

NOTE ON THE USE OF PHOTOGRAPHS

Please note that this material is being circulated for the personal educational use of the student of Travis Audubon Society classes. Please do not distribute, copy, post, share, or further disseminate any of this material.

Photographs used in these presentations are credited to Jeffrey E. Patterson or the eBird contributors named in the photographs and to the Macaulay Library of The Cornell Laboratory of Ornithology. Other photographs are credited as indicated.

REFERENCE BIRDS



Least

Photo by Jeffrey E. Patterson

REFERENCE BIRDS



Lesser Yellowlegs



Killdeer

Photo by Jeffrey E. Patterson

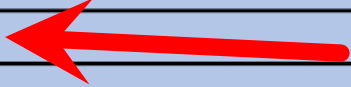




REFERENCE BIRDS

Lesser
Yellowlegs



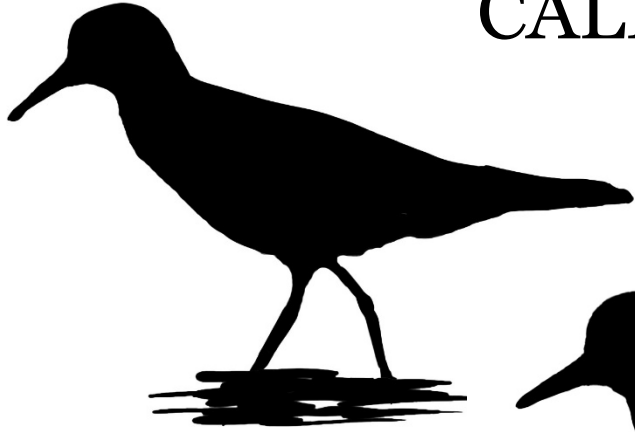
Photo by Jeffrey E. Patterson

Genus Calidris Contain 24 Species

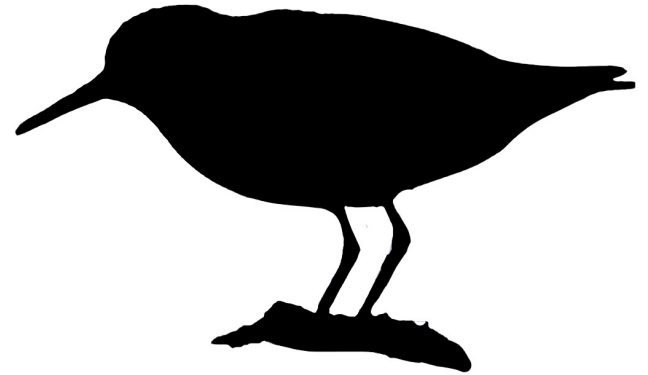
Texas Frequency	Species	Binomial
Calidris Peep	Baird's sandpiper	Calidris bairdii
Calidris Peep	Least sandpiper	Calidris minutilla
Calidris Peep	Semipalmated sandpiper	Calidris pusilla 
Calidris Peep	Western sandpiper	Calidris mauri
Calidris Peep	White-rumped sandpiper	Calidris fuscicollis
Calidris Big	Dunlin	Calidris alpina
Calidris Big	Pectoral sandpiper	Calidris melanotos
Calidris Big	Red knot	Calidris canutus 
Calidris Big	Sanderling	Calidris alba
Calidris Big	Stilt sandpiper	Calidris himantopus
Grass-piper	Buff-breasted sandpiper	Calidris subruficollis 
Rare	Curlew sandpiper	Calidris ferruginea
 Rare	Ruff	Calidris pugnax
Rare	Purple sandpiper	Calidris maritima
	Great knot	Calidris tenuirostris
	Surfbird	Calidris virgata
	Broad-billed sandpiper	Calidris falcinellus
	Sharp-tailed sandpiper	Calidris acuminata
	Temminck's stint	Calidris temminckii
	Long-toed stint	Calidris subminuta
	Red-necked stint	Calidris ruficollis
	Little stint	Calidris minuta
	Spoon-billed sandpiper	Calidris pygmaea
	Rock sandpiper	Calidris ptilocnemis

ID GROUP 4
CALIDRIS PEEPS

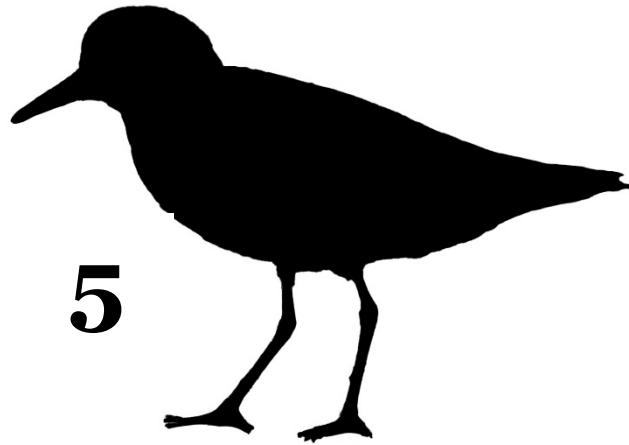
1



2

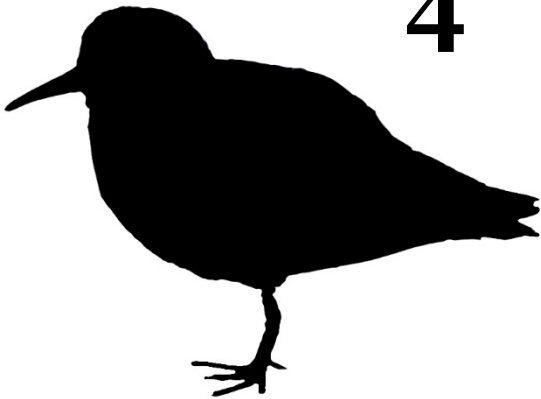


5

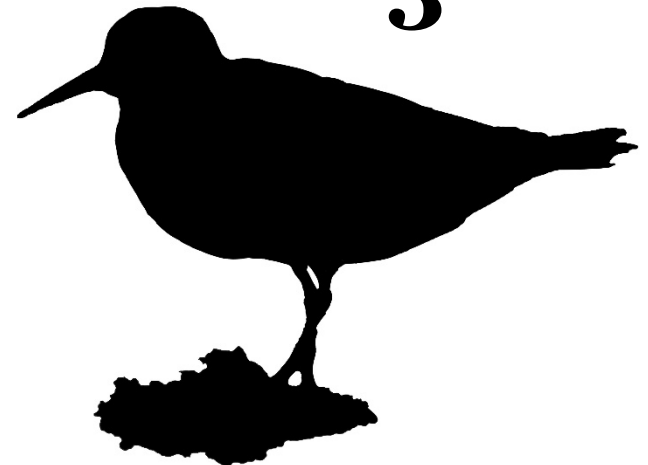


Which of these
peeps has long
wings?

4

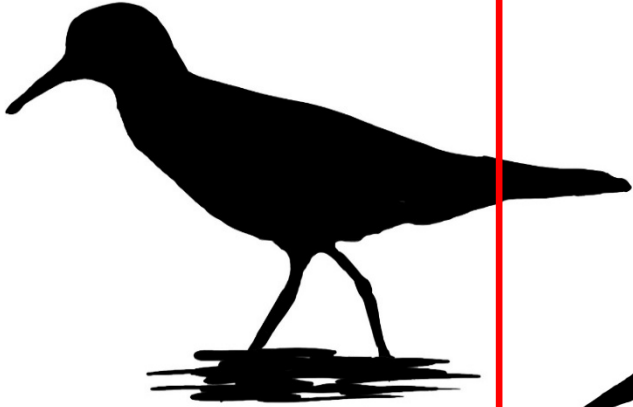


3



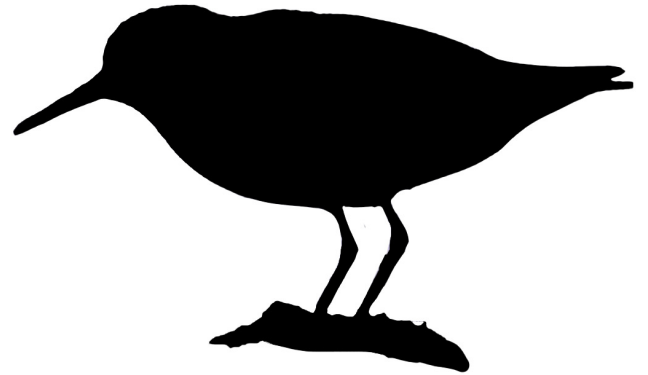
CALIDRIS PEEPS

1

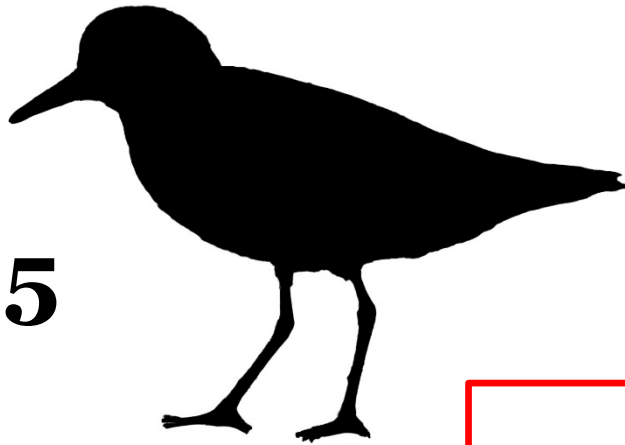


Long-winged

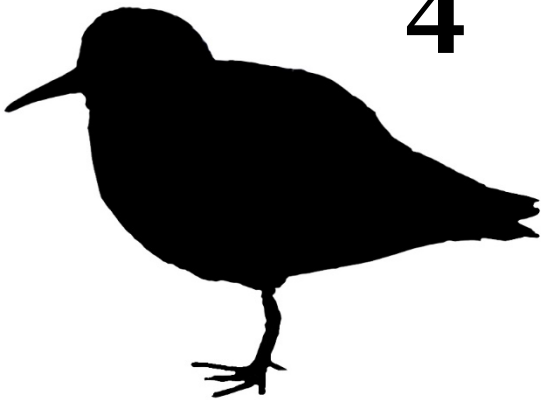
2



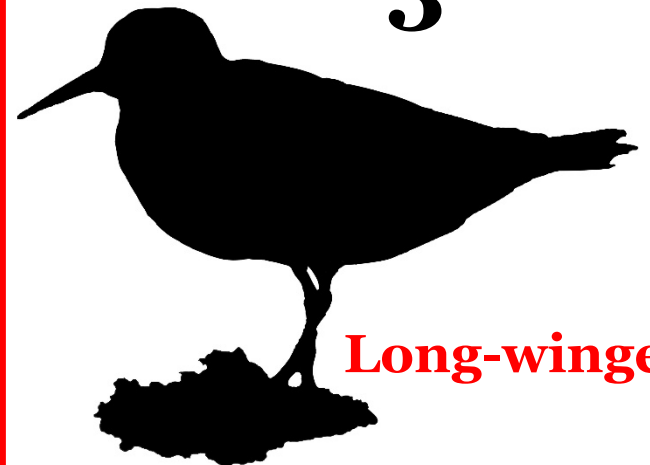
5



4



3



Long-winged

PRIMARY EXTENSION

Primaries



Tail



PRIMARY EXTENSION

Primaries

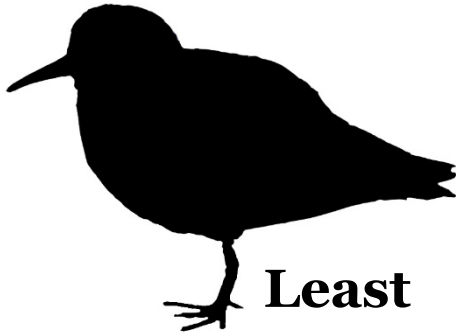


Tail

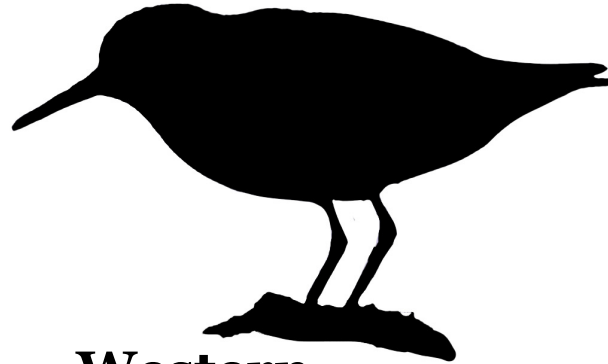


CALIDRIS PEEPS

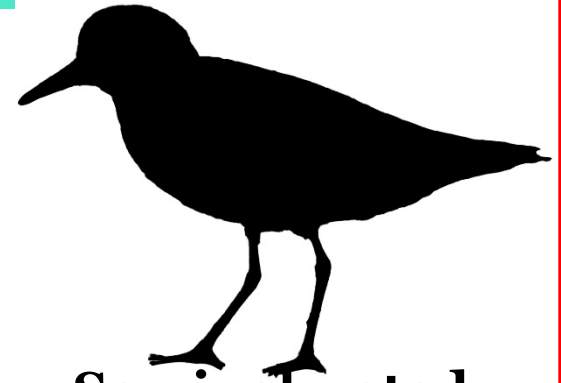
Short-winged



Least



Western

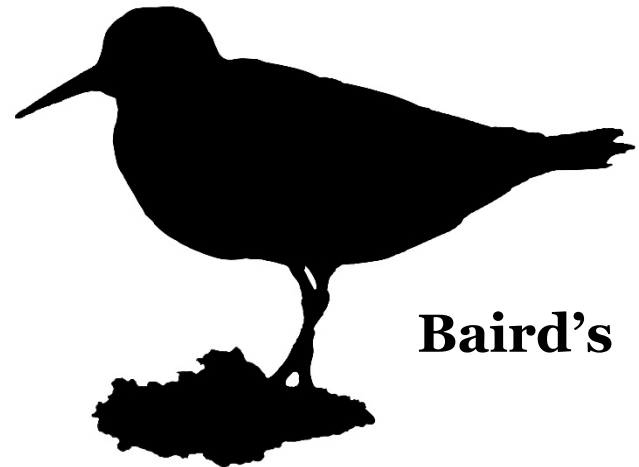


Semipalmated

Long-winged



White-rumped

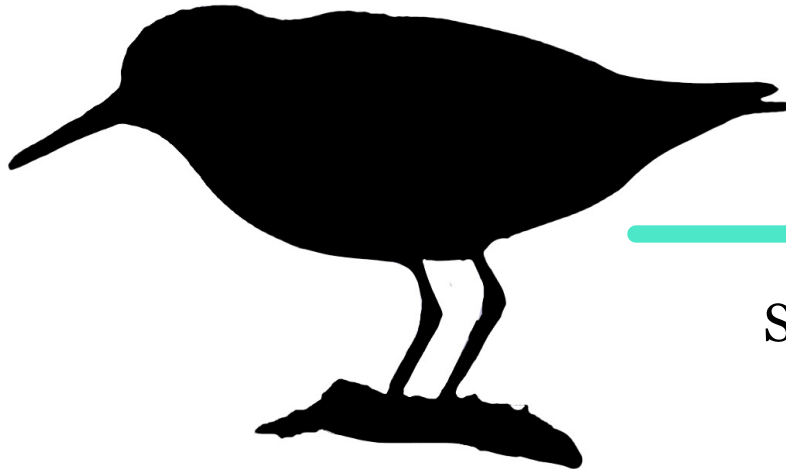
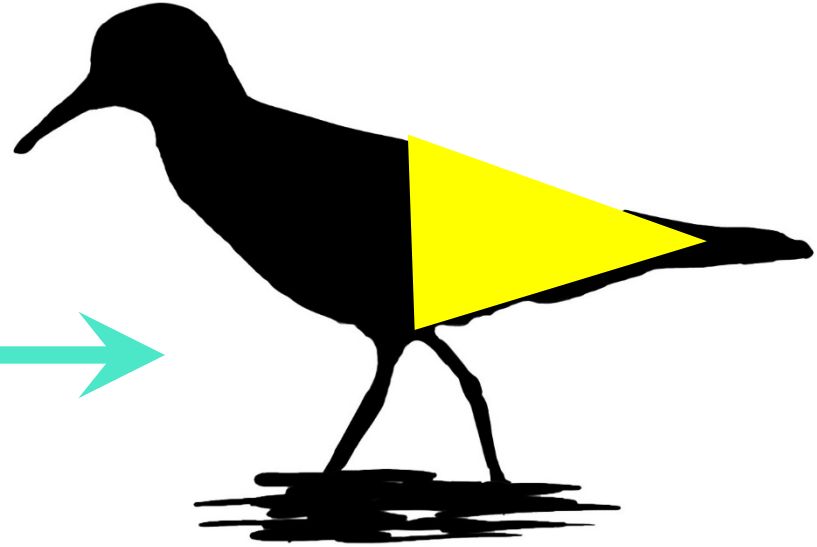
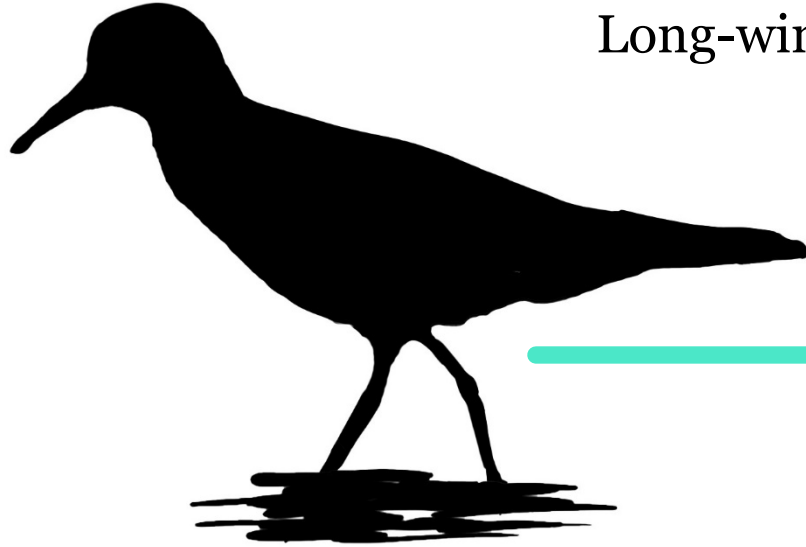


Baird's

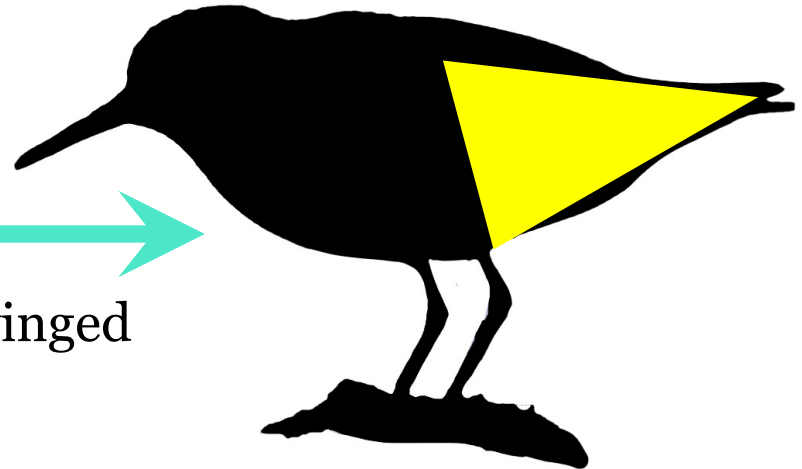
Proportions are different

CALIDRIS PEEPS

Long-winged



Short-winged



“Peeps”

<https://jepbirding.com/shorebirds-self-study/>



Western

Yes

START

Large peep,
long primary extension
(beyond tail)?
Long rear 1/2 of body?

