birds using the irrigation and drainage canals of the SML rice fields in Wageningen.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

CANAL: Between 30 - 31 LENGTH: 1.2 km NO. SPECIES: 3

DATE: 18 November, 1989 TIME: 1545-1615 TOTAL BIRDS: 7

<i>SPECIES</i>	<i>NUMBERS</i>	
White-necked Heron.....	0	HABITAT: Secondary irrigation canal with 10% emergent vegetation and three small trees lining the canal.
Great Egret.....	0	
Snowy Egret.....	0	
Little Blue Heron.....	0	
Cattle Egret.....	0	
Striated Heron.....	1	
Black-crowned Night-Heron...	0	
Yellow-crowned Night-Heron..	0	
Blue-winged Teal.....	0	
Peregrine Falcon.....	0	
Osprey.....	0	REMARKS: The single Snail Kite was seen in one of the trees along the canal. The fields on both sides of the canal were covered in rice stubble.
(Yellow-breasted) Crake.....	0	
Snail Kite.....	1	
Azure Rail.....	0	
Purple Gallinule.....	0	
Limpkin.....	0	
Black-bellied Plover.....	0	
Lesser Golden Plover.....	0	
Collared Plover.....	0	
Wilson's Plover.....	0	
Semipalmated Plover.....	0	
Wattled Jacana.....	5	
Greater Yellowlegs.....	0	
Lesser Yellowlegs.....	0	
Solitary Sandpiper.....	0	
Spotted Sandpiper.....	0	
Upland Sandpiper.....	0	
Hudsonian Godwit.....	0	
Ruddy Turnstone.....	0	
Sanderling.....	0	
Semipalmated Sandpiper.....	0	
Least Sandpiper.....	0	
White-rumped Sandpiper.....	0	
Stilt Sandpiper.....	0	
Common Snipe.....	0	
Gull-billed Tern.....	0	
Yellow-billed Tern.....	0	
Large-billed Tern.....	0	

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

CANAL: Between 31-32

LENGTH: 1.2 km

NO. SPECIES: 4

DATE: 18 November, 1989

TIME: 1545-1600

TOTAL BIRDS: 15

SPECIES

NUMBERS

White-necked Heron.....	0
Great Egret.....	1
Snowy Egret.....	1
Little Blue Heron.....	1
Cattle Egret.....	0
Striated Heron.....	12
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Snail Kite.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	0
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Secondary drainage canal with 10% emergent vegetation and four small trees at the end.

REMARKS: On one side of the canal was a rice field with stubble while harrowing with a tractor was proceeding on the other side.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

CANAL: Between 55-55A

LENGTH: 1.2 km

NO. SPECIES: 5

DATE: 17 November, 1989

TIME: 1500-1530

TOTAL BIRDS: 32

<i>SPECIES</i>	<i>NUMBERS</i>
White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	1
Striated Heron.....	5
Black-crowned Night-Heron...	12
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Snail Kite.....	0
Azure Rail.....	0
Purple Gallinule.....	12
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	2
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Secondary irrigation canal with two trees at the end.

REMARKS: All birds except the Striated Herons and the Wattled Jacanas were in the trees at the end of the canal. The fields on either side of the canal were i) flooded and grassy (#55A) and ii) with ripe rice (#55).

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

CANAL: Between 55-56

LENGTH: 1.2 km

NO. SPECIES: 9

DATE: 17 November, 1989

TIME: 1445-1500

TOTAL BIRDS: 52

<i>SPECIES</i>	<i>NUMBERS</i>
White-necked Heron.....	0
Great Egret.....	2
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	3
Striated Heron.....	9
Black-crowned Night-Heron...	13
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Snail Kite.....	1
Azure Rail.....	5
Purple Gallinule.....	17
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	1
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	1

HABITAT: Secondary drainage canal with the last 150 metres covered with vegetation. There was on tree at the 400 m mark and two trees at the end.

REMARKS: Of the birds seen, 2 Great Egrets, 3 Cattle Egrets, 1 Striated Heron, 12 Black-crowned Night-Herons, 1 Snail Kite, 1 Azure Rail and 17 Purple Gallinules were in the trees at the end. The surrounding fields consisted of i) ripe rice (#55) and ii) were flooded (#56).