No

Yellow, spindly legs?
Crouched posture?
Large round eyes?
Fine-tipped, short, slightly-
drooping-at-end bill?
Brownish?

No

Long, droopy bill?
Front heavy?
Large, blocky head?
Rufous scapulars?
Arrowheads on flanks?

Yes

Fall?
Clean, white flanks?
Buffy breast-band?
White supraloral spot?
Horizontal posture while
feeding?

No

Least



No

Rounder head?
Shorter straight blunt tipped bill?
Plumper body?
“Balanced” look?
Less contrasting colors?
“Frosty” look (maybe)?

Yes

Athletic, bulky chest?
Streaky flanks?
Obvious white supercilium?
Angular posture while feeding?

Yes

Baird's



White-rumped



Semipalmated

Yes

1



CALIDRIS PEEPS

2



5



Which one has yellow legs?

4

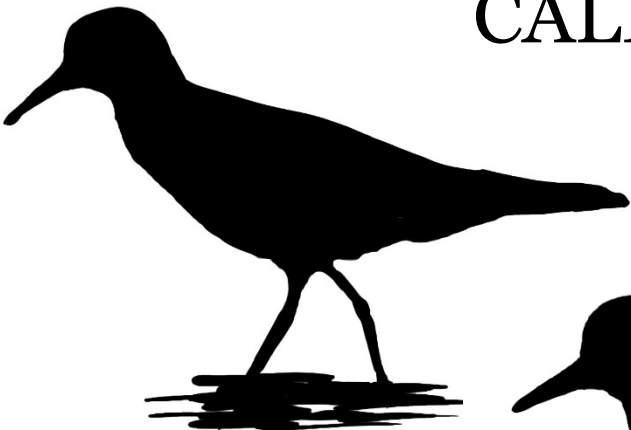


3

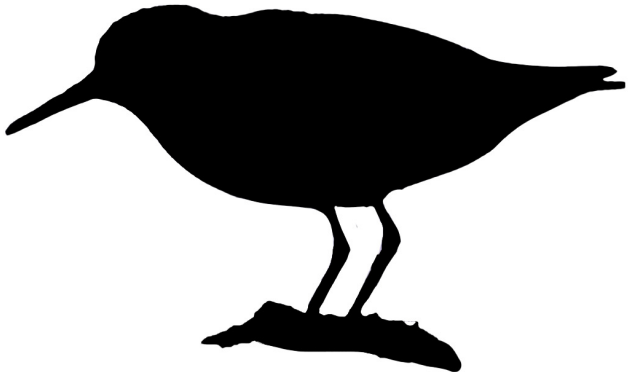


ID GROUP 4
CALIDRIS PEEPS

1

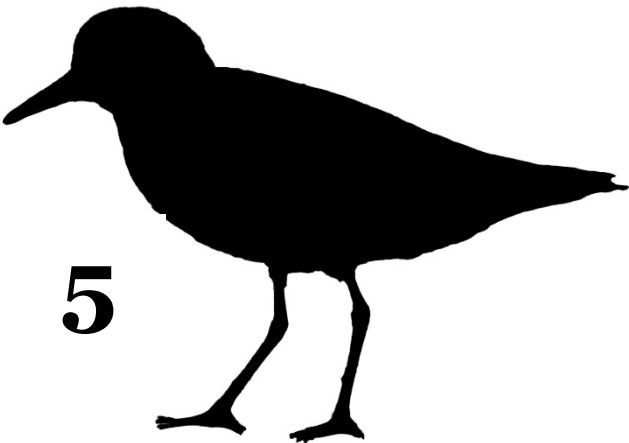


2

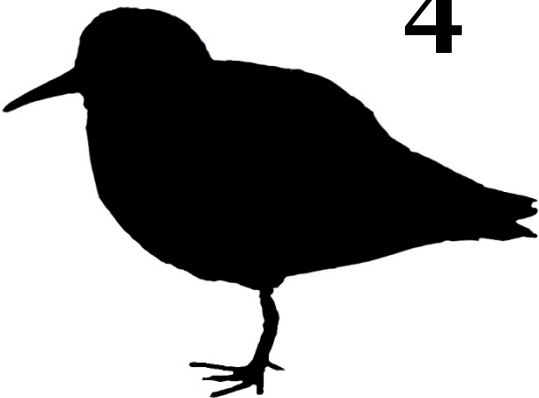


Which have
fine-tipped bills?

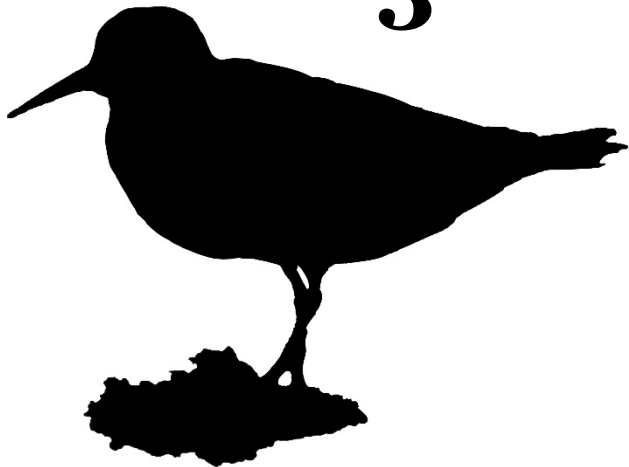
5



4

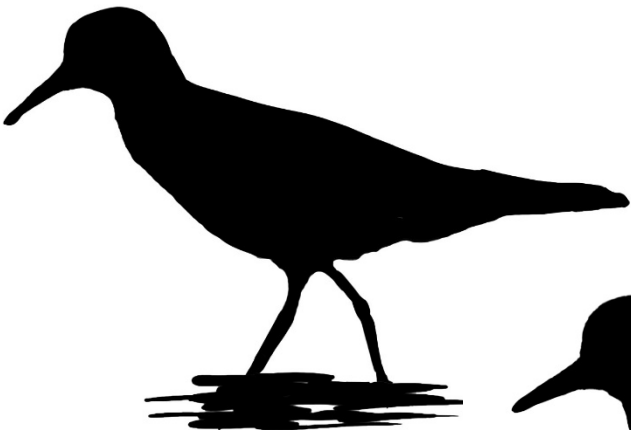


3

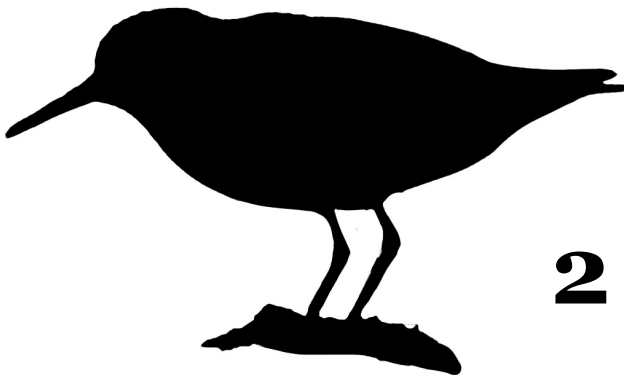


CALIDRIS PEEPS

1

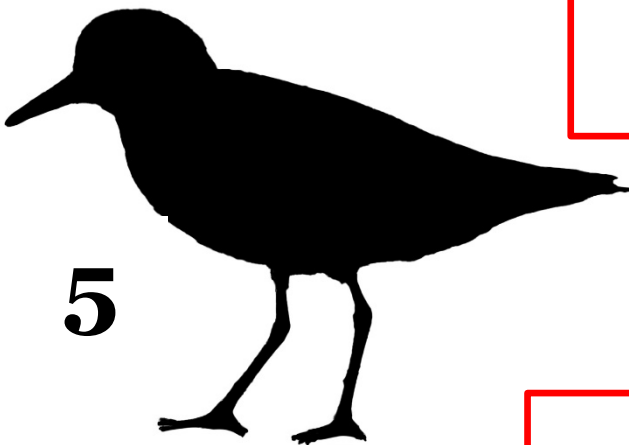


**Fine-tipped
(sometimes)**



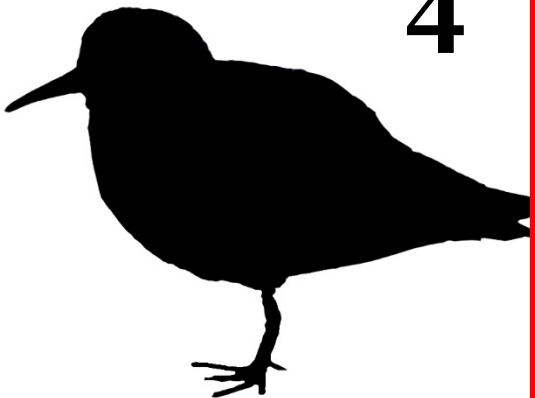
2

5

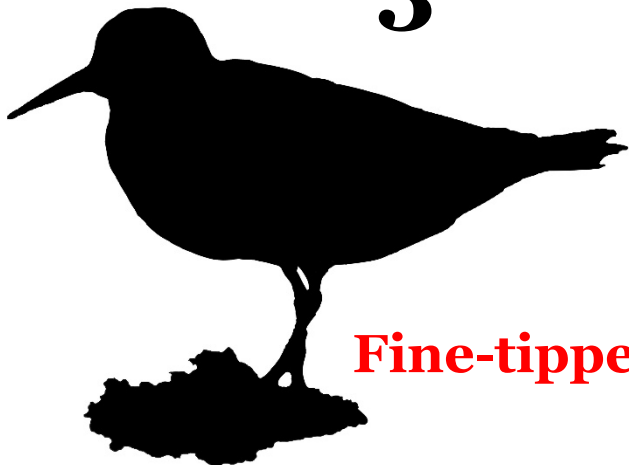


Fine-tipped

4



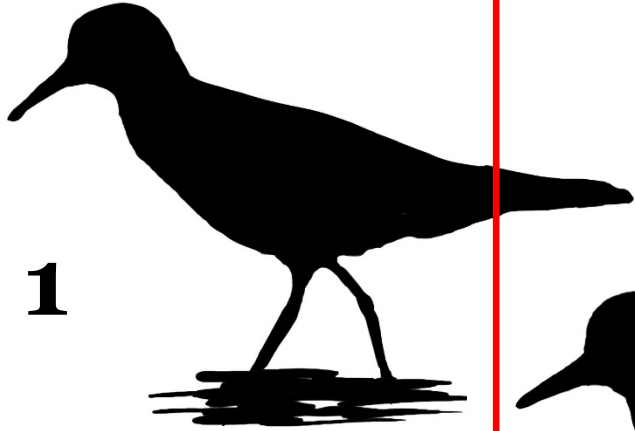
3



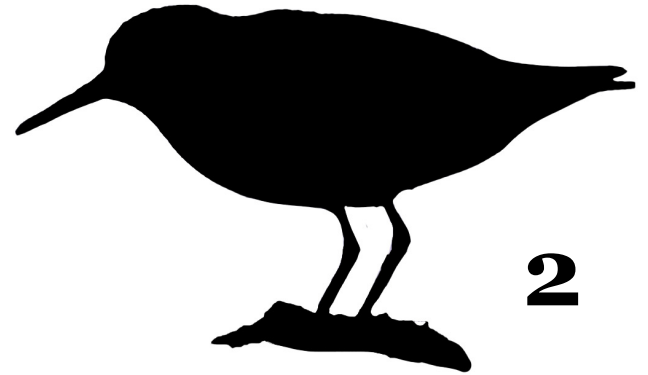
Fine-tipped

CALIDRIS PEEPS

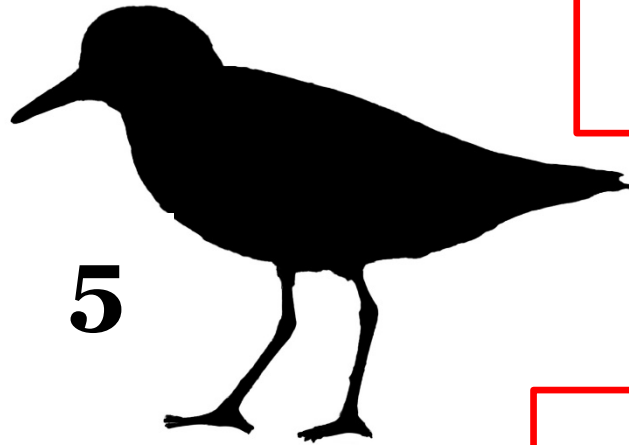
Down-turned



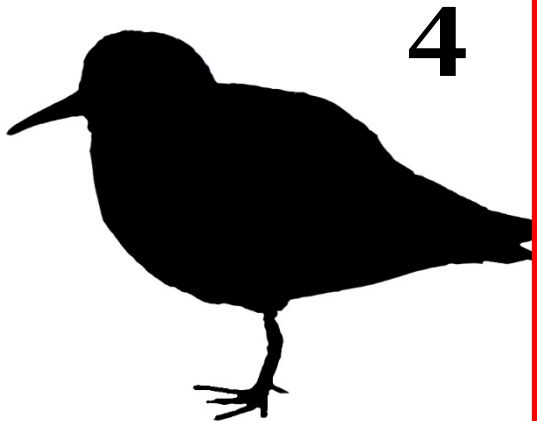
Down-turned



5

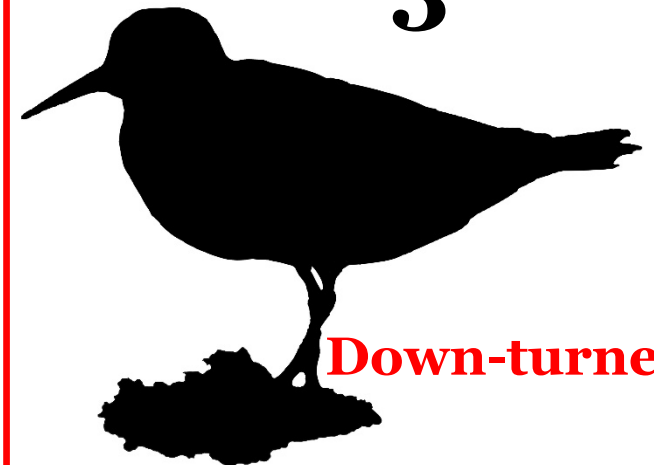


Down-turned



Which ones
have down-
turned bills?

3



Down-turned

1



CALIDRIS PEEPS

2



Which ones are more colorful?

Which ones are frostier?

5



4



Which ones are browner?

3



1



Colorful

CALIDRIS PEEPS

2



Colorful

5



Frosty

4



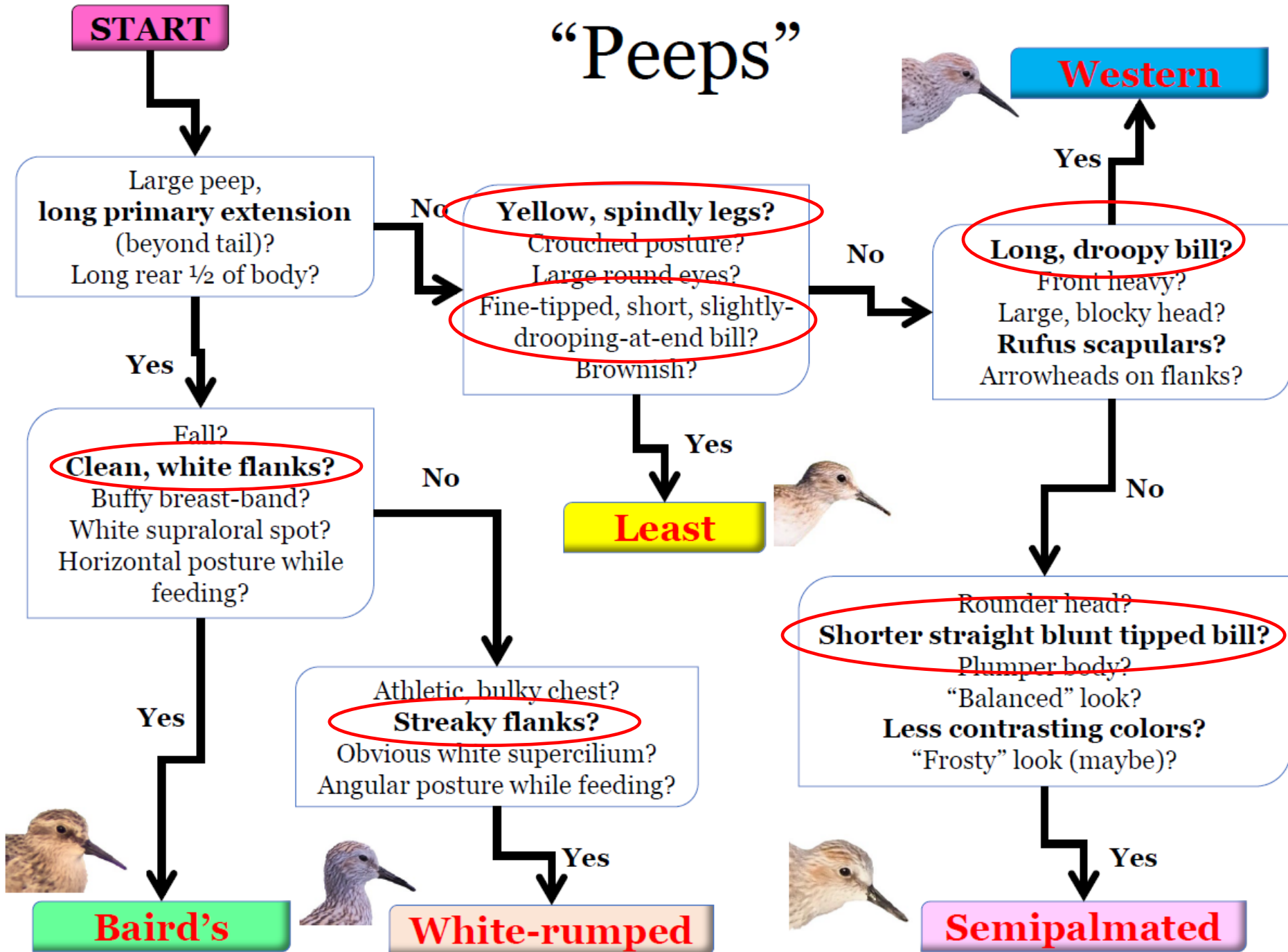
Brown

Brown



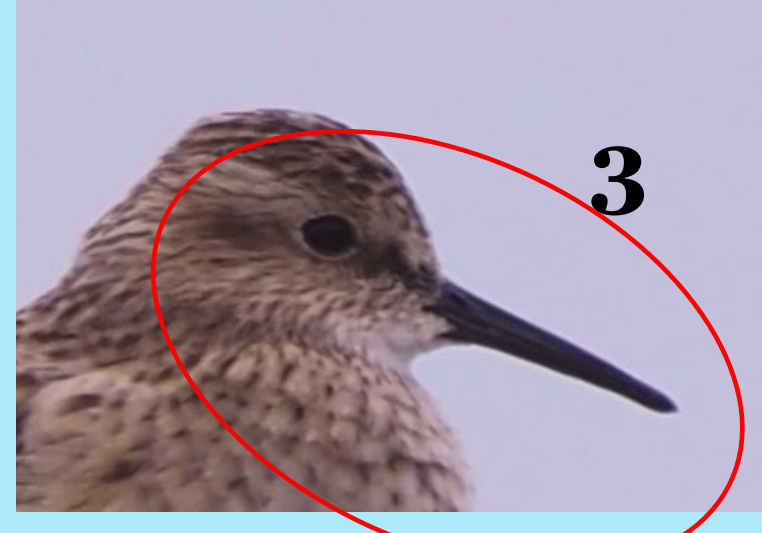
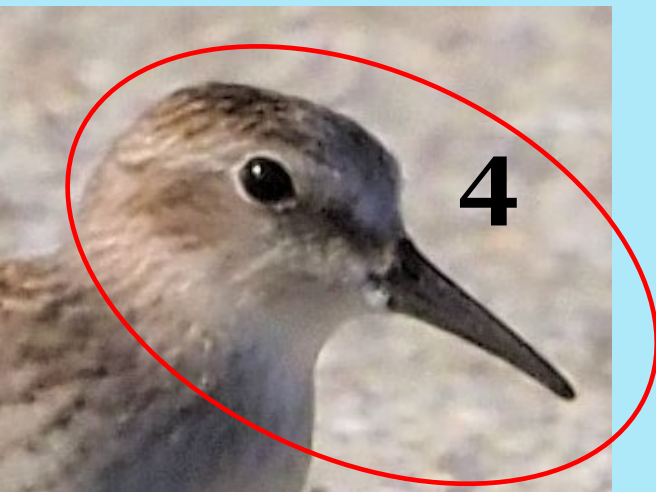
3