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

CANAL: Between 71-72

LENGTH: 1.2 km

NO. SPECIES: 3

DATE: 18 November, 1989

TIME: 1200-1230

TOTAL BIRDS: 53

SPECIES	NUMBERS
---------	---------

White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	4
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Snail Kite.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	1
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	48
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Secondary drainage canal with 90% emergent vegetation, mainly water hyacinths, and one tree.

REMARKS: The fields surrounding this canal were all flooded and harrowed.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

CANAL: Between 72-73

LENGTH: 1.2 km

NO. SPECIES: 3

DATE: 18 November, 1989

TIME: 1145-1215

TOTAL BIRDS: 9

SPECIES	NUMBERS
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White-necked Heron.....	0
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Snail Kite.....	0
Azure Rail.....	1
Purple Gallinule.....	0
Limpkin.....	2
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	6
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	0
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Secondary irrigation canal with
<10% emergent vegetation and no trees.

REMARKS: The fields surrounding this canal were all flooded and harrowed. Beside the Limpkin in the canal, we saw another one, just beside the canal, which was not recorded because of its location.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

CANAL: Between 83A-84

LENGTH: 1.2 km

NO. SPECIES: 5

DATE: 19 November, 1989

TIME: 0800-0815

TOTAL BIRDS: 15

SPECIES	NUMBERS
---------	---------

White-necked Heron.....	0
Great Egret.....	3
Snowy Egret.....	1
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	1
Black-crowned Night-Heron...	0
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Snail Kite.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	9
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	1
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Secondary irrigation canal with
20 - 25 % emergent vegetation and no trees.

REMARKS: Counts were started from the
second plots of fields 83A and 84. The
fields surrounding this canal were harvested
and flooded with some harrowing done. One
adult male Peregrine Falcon was seen flying
over the canal.

BIRDS USING THE SML RICE FIELDS IN WAGENINGEN, SURINAME

CANAL: Between 84-84A

LENGTH: 1.2 km

NO. SPECIES: 4

DATE: 19 November, 1989

TIME: 0815-0830

TOTAL BIRDS: 10

<i>SPECIES</i>	<i>NUMBERS</i>
----------------	----------------

White-necked Heron.....	1
Great Egret.....	0
Snowy Egret.....	0
Little Blue Heron.....	0
Cattle Egret.....	0
Striated Heron.....	0
Black-crowned Night-Heron...	1
Yellow-crowned Night-Heron..	0
Blue-winged Teal.....	0
Peregrine Falcon.....	0
Osprey.....	0
(Yellow-breasted) Crake.....	0
Snail Kite.....	0
Azure Rail.....	0
Purple Gallinule.....	0
Limpkin.....	0
Black-bellied Plover.....	0
Lesser Golden Plover.....	0
Collared Plover.....	0
Wilson's Plover.....	0
Semipalmated Plover.....	0
Wattled Jacana.....	5
Greater Yellowlegs.....	0
Lesser Yellowlegs.....	0
Solitary Sandpiper.....	0
Spotted Sandpiper.....	3
Upland Sandpiper.....	0
Hudsonian Godwit.....	0
Ruddy Turnstone.....	0
Sanderling.....	0
Semipalmated Sandpiper.....	0
Least Sandpiper.....	0
White-rumped Sandpiper.....	0
Stilt Sandpiper.....	0
Common Snipe.....	0
Gull-billed Tern.....	0
Yellow-billed Tern.....	0
Large-billed Tern.....	0

HABITAT: Secondary drainage canal with
<5% emergent vegetation and no trees.

REMARKS: The fields surrounding this
canal were flooded and partially harrowed.

Appendix 1c. Numbers and species of birds using the *Typha* marshes which were converted to rice fields but never actually used as rice fields (i.e. abandoned) between Wageningen and Coronie on 9-19 November, 1989.

**BIRDS IN THE ABANDONNED RICE FIELDS
OF CORONIE-WAGENINGEN, SURINAME**

FIELD NO: Buckleberry

AREA: 23 ha

DATE: 14 November, 1989

TIME: 0900 - 1130 hrs

HABITAT: *Typha* marshes converted into pre-rice fields (5% *Typha*, 80% *Nymphaea*, 5% other floating vegetation). These fields were converted, but never actually used for rice cultivation.

SPECIES AND NUMBERS COUNTED

Anhinga	1 (in canal)	Azure Rail	5
Striated Heron	4 (3 in canal)	Purple Gallinule	2
Black-bellied Whistling Duck	2	Limpkin	6
White-faced Whistling Duck	8	Wattled Jacana	78
Snail Kite	41	Least Sandpiper	1

OTHER SPECIES

Long-winged Harrier (5), Osprey (outside plots), Brown-throated Parakeet, Smooth-billed Ani, Yellow-throated Spinetail, Pied Water-tyrant, White-headed Marsh-tyrant, Tropical Kingbird, Great Kiskadee, Yellow Oriole, Blue-back Grassquit, Ruddy-breasted Seedeater.

**Appendix 2. Prey items recovered from the digestive tracts of birds collected in the SML
rice fields in Wageningen, Suriname, on 15 and 16 November, 1989.**

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Lesser Yellowlegs **AGE & SEX:** adult female **BIRD NO:** 89-01

DATE: 15 November, 1989 **TIME:** 0910 **FIELD NO:** 98/1

.....
HABITAT

Recently flooded and harrowed field with 10 cm water and < 1 % exposed mud. This field was harrowed on 14 November.

REMARKS

This bird was collected out of a group of 6 birds in the third plot. About 20-30 Yellowlegs in the field.

BIOMETRICS

-wing length:	155.5 mm
-exposed culmen:	37.2 mm
-weight:	76.0 g

MOULT

-primaries:	8x5, 1x3, 1x2
-primary score:	45
-tail (right to left):	1x5, 1x0, 1x2, 6x5, 1x2, 1x0, 1x5
-tail score:	44

PREY ITEMS

Insects	Number
Coleoptera (very small specimens)	ca. 20

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Lesser Yellowlegs **AGE & SEX:** adult male **BIRD NO:** 89-02

DATE: 15 November, 1989 **TIME:** 0910 **FIELD NO:** 98/1

.....
HABITAT

Recently flooded and harrowed field with 10 cm water and <1% exposed mud. This field was harrowed on 14 November.

REMARKS

This bird was collected out of a group of 6 birds in the third plot. About 20-30 Yellowlegs in the field.

BIOMETRICS

-wing length:	159.0 mm
-exposed culmen:	37.2 mm
-weight:	80.0 g

MOULT

-primaries:	6x5, 1x2, 3x0
-primary score:	32
-tail (right to left):	5x0, 2x5, 1x2, 4x0
-tail score:	12

PREY ITEMS

Spiders	Number
Salticidae (juvenile)	1
Lycosidae (juvenile)	1

Insects	
?Orthoptera (pieces of wings only)	2
Coleoptera (very small specimens;	
Curculionidae: 1)	ca. 18
unidentified	1

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Greater Yellowlegs **AGE & SEX:** first year? female **BIRD NO:** 89-03

DATE: 15 November, 1989 **TIME:** 0910 **FIELD NO:** 98/1

.....
HABITAT

Recently flooded and harrowed field with 10 cm water and <1% exposed mud. This field was harrowed on 14 November.

REMARKS

This bird was collected out of a group of 6 birds in the third plot. About 20-30 Yellowlegs in the field.

BIOMETRICS

-wing length:	194.0 mm
-exposed culmen:	47.8 mm
-weight:	154.0 g

MOULT

-primaries:	10x0
-primary score:	0
-tail (right to left):	12x0
-tail score:	0

PREY ITEMS

Spiders	Number
unidentified Araneae	1

Insects	
Coleoptera (3 large & ca. 4 small specimens)	ca. 7
unidentified	1

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Solitary Sandpiper **AGE & SEX:** first year male **BIRD NO:** 89-04

DATE: 15 November, 1989 **TIME:** 1010 **FIELD NO:** 83/1

.....
HABITAT

Recently flooded and harrowed field with 15 cm water and 35% exposed mud. This field was harrowed on 14 November.

REMARKS

This bird was collected out of a group of 30 Yellowlegs and 1 Hudsonian Godwit in the first plot.

BIOMETRICS

-wing length:	133.0 mm
-exposed culmen:	30.5 mm
-weight:	49.0 g

MOULT

-primaries:	4x0, 1x1, 5x0
-primary score:	1
-tail (right to left):	12x0
-tail score:	0

PREY ITEMS

Insects	Number
Orthoptera, Gryllidae (or Gryllotalpidae?)	1
Coleoptera (very small specimens)	ca. 2

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Lesser Yellowlegs **AGE & SEX:** first year female **BIRD NO:** 89-05

DATE: 15 November, 1989 **TIME:** 1010 **FIELD NO:** 83/1

.....
HABITAT

Recently flooded and harrowed field with 15 cm water and 35% exposed mud. This field was harrowed on 14 November.