“Peeps”





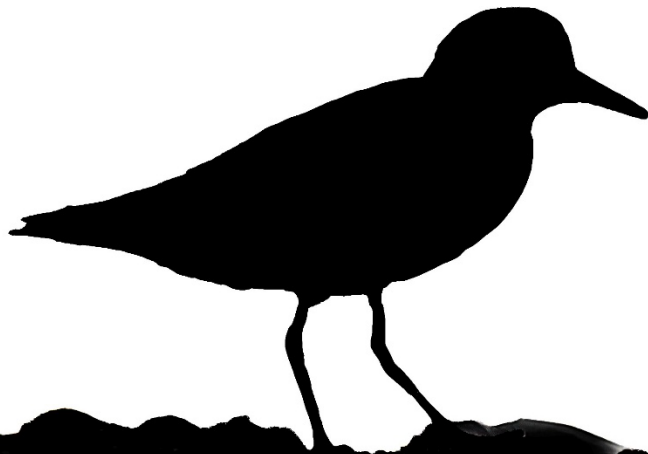
Which ones
have fine-
tipped bills?





Photos by Jeffrey E. Patterson

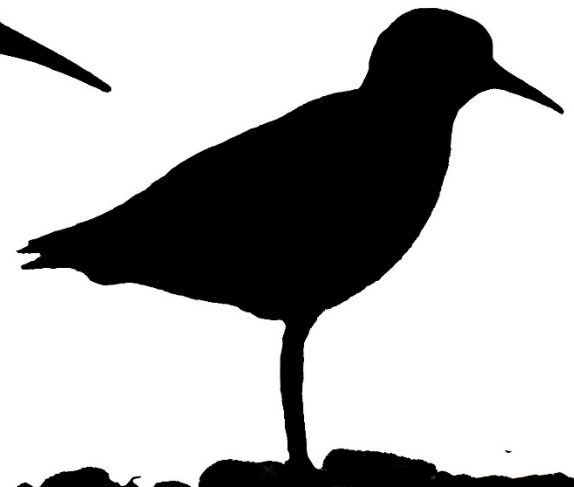
Semipalmated



Western



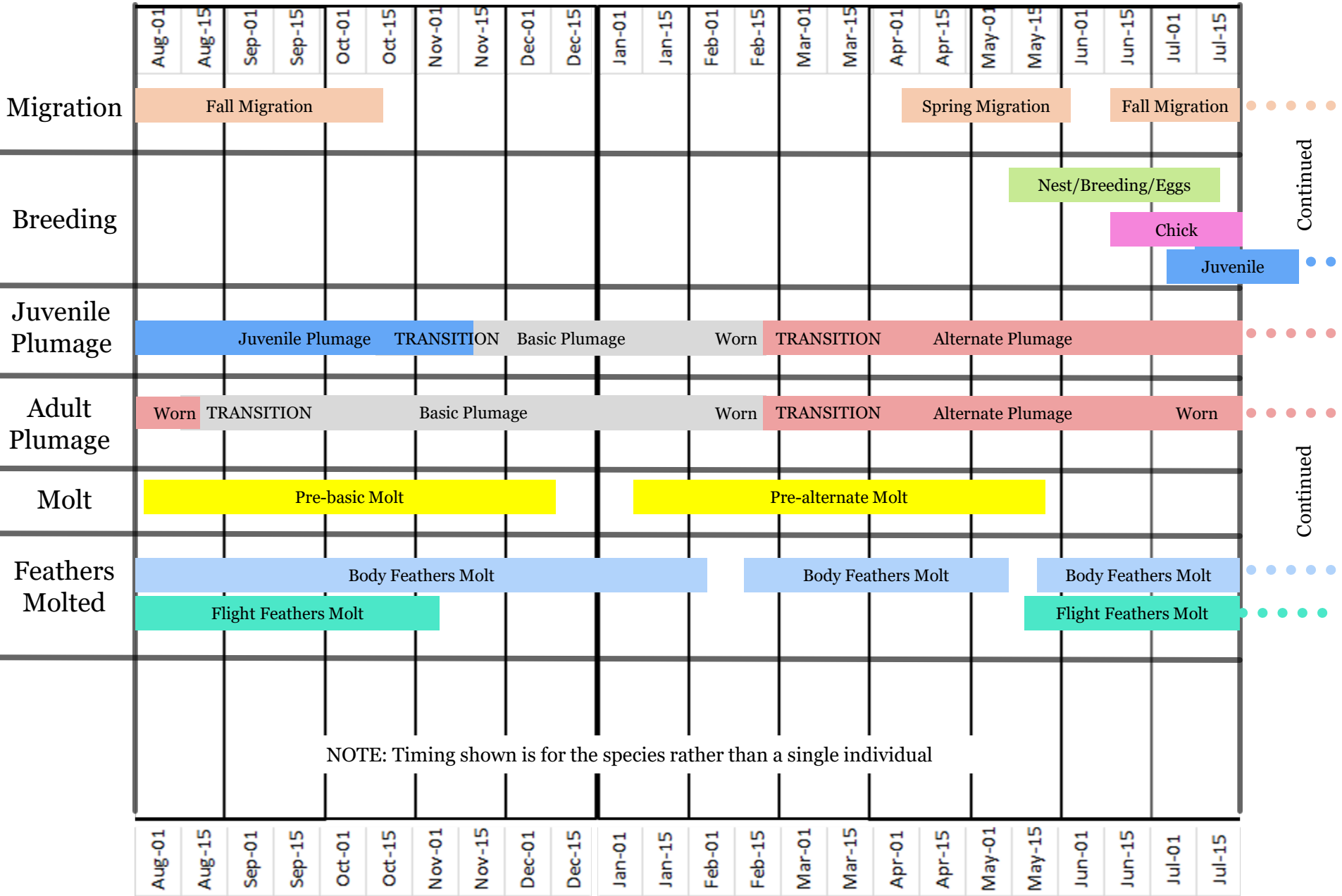
Least



PEEP DISTRIBUTION AT HORNSBY

- ▶ Least
 - ▶ Year round 90% of the shorebirds are Least
 - ▶ Almost always present
- ▶ Western
 - ▶ Moderate numbers in spring, fall and winter
- ▶ Semipalmated
 - ▶ Moderate numbers in spring and fall
 - ▶ None in winter
- ▶ Baird's
 - ▶ Small numbers in spring
 - ▶ Generally a few more in fall
- ▶ White-rumped
 - ▶ Small numbers in spring
 - ▶ Very, very rare in fall

Generic Sandpiper Annual Life Cycle



Population
Estimate
700,000

LEAST SANDPIPER

“THE PEEP WITH DRY FEET”

Least Sandpiper
Calidris minutilla



Map by Cornell Lab of Ornithology
Range data by NatureServe



THE BILL & HEAD

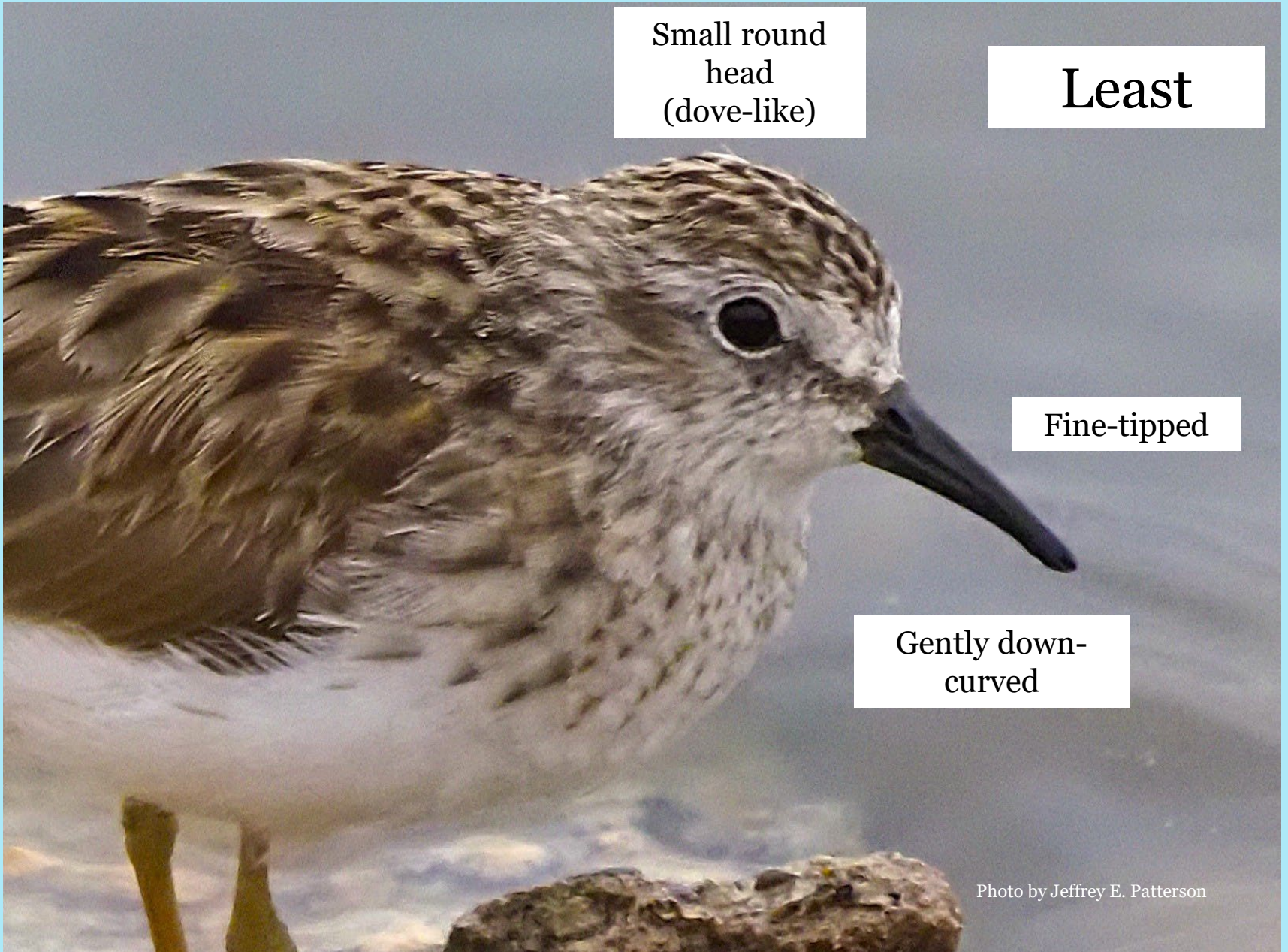
Small round
head
(dove-like)

Least

Fine-tipped

Gently down-
curved

Photo by Jeffrey E. Patterson



Jan Feb Mar Apr May Jun Jul Aug **Sept** Oct Nov Dec

Small,
round
head

Large
round
eyes

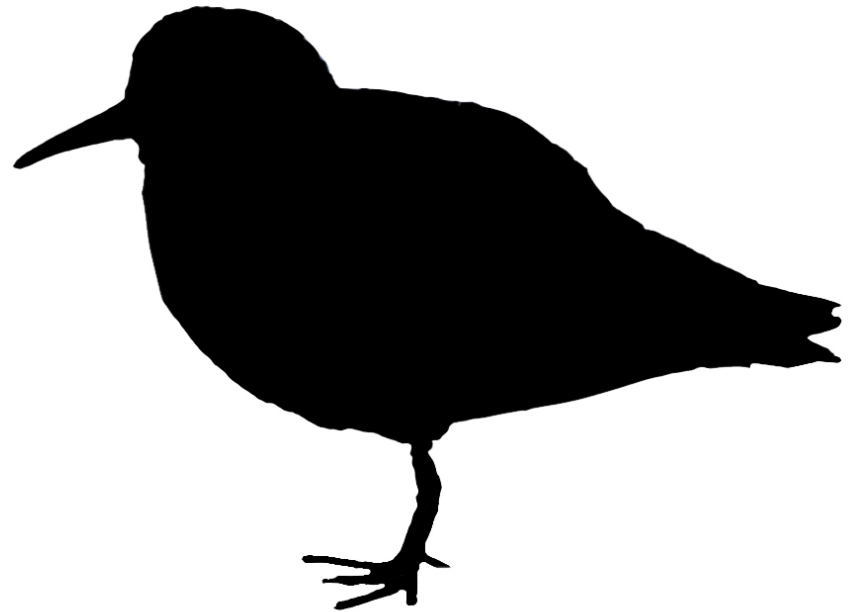
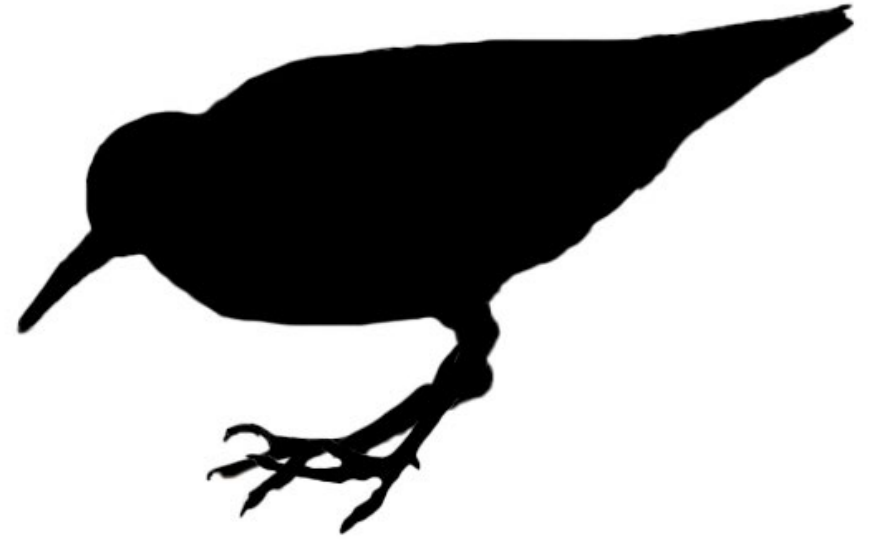
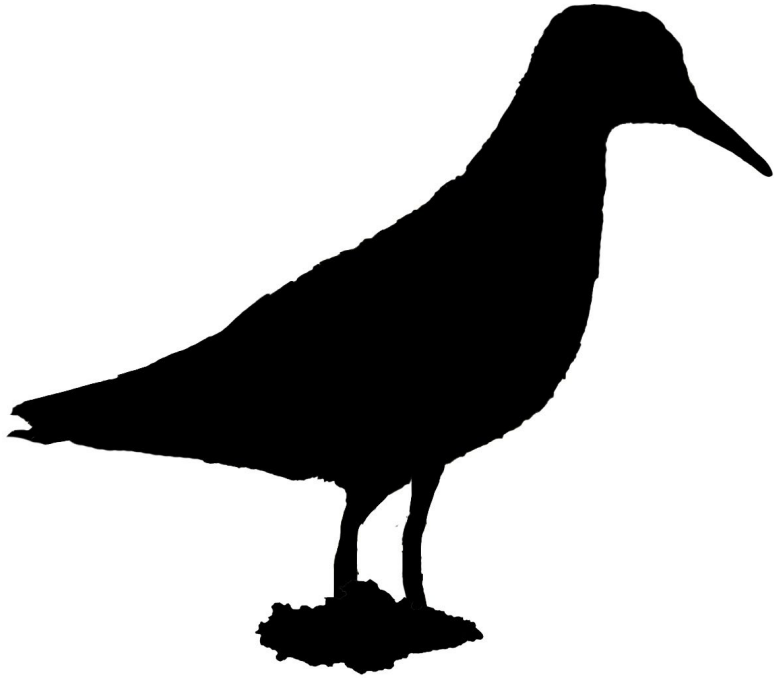
A brown bird

Fine, short,
thin-tipped,
slightly drooping
bill

Yellow, spindly legs

Dingy brown
breast band.