REMARKS

This bird was collected out of a group of 30 Yellowlegs and 1 Hudsonian Godwit in the first plot.

BIOMETRICS

-wing length:	165.0 mm
-exposed culmen:	32.8 mm
-weight:	85.5 g

MOULT

-primaries:	3x0, 2x4, 1x2, 4x0
-primary score:	10
-tail (right to left):	4x0, 1x3, 2x5, 1x3, 4x0
-tail score:	16

PREY ITEMS

Insects	Number
Orthoptera, Gryllidae (or Gryllotalpidae?)	2
Coleoptera (very small specimens)	ca. 6

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Greater Yellowlegs **AGE & SEX:** first year? female **BIRD NO:** 89-06

DATE: 15 November, 1989 **TIME:** 1010 **FIELD NO:** 83/1

.....
HABITAT

Recently flooded and harrowed field with 15 cm water and 35% exposed mud. This field was harrowed on 14 November.

REMARKS

This bird was collected out of a group of 30 Yellowlegs and 1 Hudsonian Godwit in the first plot.

BIOMETRICS

-wing length:	192.0 mm
-exposed culmen:	59.4 mm
-weight:	173.0 g

MOULT

-primaries:	10x0
-primary score:	0
-tail (right to left):	5x0, 2x2, 5x0
-tail score:	4

PREY ITEMS

Amphibians	Number
Anura, <i>Bufo</i> sp. (? <i>granulosus</i>) (juvenile)	2

Insects	
Orthoptera, Gryllidae (or Gryllotalpidae?)	2
Coleoptera (larva)	1

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Lesser Yellowlegs **AGE & SEX:** first year male **BIRD NO:** 89-07

DATE: 15 November, 1989 **TIME:** 1100 **FIELD NO:** 83A/3

.....
HABITAT

Harvested field with stubble, grasses and weeds and a few cm water. Harrowing was proceeding during the survey. This field was flooded on 8 November.

REMARKS

This bird was collected in the second plot with about 200 Lesser Yellowlegs present.

BIOMETRICS

-wing length:	164.0 mm
-exposed culmen:	36.7 mm
-weight:	80.0 g

MOULT

-primaries:	3x0, 3x5, 1x2, 3x0
-primary score:	17
-tail (right to left):	4x0, 1x3, 2x5, 1x3, 4x0
-tail score:	16

PREY ITEMS

Spiders	Number
Lycosidae (juvenile)	4

Insects	
Dictyoptera	1
Hemiptera (larva)	1
Coleoptera (Curculionidae: 4)	ca. 17
Coleoptera (larvae)	3

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Lesser Yellowlegs **AGE & SEX:** first year female **BIRD NO:** 89-08

DATE: 15 November, 1989 **TIME:** 1100 **FIELD NO:** 83A/3

.....
HABITAT

Harvested field with stubble, grasses and weeds and a few cm water. Harrowing was proceeding during the survey. This field was flooded on 8 November.

REMARKS

This bird was collected in the second plot with about 200 Lesser Yellowlegs present.

BIOMETRICS

-wing length:	162.0 mm (worn primaries)
-exposed culmen:	34.5 mm
-weight:	83.0 g

MOULT

-primaries:	4x0, 2x5 ,1x4, 1x2, 2x0
-primary score:	16
-tail (right to left):	2x2, 1x0, 5x5, 1x2, 1x0, 2x2
-tail score:	35

PREY ITEMS

Spiders	Number
Oxyopidae, <i>Oxyopes salticus</i>	1

Insects	
Hemiptera (nymph)	1
Coleoptera (very small specimens; Curculionidae: 2)	ca. 17
Coleoptera (larva)	1
Hemiptera, Notonectidae/ Coleoptera, Hydrophilidae	1

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Lesser Yellowlegs **AGE & SEX:** first year female **BIRD NO:** 89-09

DATE: 15 November, 1989 **TIME:** 1100 **FIELD NO:** 83A/3

.....
HABITAT

Harvested field with stubble, grasses and weeds and a few cm water. Harrowing was proceeding during the survey. This field was flooded on 8 November.