LEAST



Jan Feb Mar Apr May Jun Jul Aug Sep Oct **Nov** Dec

Warm brown



Gray brown

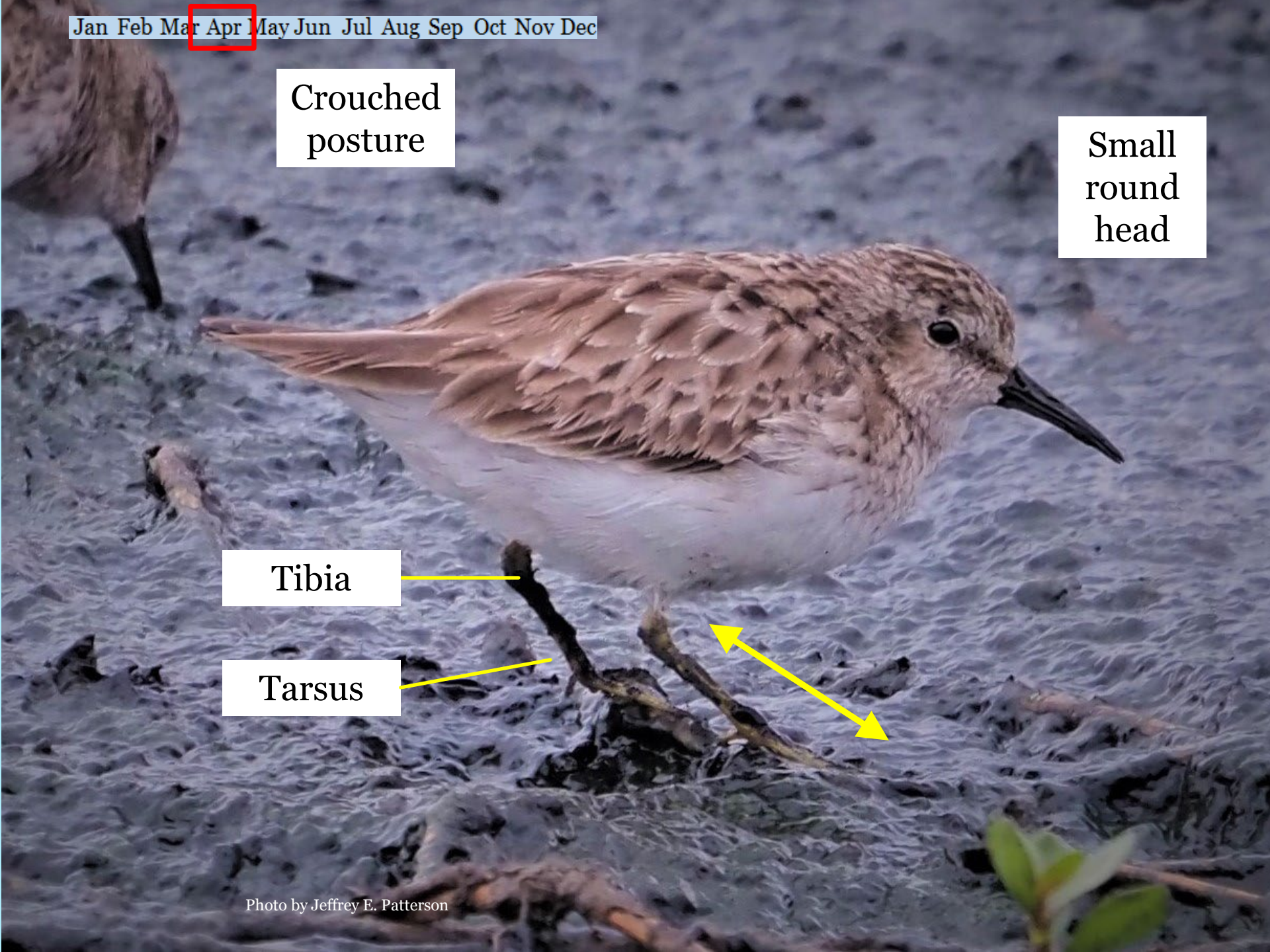


Crouched posture

Small round head

Tibia

Tarsus



Jan Feb Mar Apr May Jun Jul Aug **Sep** Oct Nov Dec

Seems to feed
just in front of toes

Crouched
posture



Secondaries

(white)

Tertials

(green)

Scapulars

(red)

Mantle

(white)

Primaries

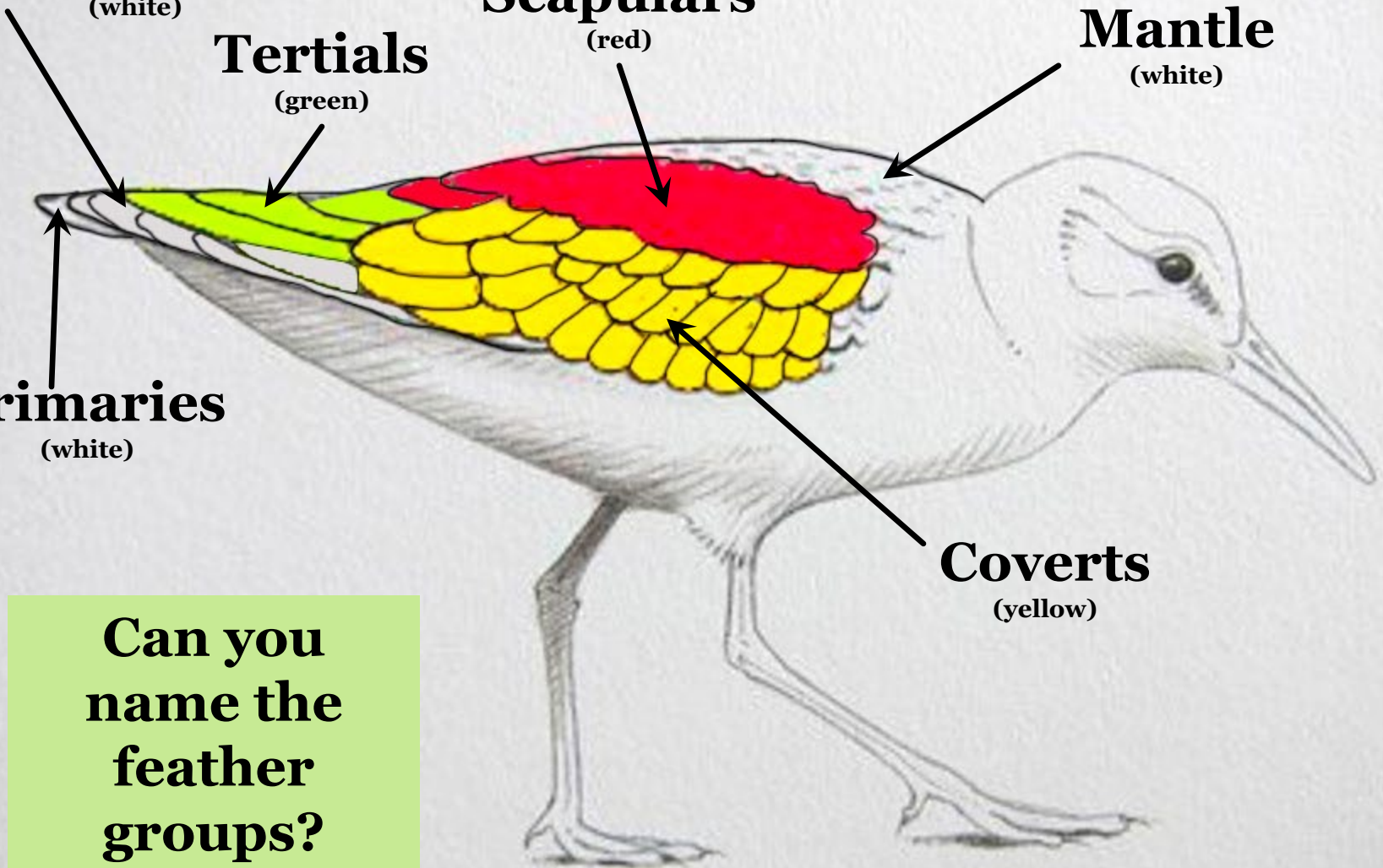
(white)

Coverts

(yellow)

**Can you
name the
feather
groups?**

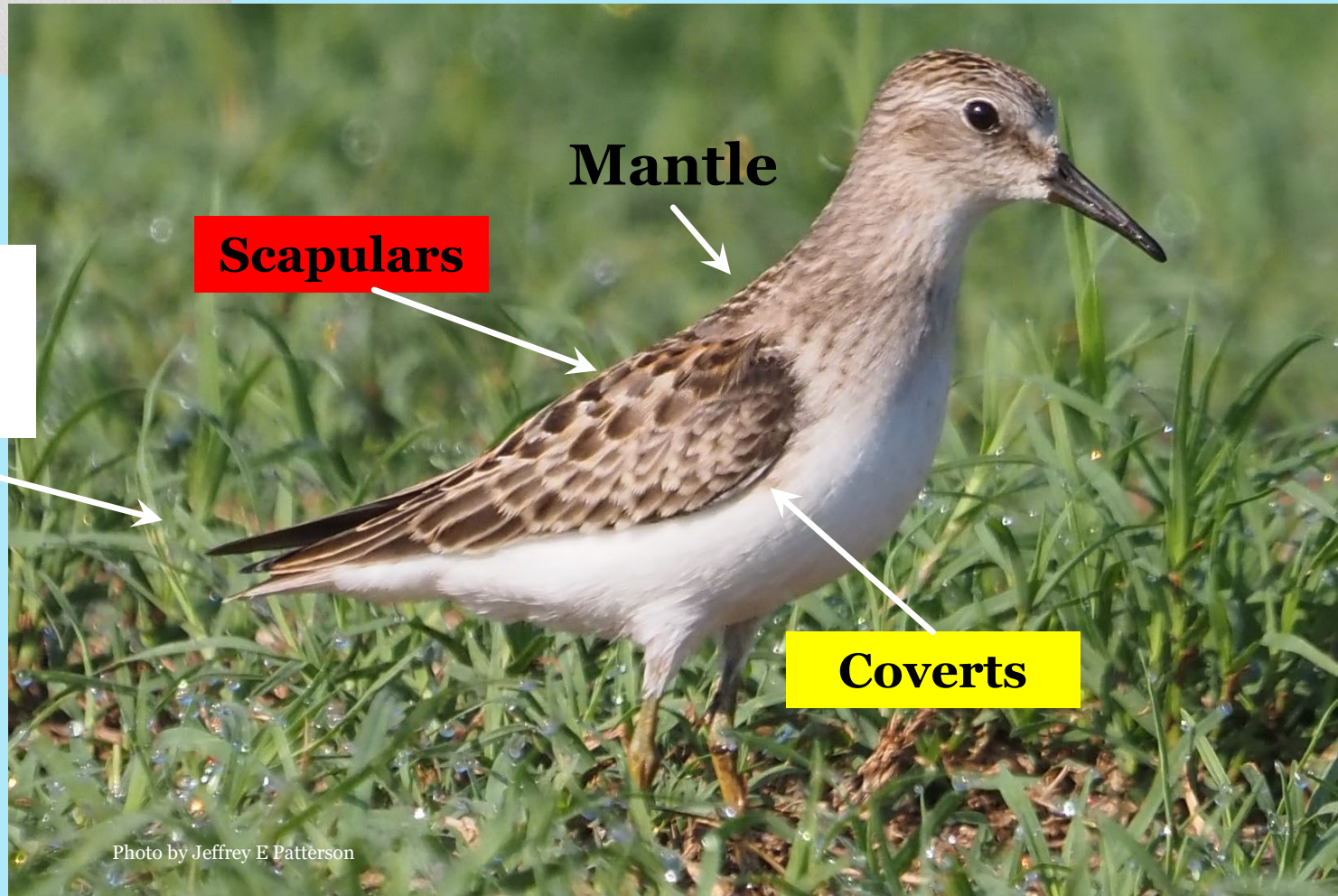
Least Sandpiper





Least Sandpiper

**Primaries,
secondaries,
tertials**



Mantle

Scapulars

Coverts

Least Sandpiper



Jan Feb Mar Apr May Jun Jul **Aug** Sep Oct Nov Dec

Basic ~ Winter



Photo by Jeffrey E. Patterson

Jan Feb Mar **Apr** May Jun Jul Aug Sep Oct Nov Dec

Transitioning to alternate



Photo by Jeffrey E. Patterson

Jan Feb Mar **Apr** May Jun Jul Aug Sep Oct Nov Dec



Alternate ~ Spring

Photo by Jeffrey E. Patterson

Jan Feb Mar Apr May Jun Jul **Aug** Sep Oct Nov Dec

Juvenile



Least Sandpiper Crouching

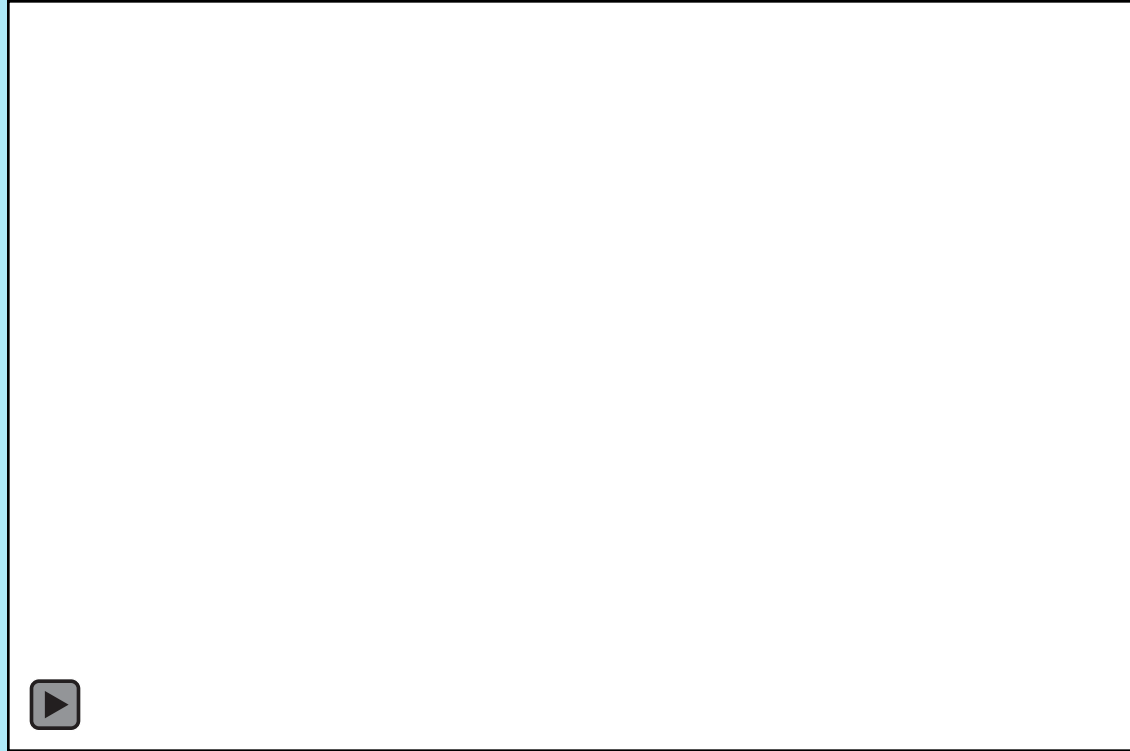


Photos by Jeffrey E. Patterson

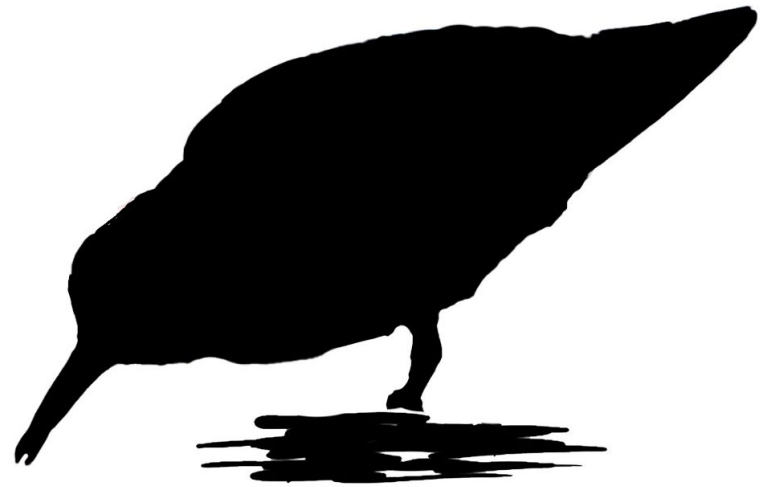
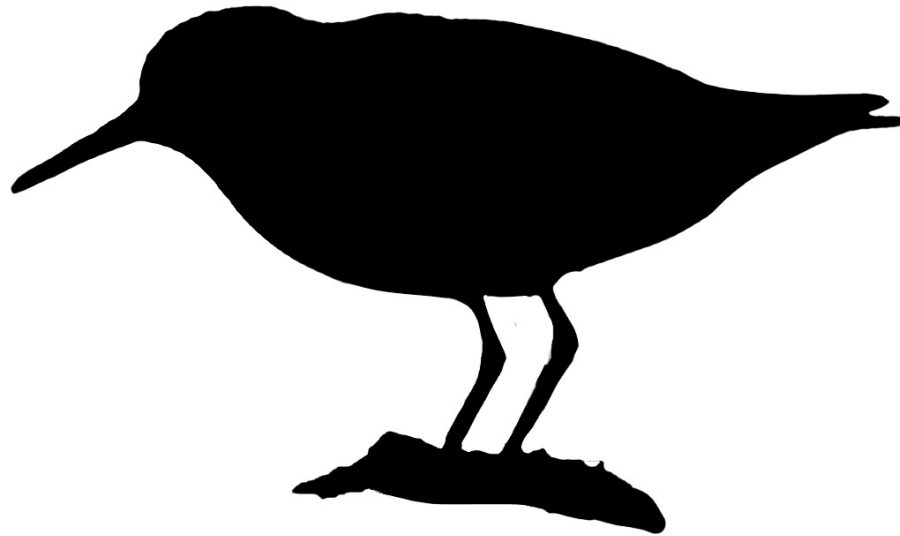
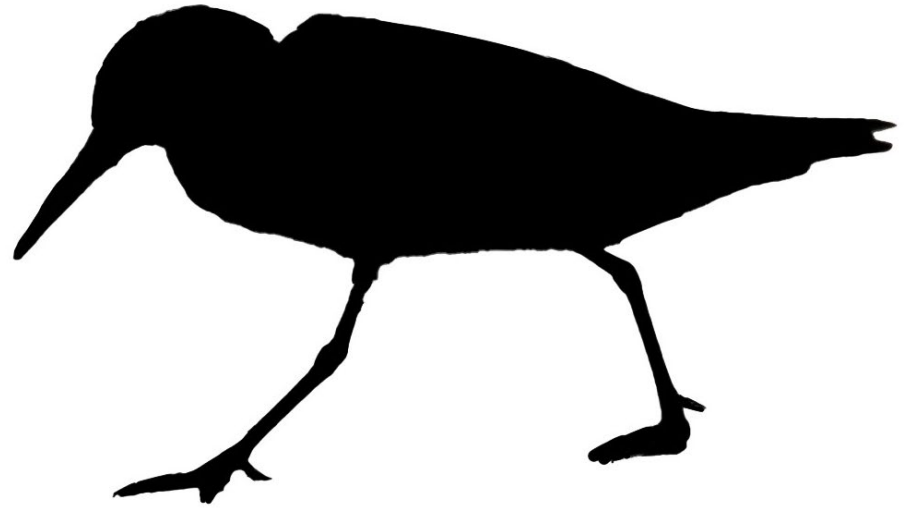
WESTERN SANDPIPER