REMARKS

This bird was collected in the second plot with about 200 Lesser Yellowlegs present.

BIOMETRICS

-wing length:	162.0 mm
-exposed culmen:	35.0 mm
-weight:	96.0 g

MOULT

-primaries:	10x0
-primary score:	0
-tail (right to left):	12x0
-tail score:	0

PREY ITEMS

Spiders	Number
Oxyopidae, <i>Oxyopes</i> sp. (juvenile)	1

Insects	
Coleoptera (very small specimens; Carabidae: 3, Curculionidae: 1)	ca. 12
unidentified larva	1

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Snowy Egret **AGE & SEX:** juvenile male **BIRD NO:** 89-10

DATE: 16 November, 1989 **TIME:** 1030 **FIELD NO:** 99/2

.....
HABITAT

Flooded field with stubble and 20 cm water. Harrowing was just beginning when we arrived at this site. This field was flooded on 16 October and harrowed on the 17th for the first time.

REMARKS

This bird was not collected by us but killed by a Peregrine Falcon and immediately retrieved.

BIOMETRICS

-wing length: -
-exposed culmen: -
-weight: -

MOULT

-primaries: -
-primary score: -
-tail (right to left): -
-tail score: -

PREY ITEMS

Amphibians	Number
Anura, ? <i>Ololygon rubra</i>	1

Spiders	
Lycosidae (2 juveniles, 1 adult)	3

Insects	
Orthoptera	3
Hemiptera (Homoptera), Naucoridae	5
Coleoptera	1
Coleoptera (larvae)	7
unidentified	ca. 2

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Great Egret **AGE & SEX:** female **BIRD NO:** 89-11

DATE: 16 November, 1989 **TIME:** 1130 **FIELD NO:** 98/8

HABITAT

Flooded field with 25 cm water and 10% exposed mud. Harrowing was proceeding during the survey. This field was flooded on 21 October after it had been left fallow for over 5 months. The field had been harrowed earlier on 29 and 30 October.

REMARKS

Great Egrets 11-14 were collected together in this field (in the third plot) at the same time.

BIOMETRICS

-wing length:	370.0 mm
-exposed culmen:	110.5 mm
-weight:	-

MOULT

-primaries:	-
-primary score:	-
-tail (right to left):	-
-tail score:	-

PREY ITEMS

Mammals	Number
Cricetidae, <i>Zygodontomys brevicauda</i> (juv.)	1
Muridae, <i>Mus musculus</i>	3

Fish	
Teleostei	ca. 7

Insects	
Odonata (Anisoptera), Libellulidae (nymphs), probably <i>Pantala flavescens</i>	5
Orthoptera, Gryllidae	13
unidentified	1

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Great Egret **AGE & SEX:** female **BIRD NO:** 89-12

DATE: 16 November, 1989 **TIME:** 1130 **FIELD NO:** 98/8

.....
HABITAT

Flooded field with 25 cm water and 10% exposed mud. Harrowing was proceeding during the survey. This field was flooded on 21 October after it had been left fallow for over 5 months. The field had been harrowed earlier on 29 and 30 October.

REMARKS

Great Egrets 11-14 were collected together in this field (in the third plot) at the same time.

BIOMETRICS

-wing length:	368.0 mm
-exposed culmen:	117.3 mm
-weight:	-

MOULT

-primaries:	-
-primary score:	-
-tail (right to left):	-
-tail score:	-

PREY ITEMS

Mammals	Number
Muridae, <i>Mus musculus</i>	1

Fish	
Teleostei	3

Insects	
Odonata (Anisoptera), Libellulidae (nymphs), probably <i>Pantala flavescens</i>	24
unidentified Odonata	2
Orthoptera, Acrididae	1
Orthoptera, ?Gryllidae (heads only)	28

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Great Egret **AGE & SEX:** male **BIRD NO:** 89-13

DATE: 16 November, 1989 **TIME:** 1130 **FIELD NO:** 98/8

.....
HABITAT

Flooded field with 25 cm water and 10% exposed mud. Harrowing was proceeding during the survey. This field was flooded on 21 October after it had been left fallow for over 5 months. The field had been harrowed earlier on 29 and 30 October.

REMARKS

Great Egrets 11-14 were collected together in this field (in the third plot) at the same time.

BIOMETRICS

-wing length:	413.0 mm
-exposed culmen:	112.8 mm
-weight:	-

MOULT

-primaries:	-
-primary score:	-
-tail (right to left):	-
-tail score:	-

PREY ITEMS

Mammals	Number
Cricetidae, <i>Zygodontomys brevicauda</i> (juv.)	1

Fish	
Teleostei	7

Insects	
Odonata (Anisoptera), Libellulidae (nymphs), probably <i>Pantala flavescens</i>	29
Orthoptera, Gryllidae	5 (+ 1?)
Coleoptera, Dysticidae (larva)	1
unidentified	1

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Great Egret **AGE & SEX:** female **BIRD NO:** 89-14

DATE: 16 November, 1989 **TIME:** 1130 **FIELD NO:** 98/8

.....
HABITAT

Flooded field with 25 cm water and 10% exposed mud. Harrowing was proceeding during the survey. This field was flooded on 21 October after it had been left fallow for over 5 months. The field had been harrowed earlier on 29 and 30 October.

REMARKS

Great Egrets 11-14 were collected together in this field (in the third plot) at the same time.

BIOMETRICS

-wing length:	373.0 mm
-exposed culmen:	118.9 mm
-weight:	-

MOULT

-primaries:	-
-primary score:	-
-tail (right to left):	-
-tail score:	-

PREY ITEMS

Mammals	Number
unidentified Rodentia (only hair recovered)	1

Insects	
Orthoptera, ?Gryllidae (legs only)	2

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Cattle Egret **AGE & SEX:** female **BIRD NO:** 89-15

DATE: 16 November, 1989 **TIME:** 1245 **FIELD NO:** 89/1

.....
HABITAT

Flooded field with 20+ cm water. Harrowing was proceeding during the survey.

REMARKS

Many Egrets, especially Great Egrets, present in this field. This bird was collected in the second plot.

BIOMETRICS

-wing length:	257.0 mm
-exposed culmen:	58.9 mm
-weight:	-

MOULT

-primaries:	-
-primary score:	-
-tail (right to left):	-
-tail score:	-

PREY ITEMS

Amphibians	Number
Anura, <i>Ololygon rubra</i>	1

Spiders	
Lycosidae (2 species)	5

Insects	
Orthoptera, Acrididae	1
Orthoptera, Gryllidae	32
Dictyoptera	4
unidentified Coleoptera	1
unidentified	2

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Cattle Egret **AGE & SEX:** female **BIRD NO:** 89-16

DATE: 16 November, 1989 **TIME:** 1245 **FIELD NO:** 89/1

.....
HABITAT

Flooded field with 20+ cm water. Harrowing was proceeding during the survey.

REMARKS

This bird was collected in the second plot.

BIOMETRICS

-wing length:	254.5 mm
-exposed culmen:	55.0 mm
-weight:	-

MOULT

-primaries:	-
-primary score:	-
-tail (right to left):	-
-tail score:	-

PREY ITEMS

Amphibians	Number
Anura, <i>Ololygon rubra</i>	3
Anura, <i>Bufo</i> sp. (<i>?granulosus</i>) (juvenile)	1
unidentified Anura	1

Spiders	
Salticidae (2 species)	2
Lycosidae (2 species, 4 juvs., 11 adults)	15
unidentified Araneae	14
egg cocoons	2

Insects	
Odonata (wings only)	1
Orthoptera, ?Acrididae	7
Orthoptera, Gryllidae	23
Dictyoptera	8
unidentified	ca. 6

**PREY ITEMS FOUND IN THE DIGESTIVE TRACTS OF BIRDS COLLECTED
IN THE SML RICE FIELDS IN WAGENINGEN, SURINAME**

SPECIES: Wattled Jacana **AGE & SEX:** adult female **BIRD NO:** 89-17

DATE: 16 November, 1989 **TIME:** 1245 **FIELD NO:** 89/1

.....
HABITAT

Flooded field with 20+ cm water. Harrowing was proceeding during the survey.

REMARKS

This bird was collected in the second plot.

BIOMETRICS

-wing length:	148.0 mm
-exposed culmen:	33.9 mm
-weight:	-

MOULT

-primaries:	-
-primary score:	-
-tail (right to left):	-
-tail score:	-

PREY ITEMS

Spiders	Number
Lycosidae	1

Insects	
Orthoptera	1