THE GNOME

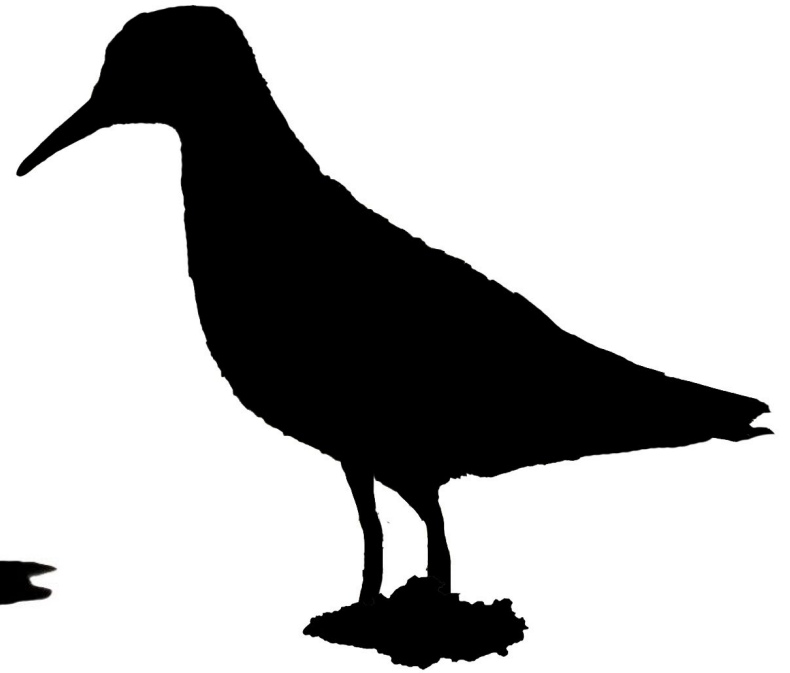
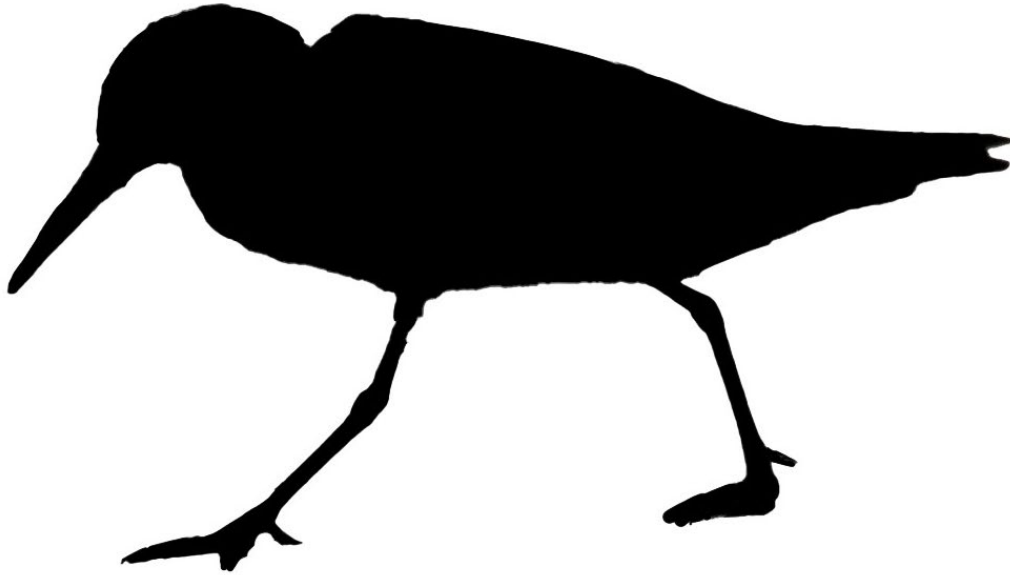
Population
Estimate
3.5 million



Western



Western



Least

Western

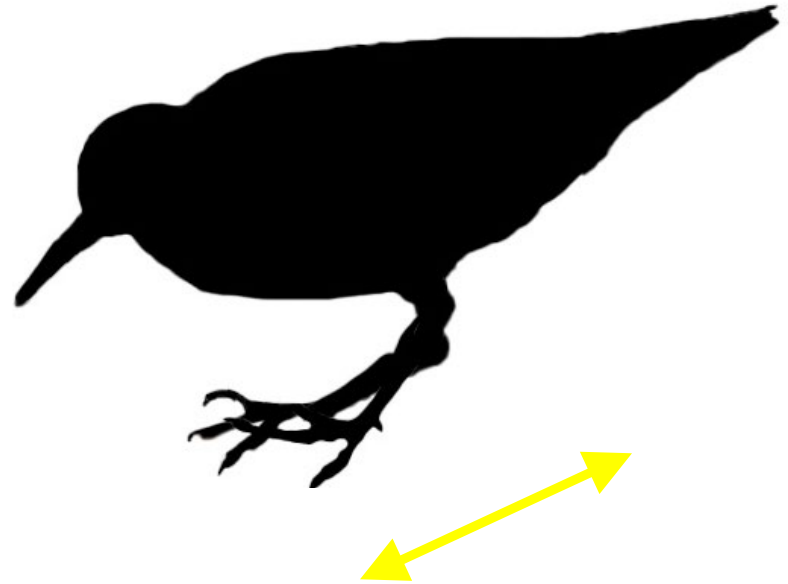
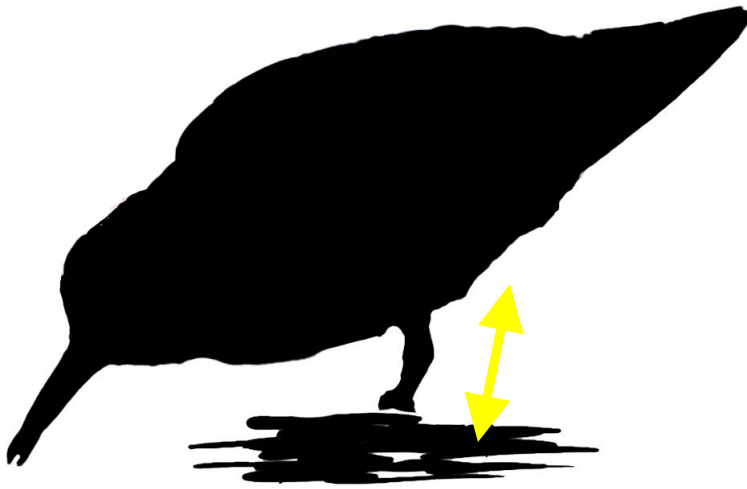


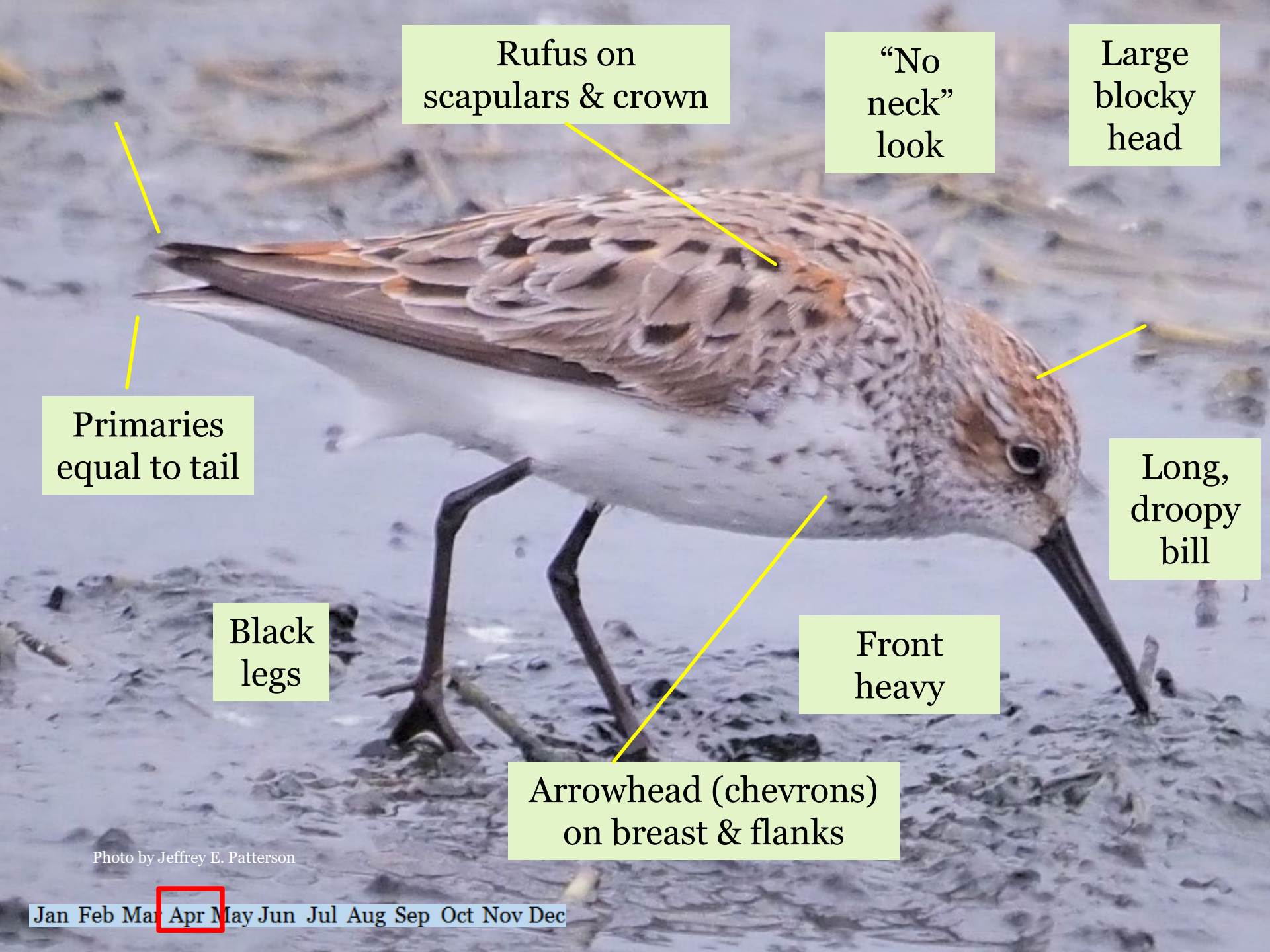
Least



Western

Least





Rufus on scapulars & crown

“No neck” look

Large blocky head

Primaries equal to tail

Long, droopy bill

Black legs

Front heavy

Arrowhead (chevrons) on breast & flanks

Photo by Jeffrey E. Patterson

Jan Feb Mar **Apr** May Jun Jul Aug Sep Oct Nov Dec

Jan Feb Mar **Apr** May Jun Jul Aug Sep Oct Nov Dec



Alternate

Where's the color ?

Front Heavy

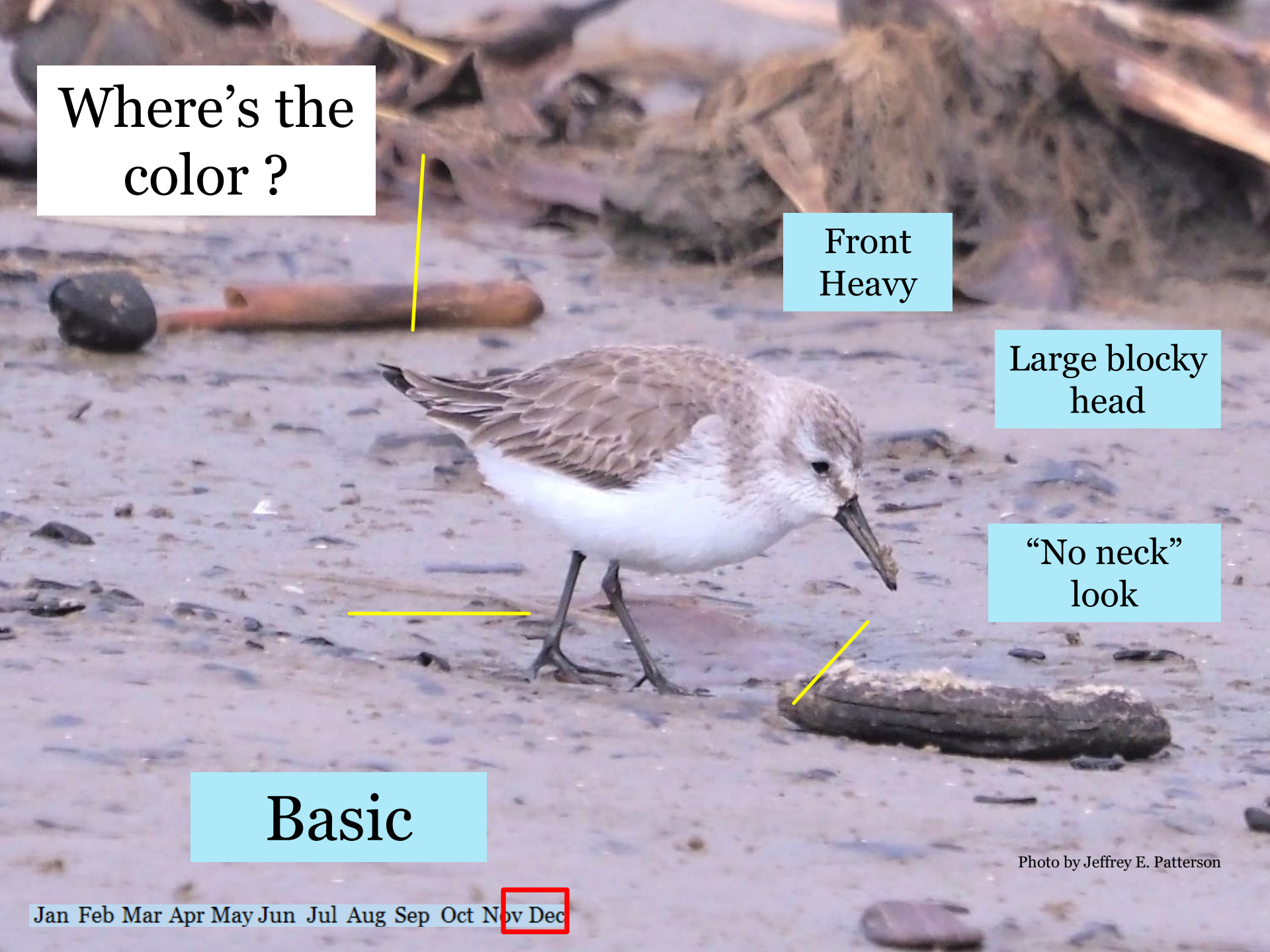
Large blocky head

"No neck" look

Basic

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Photo by Jeffrey E. Patterson



Jan Feb Mar Apr May Jun Jul Aug Sep **Oct** Nov Dec

What
plumage
am I in?



Worn
alternate

Can you ID?

Western

Least

Photo by Jeffrey E. Patterson

Jan Feb Mar **Apr** May Jun Jul Aug Sep Oct Nov Dec

Western



Least



Photo by Jeffrey E. Patterson

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

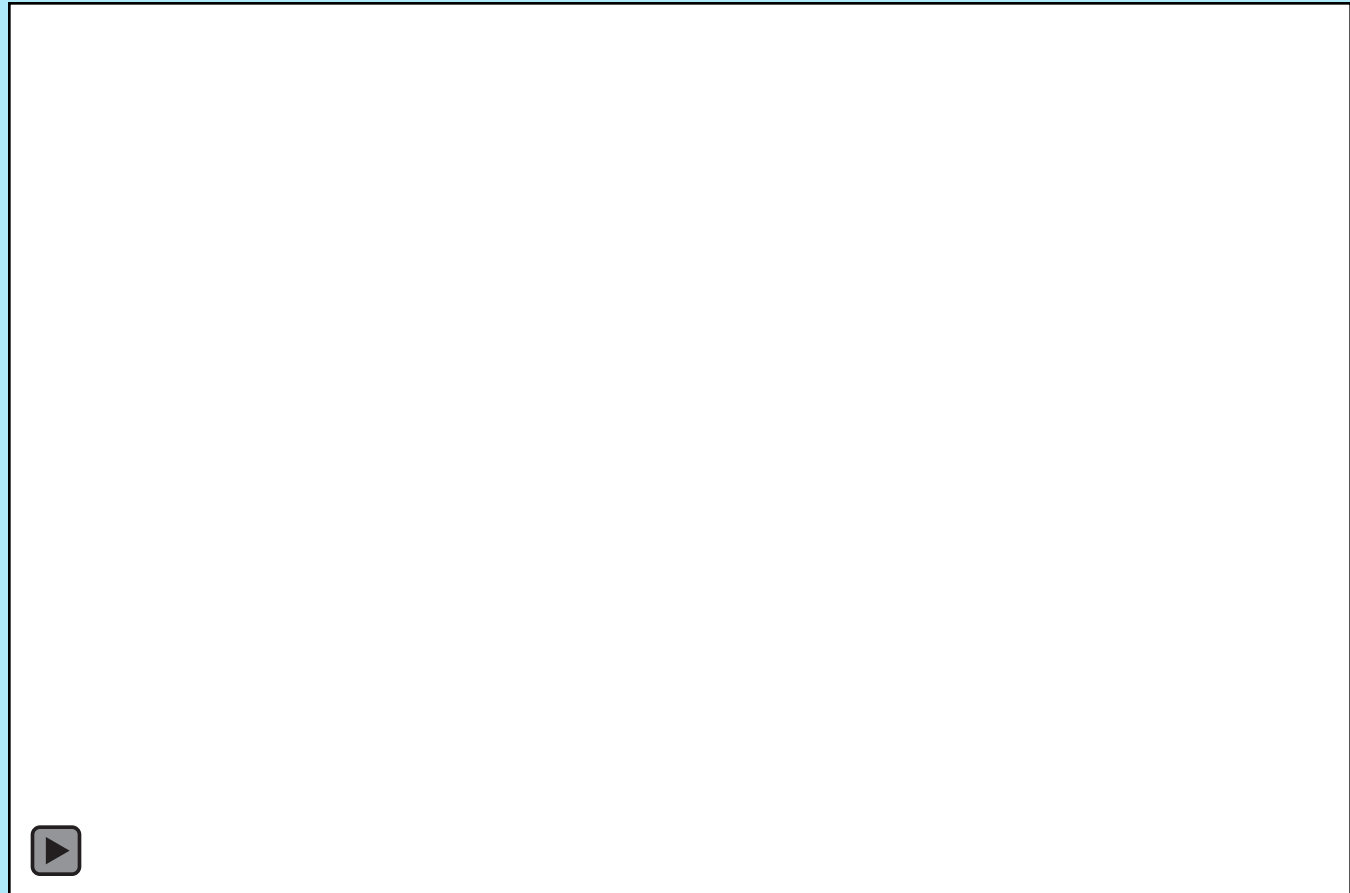


Photo by Jeffrey E. Patterson

SEMIPALMATED SANDPIPER

“BLUNT BILL”

Population
Estimate
2.3 million



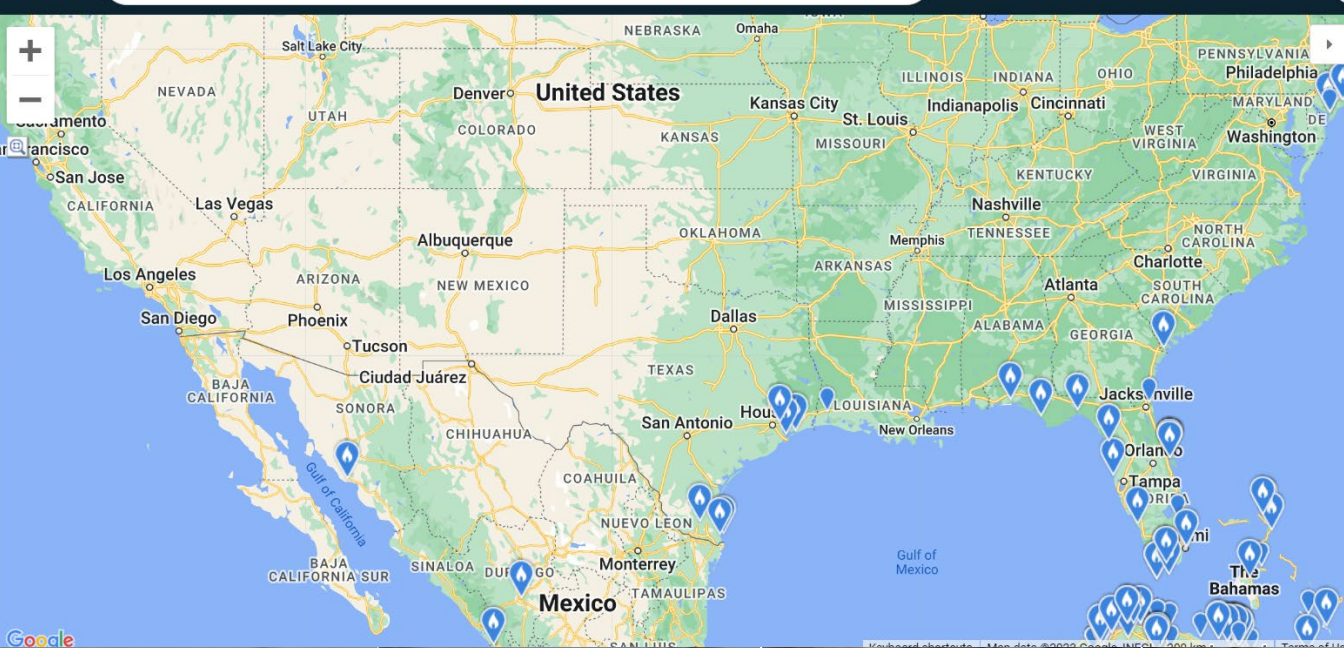
SHORE-BIRDING IS COMPARATIVE BIRDING

Lefty

Righty



What's different?
What's the same ?

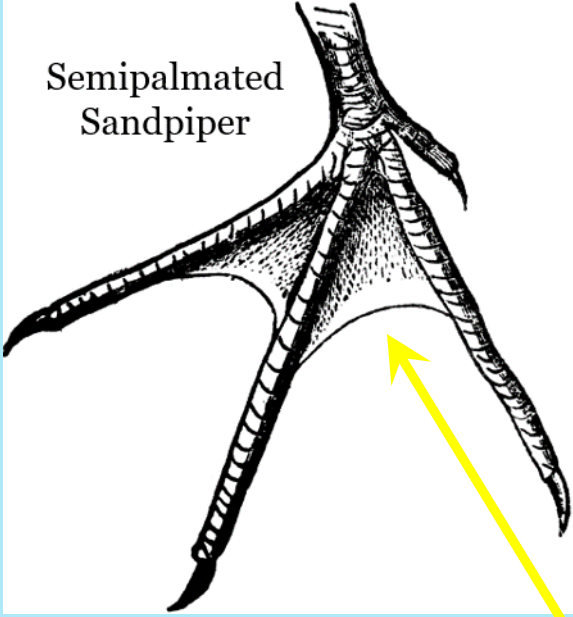


Semipalmated Sandpiper
Last 10 years
Texas sightings
in winter
(Dec, Jan, Feb)



Photos by Cin-Ty Lee (via Ebird)

“SEMI-PALMATED”



Drawing by Florida Center for Instructional Technology

A close-up photograph of a Western Sandpiper's bill and feet on a sandy beach. The bird's bill is long and straight, with a sharp hook at the tip. The feet are long and thin, with a distinct webbing between the toes. The sand is light-colored and textured. A yellow arrow points to the tip of the bill.

Western Sandpiper



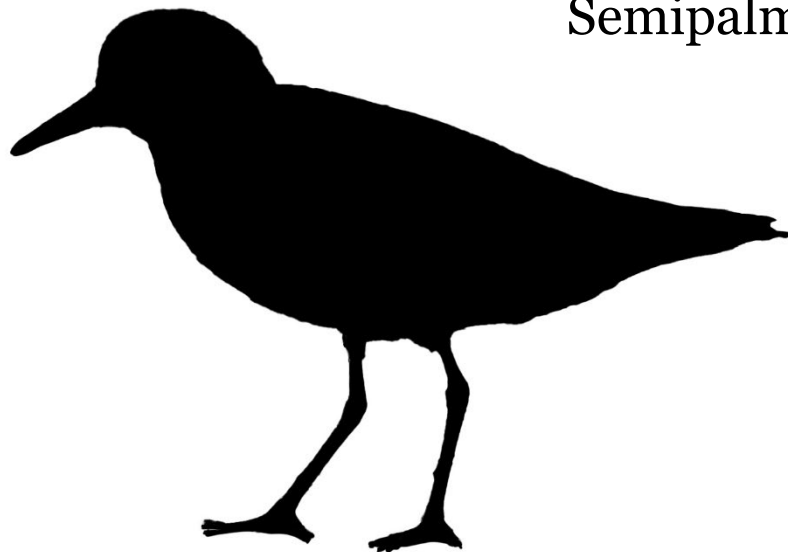
Piping Plover



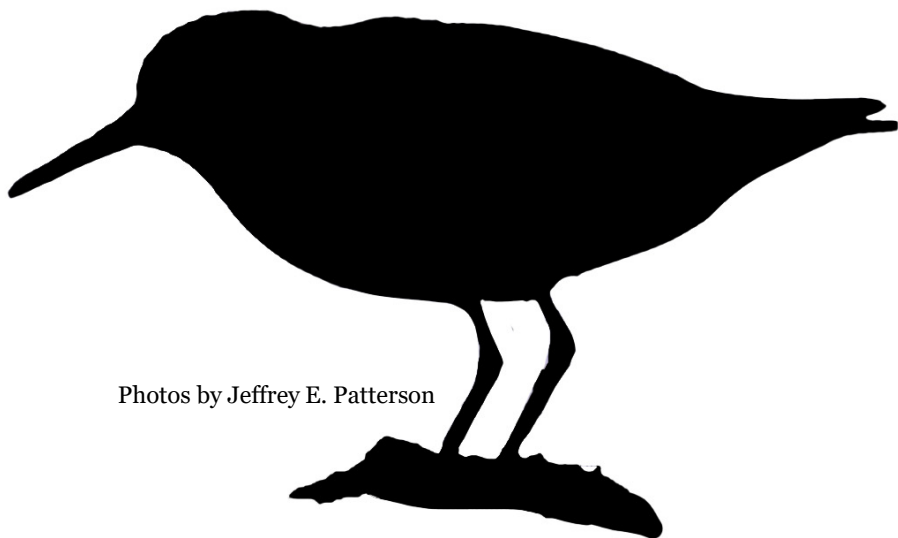
Western Sandpiper

Can you
ID?

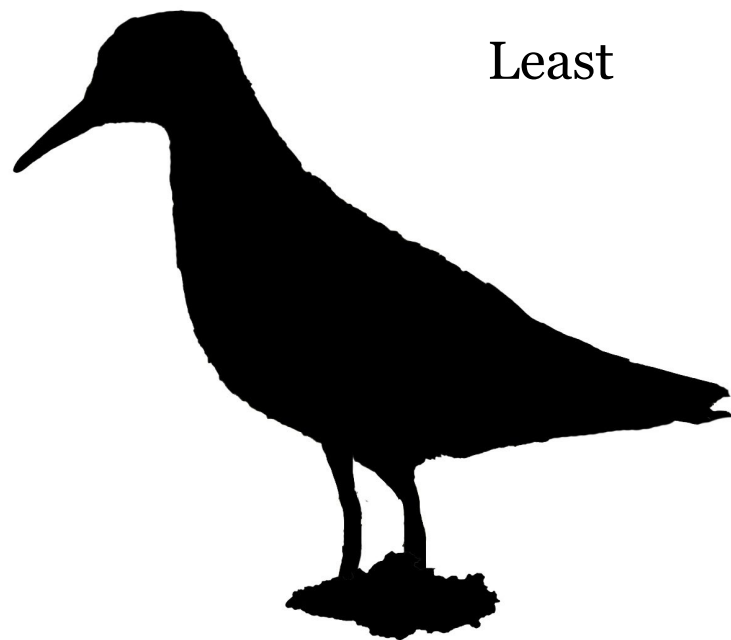
Semipalmated



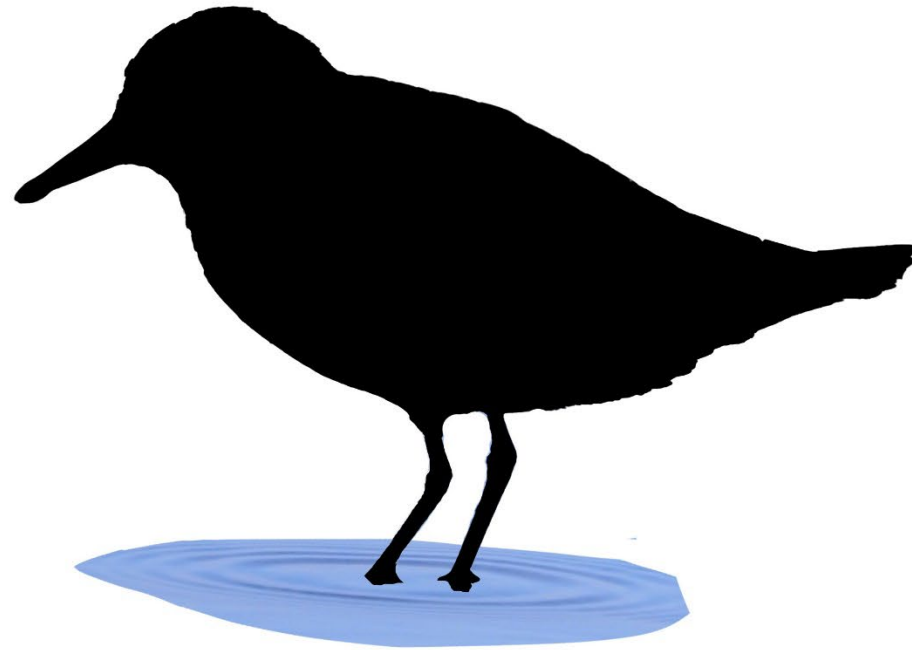
Western



Least



Photos by Jeffrey E. Patterson



Which one
is colorful?



Which one
is frosty ?

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Which one
is brown ?

“Big-eyed”
look

Rounder, Less
Blocky Head

Grayer
Back

Primaries
equal to
Tail

Straight,
blunt-
tipped
Bill

Clean
White
Throat

Whiter
Belly &
Flanks

Black
legs

Jan Feb Mar **Apr** May Jun Jul Aug Sep Oct Nov Dec

Photo by Jeffrey E. Patterson

Semipalmated

Bill
sometimes
bulbous

Semipalmated

Straight,
blunt-
tipped Bill



Semipalmated



Photo by Jeffrey E. Patterson

Jan Feb Mar **Apr** May Jun Jul Aug Sep Oct Nov Dec

A photograph of two Western Semipalmated sandpipers standing in shallow, rippling water. The birds are shown in profile, facing left. They have long, dark, straight bills and are covered in intricate brown and white mottled patterns on their heads and backs. Their underparts appear lighter, with some white feathers visible. The water is a light brownish-grey color, and the background is softly blurred.

Western

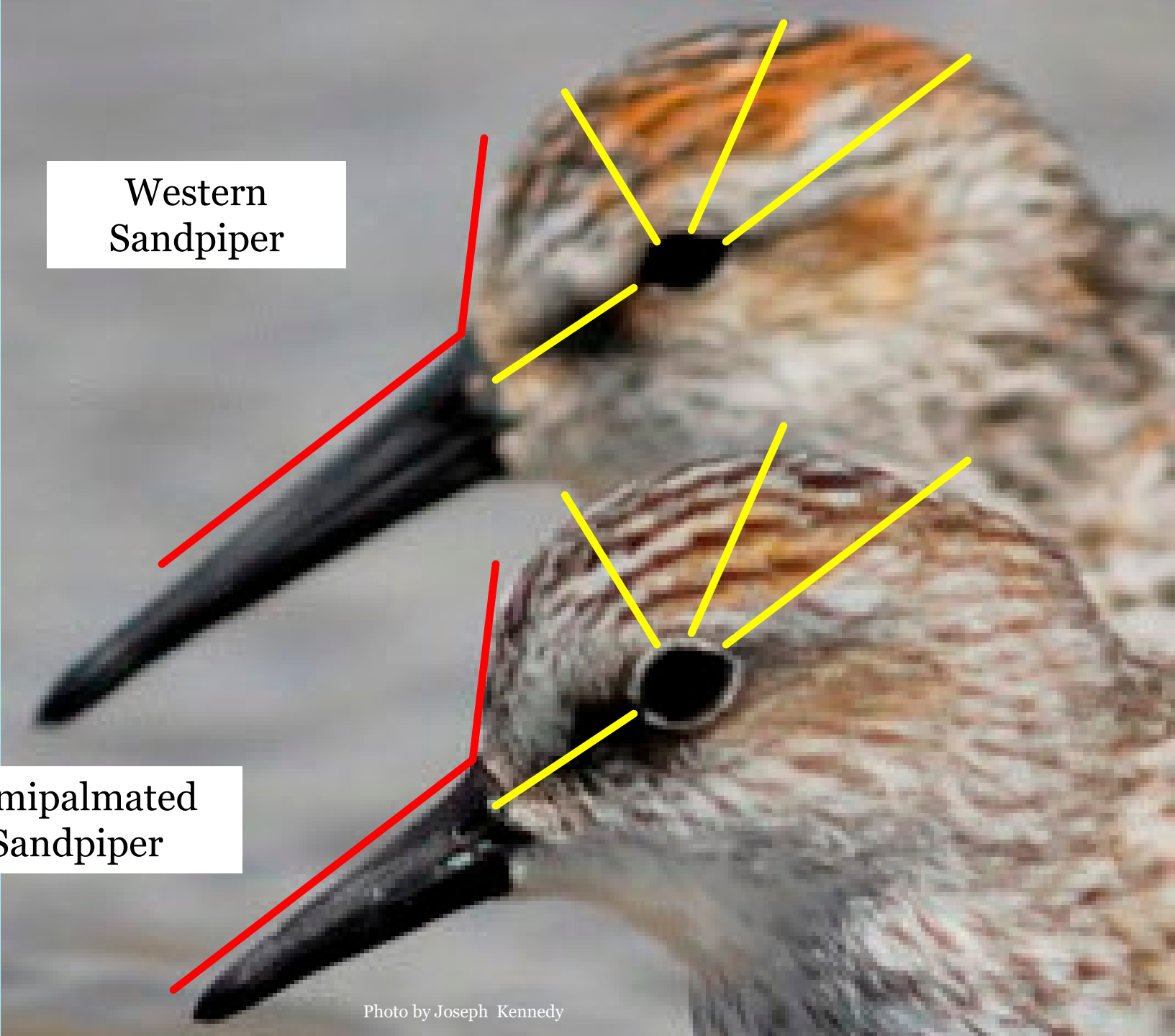
Semipalmated

Photo by Joseph Kennedy

Western
Sandpiper

Semipalmated
Sandpiper

Photo by Joseph Kennedy



Semipalmated

Worn
Alternate

Same
date/location
(August)

Western

Basic

What
plumage
am I in?

ID ?

What
plumage
am I in?

Photo by Jeffrey E. Patterson

Jan Feb Mar Apr May Jun Jul **Aug** Sep Oct Nov Dec

A photograph of two shorebirds standing on a sandy beach. The bird on the left is labeled 'Western' and has a reddish-brown cap and a dark, straight bill. The bird on the right is labeled 'Semipalmated' and has a more mottled brown and white pattern on its head and neck, and a dark, straight bill. Both birds have long, thin legs and are facing right. The background is a light, sandy beach with some sparse vegetation.

Western

Semipalmated

Western



Semipalmated

Western



Semipalmated

A photograph of two Least Semipalmated plovers in a shallow, blue-tinted wetland. The birds have mottled brown and tan upperparts and white underparts. They have long, dark bills and thin, dark legs. The bird in the foreground is standing in the water, and its reflection is visible. The bird in the background is standing on a slightly higher, muddy bank. The water is shallow and reflects the sky and the birds. The overall scene is a natural, outdoor setting.

Least

Semipalmated

Photo by Jeffrey E. Patterson

Juvenile Plumage

“Frosty”
look



Photo by Jeffrey E. Patterson

Semipalmated
Sandpiper

Basic



Photo by Cin Ty Lee

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec



Photo by James Giroux

Western

Can you
name
them?

Semipalmated



Least

Photo by Jeffrey E. Patterson

Jan Feb Mar **Apr** May Jun Jul Aug Sep Oct Nov Dec

BAIRD'S SANDPIPER

THE LONG-WINGED GENTLEMEN PEEP

Population
Estimate
300,000



Baird's



Photo by Jeffrey E. Patterson

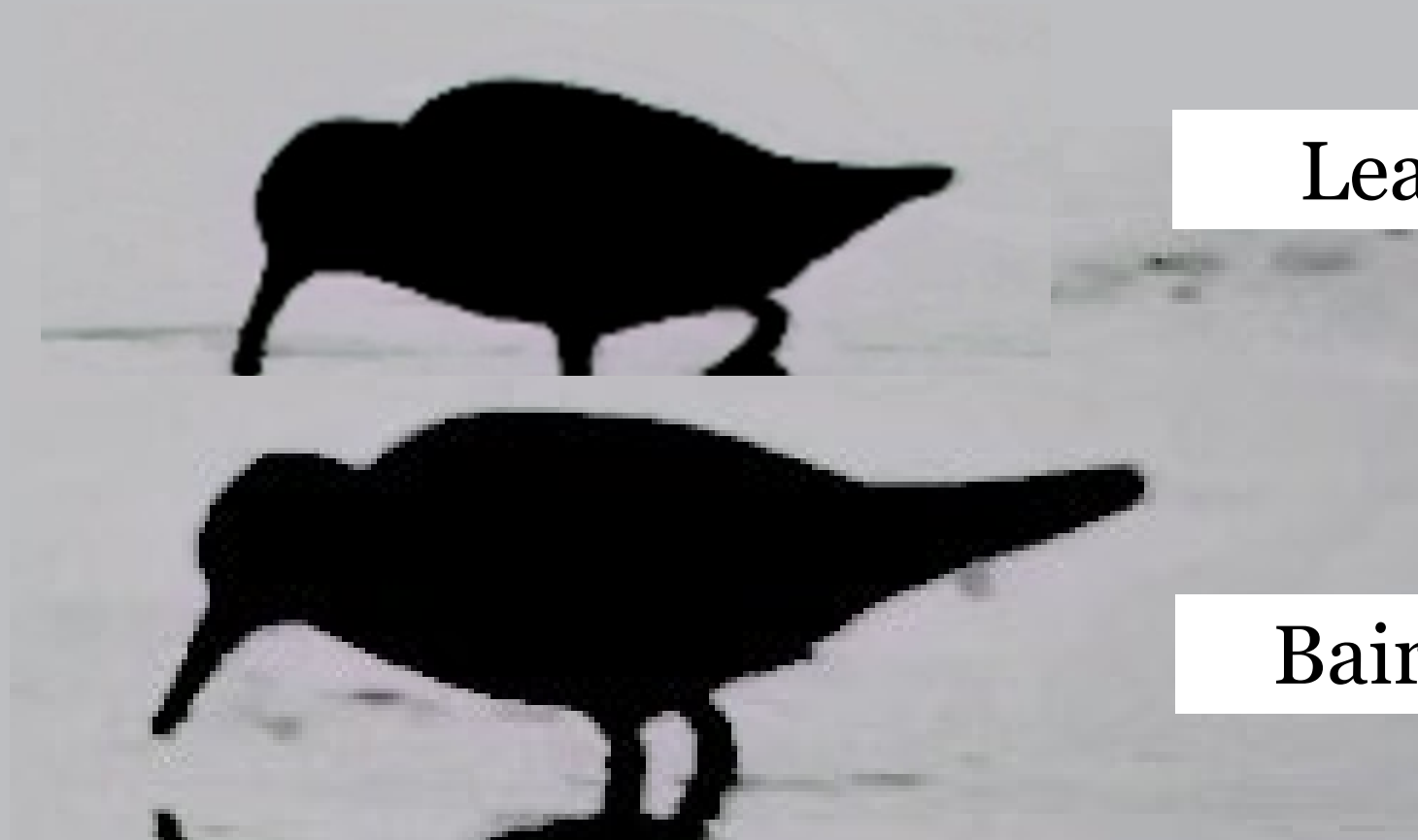
Baird's



Least

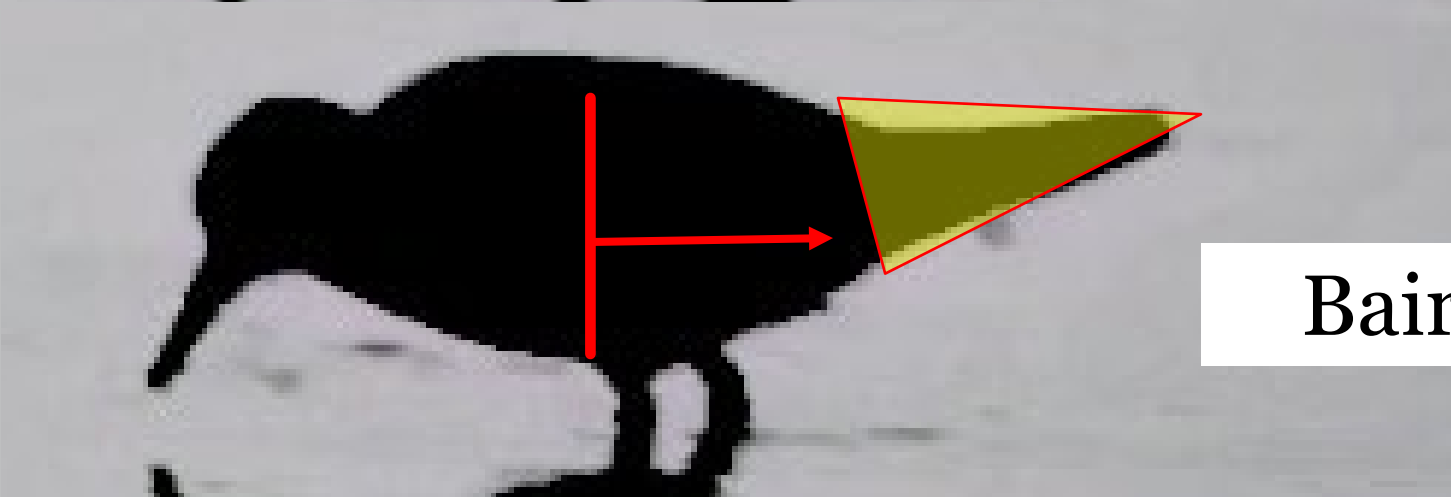


Baird's





Least



Baird's

VIDEO



Least



Baird's



Steep forehead

Warm brown

Fairly straight,
fine-tipped bill

Primaries

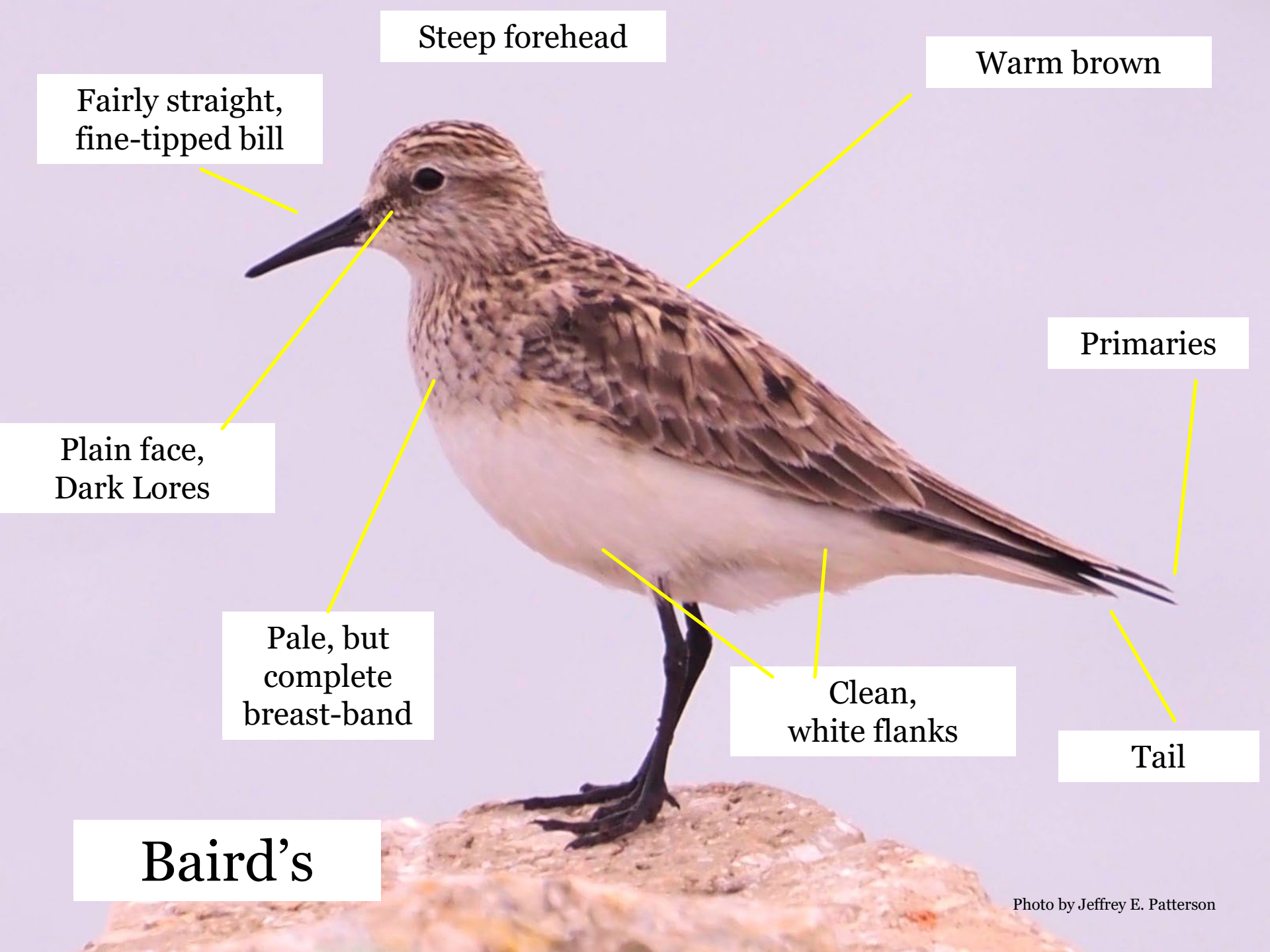
Plain face,
Dark Lores

Pale, but
complete
breast-band

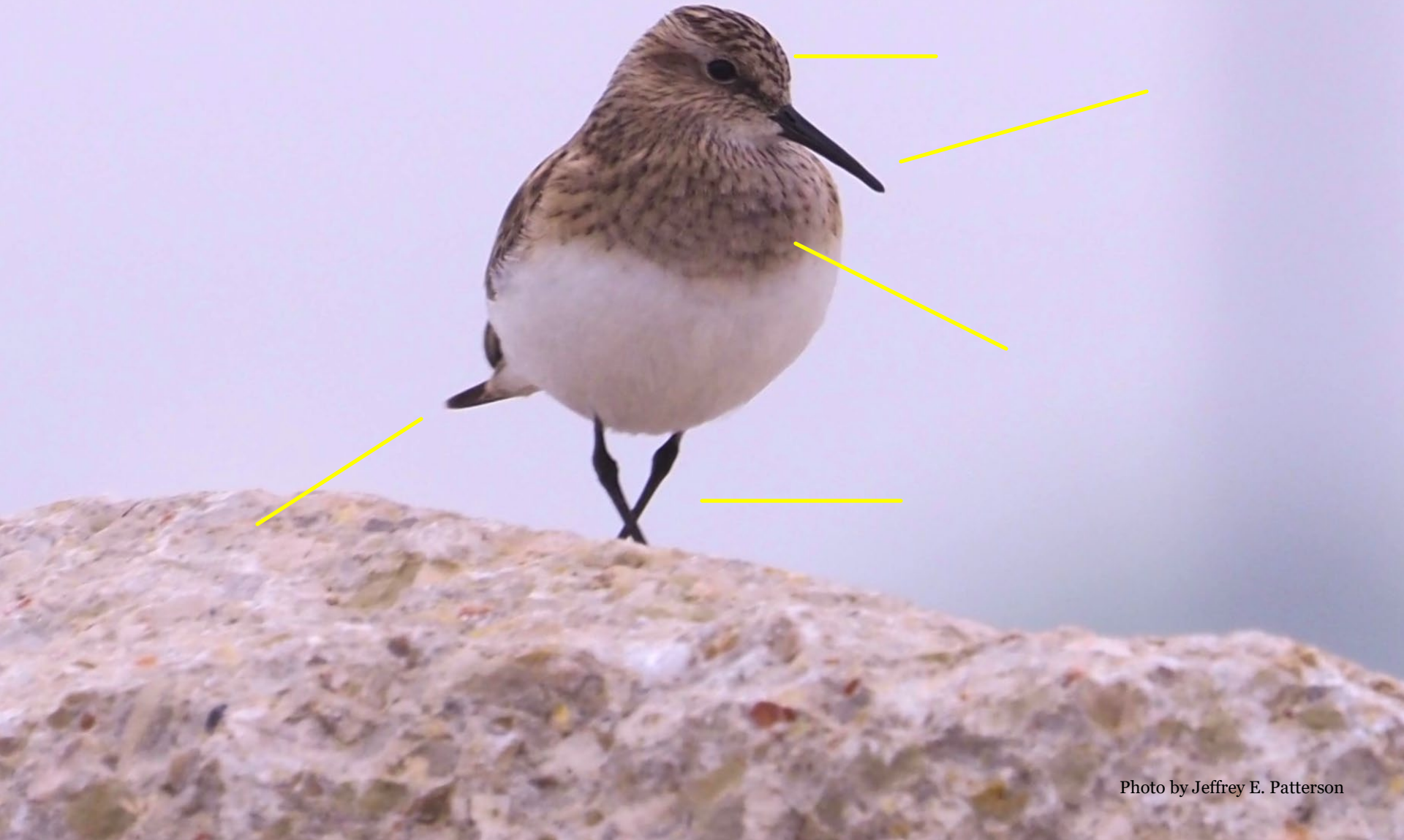
Clean,
white flanks

Tail

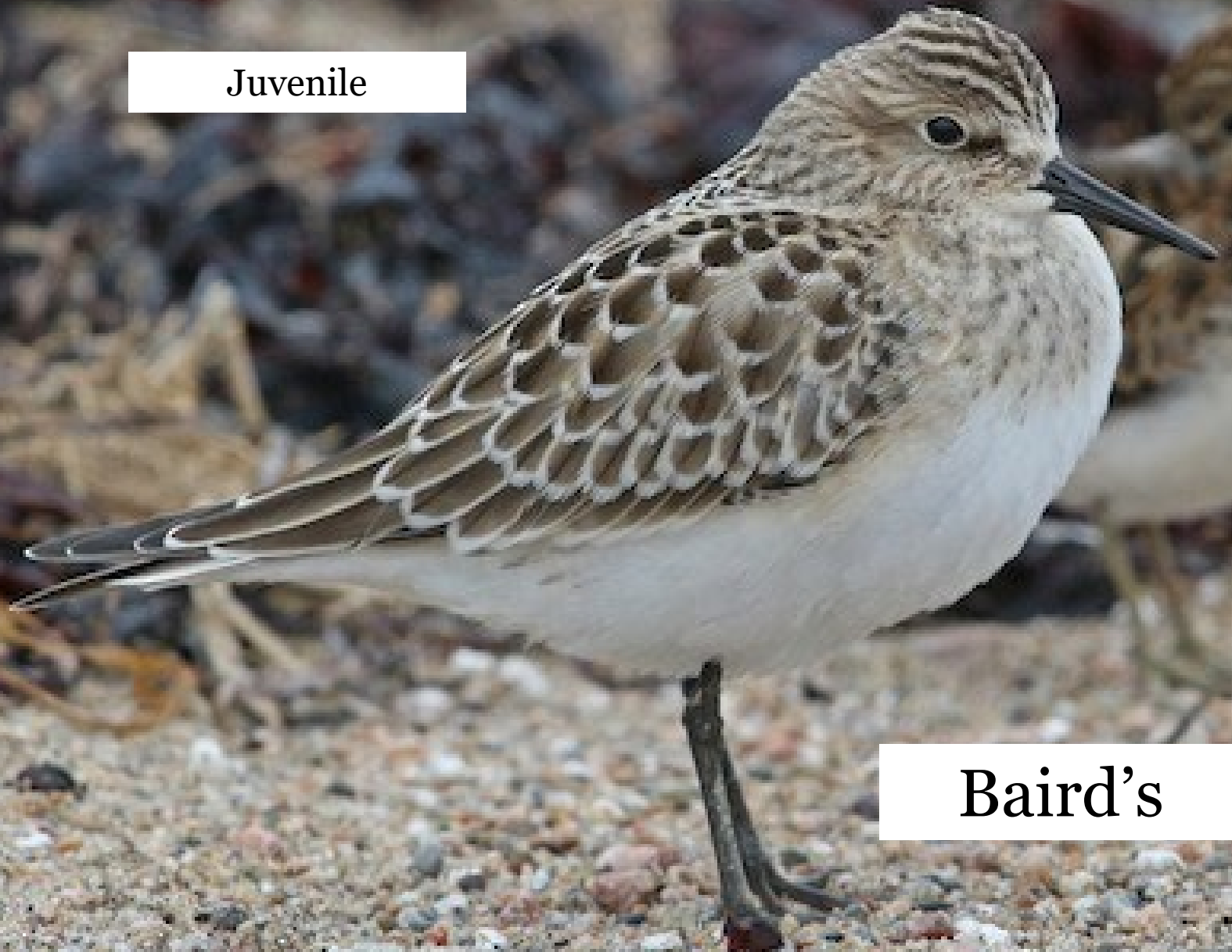
Baird's



Baird's



Juvenile



Baird's



Baird's

Least

“ELLIPTICAL” MIGRANTS

White-rumped Sandpiper

Whimbrel

Hudsonian Godwit

American Golden Plover



WHITE-RUMPED SANDPIPER

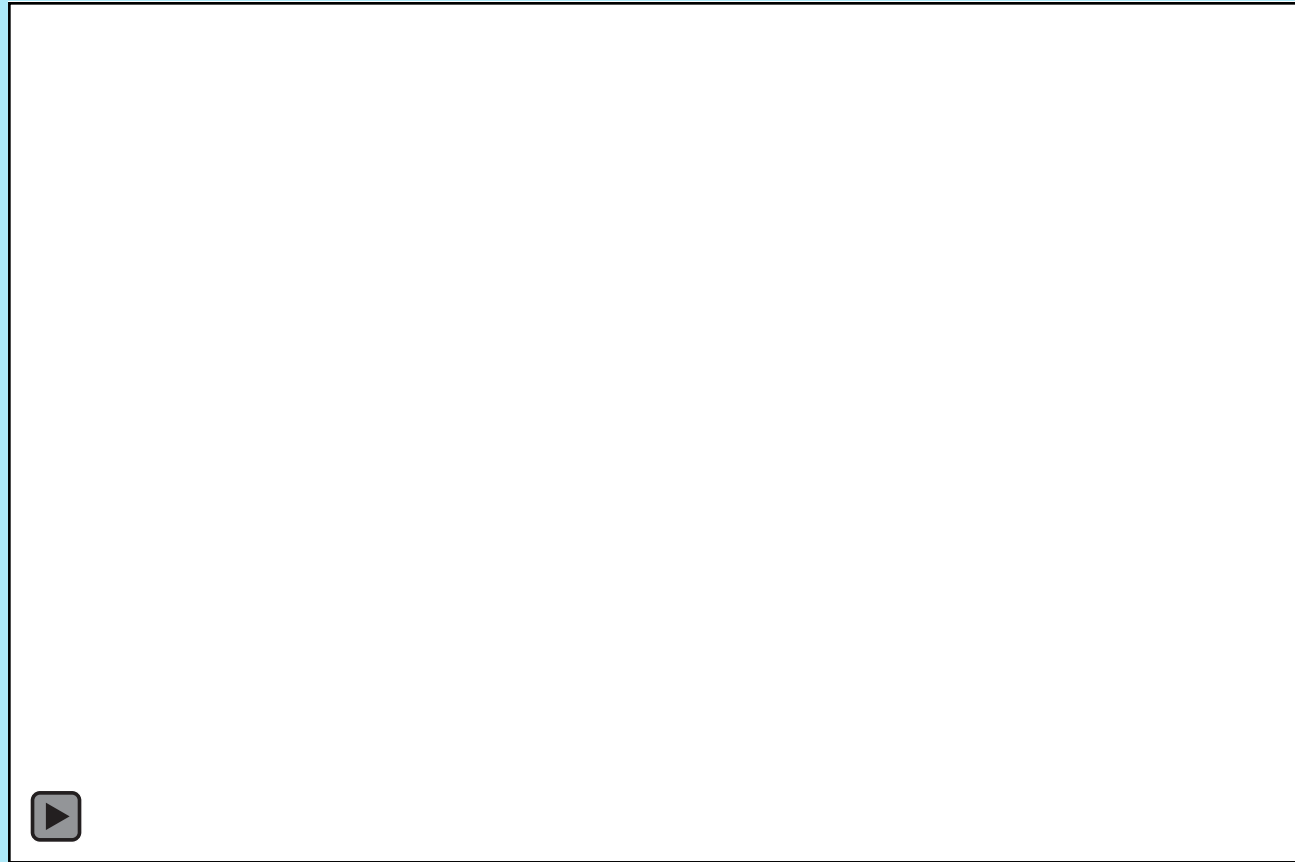
“LONG-WINGED STREAKY-FLANKED PEEP”

Population
Estimate
1.7 million

White-rumped Sandpiper
Calidris fuscicollis



Map by Cornell Lab of Ornithology
Range data by NatureServe



Bill thicker than Baird's,
more bulbous tip

Thin but obvious
white supercilium

White-rumped

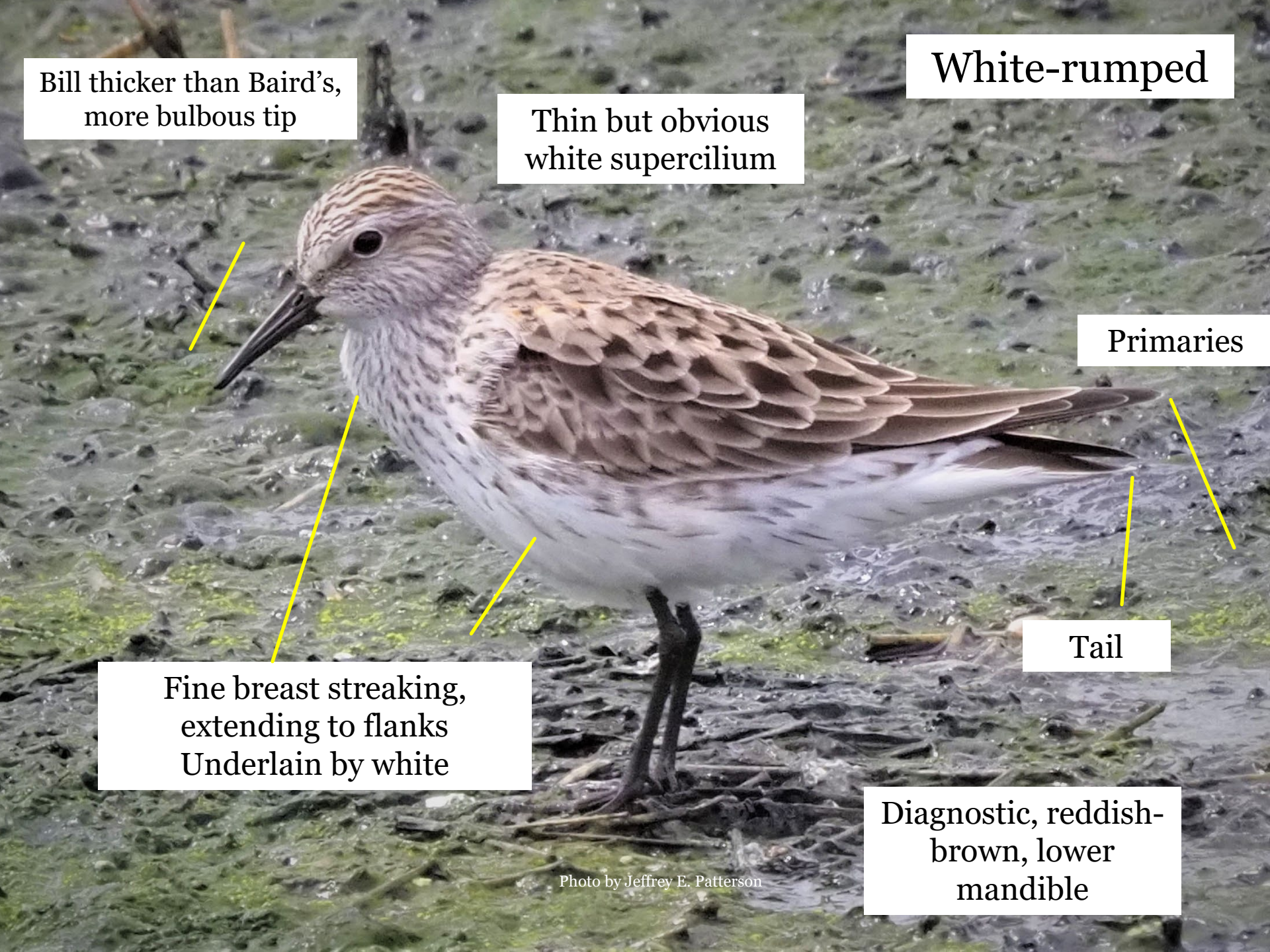
Primaries

Tail

Fine breast streaking,
extending to flanks
Underlain by white

Diagnostic, reddish-
brown, lower
mandible

Photo by Jeffrey E. Patterson



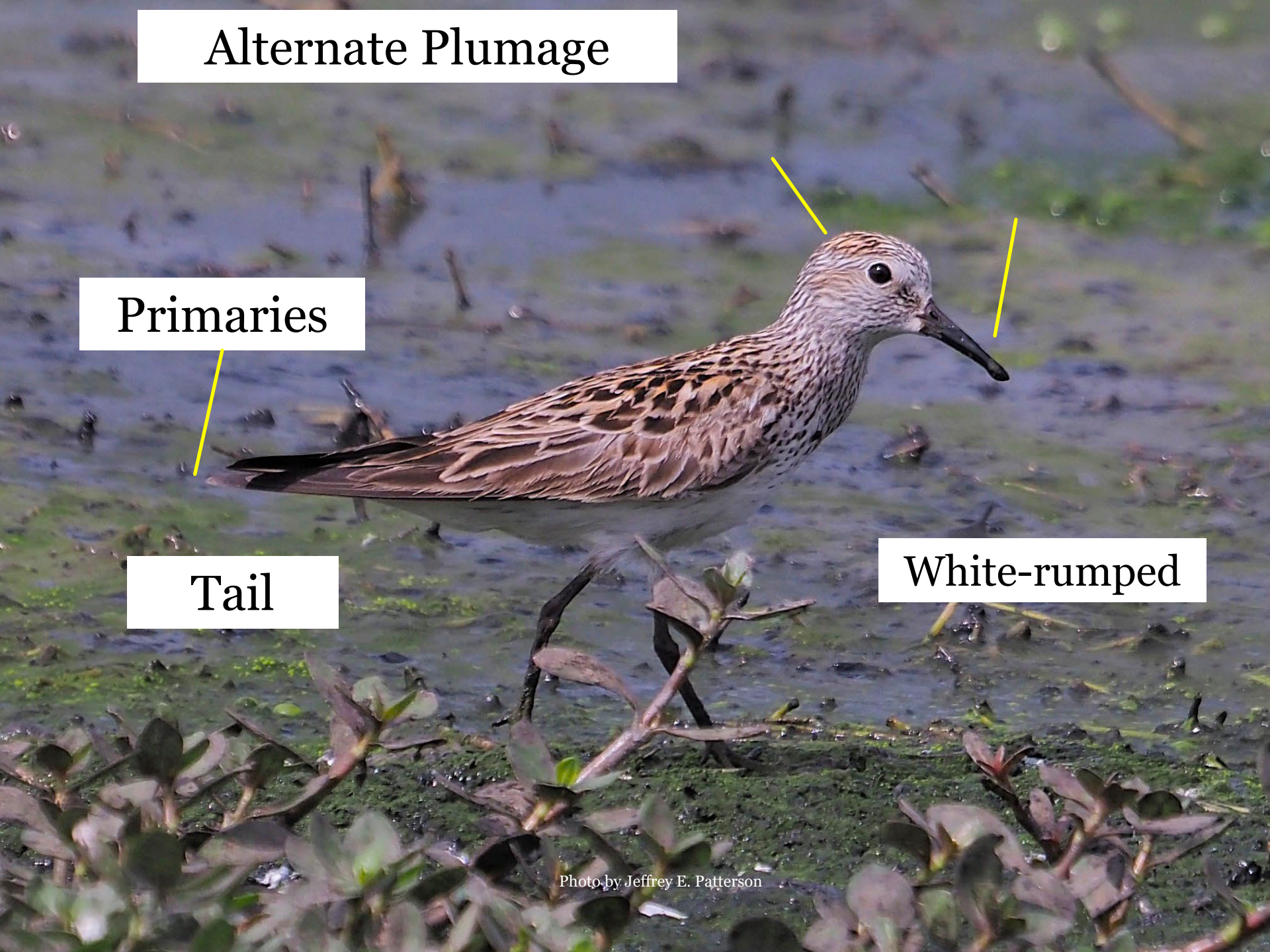
Alternate Plumage

Primaries

Tail

White-rumped

Photo by Jeffrey E. Patterson



Long “attenuated” look



White-rumped

Photo by Jeffrey E. Patterson

White-rumped



Streaks underlain
by white

White-rumped

See-saw look
as it feeds

Baird's



Photos by Jeffrey E. Patterson

FEEDING STYLES

3 PEEPS

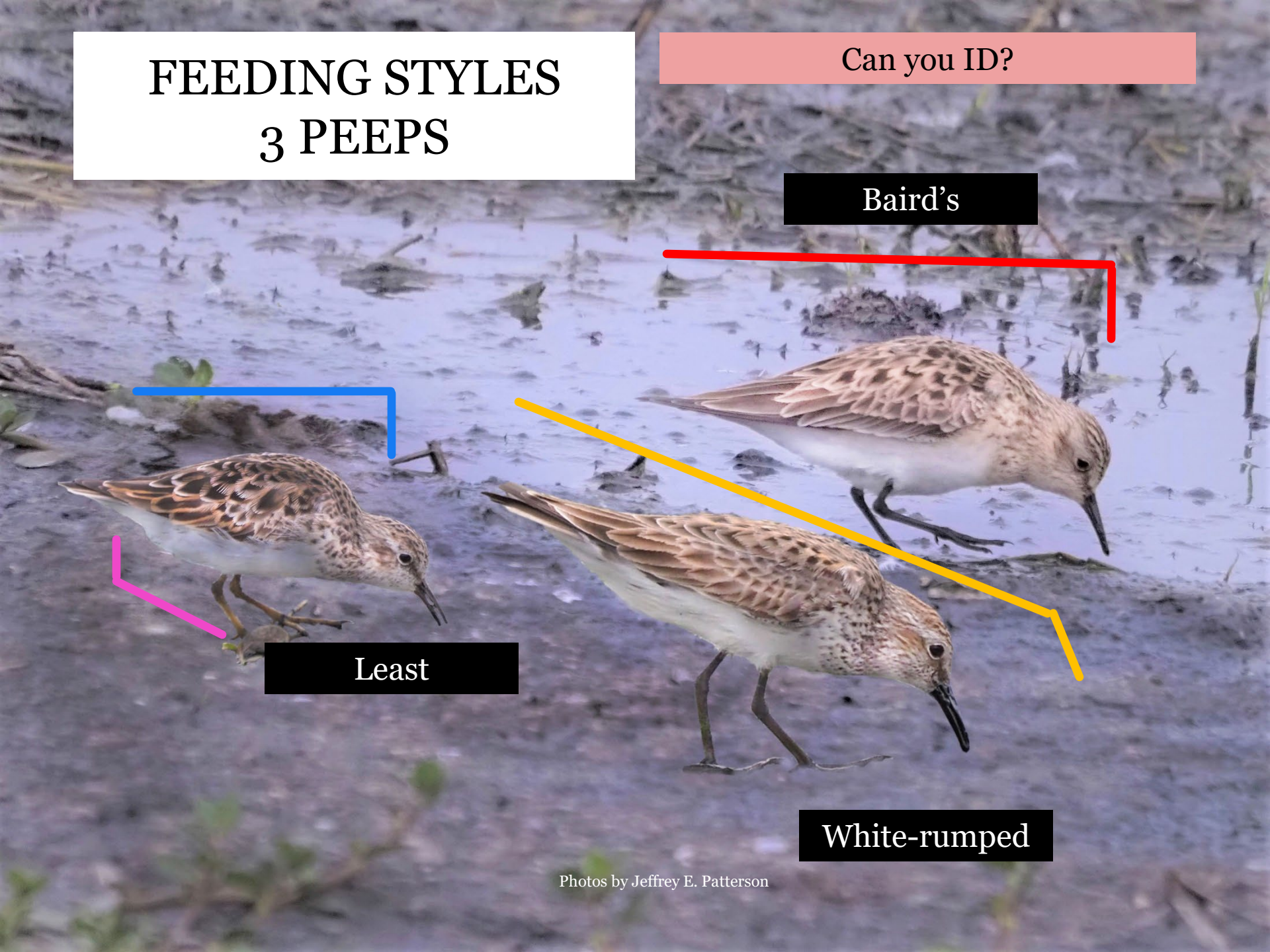
Can you ID?

Baird's

Least

White-rumped

Photos by Jeffrey E. Patterson



White-rumped



Photo by Jeffrey E. Patterson

White
rump



Photo by Jeffrey E. Patterson



CALIDRIS PEEPS



CALIDRIS PEEPS



Least



Western



Semipalmated



White-rumped



Baird's

GROUP QUIZ

3 Brown Birds



Photos by Jeffrey E. Patterson



Paintings by David A. Sibley

3 Brown Birds

Least



Baird's



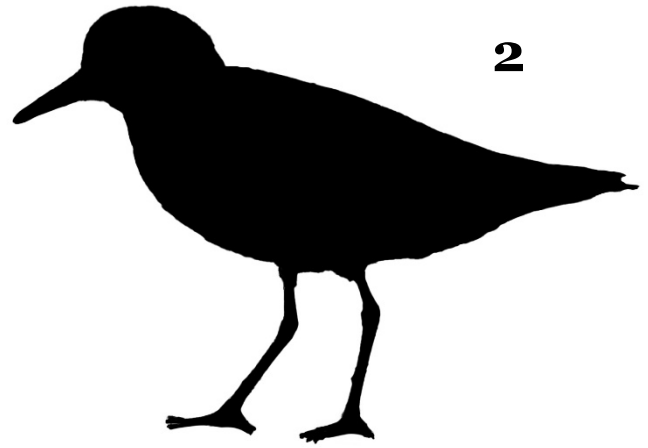
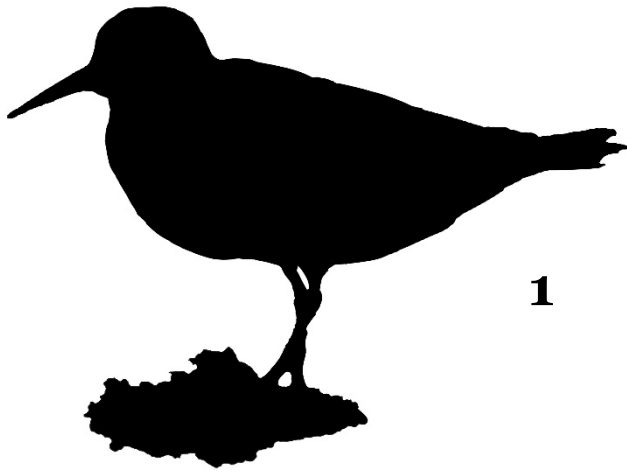
Pectoral



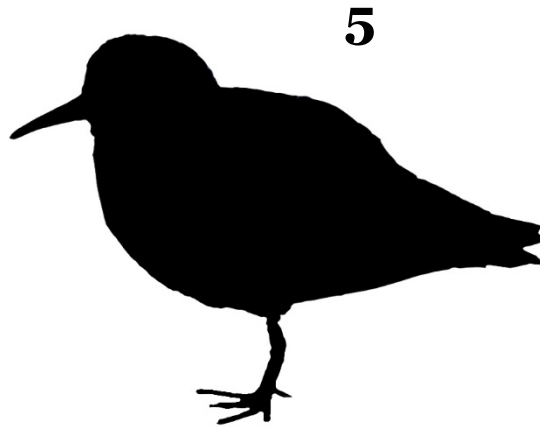
Photos by Jeffrey E. Patterson



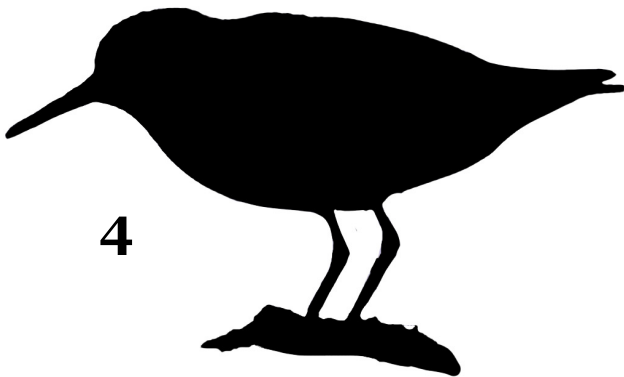
Paintings by David A. Sibley

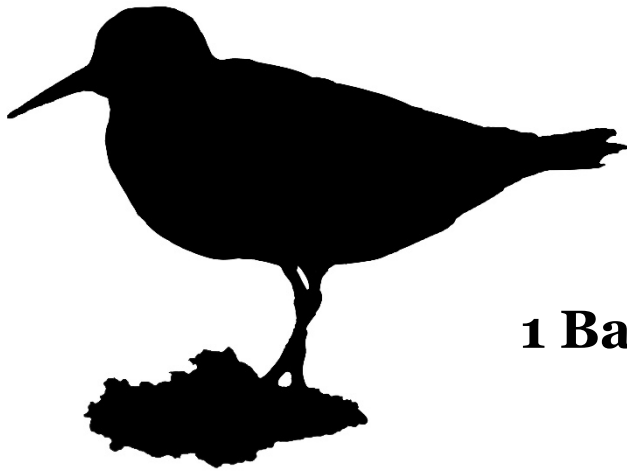


And tell me
why?



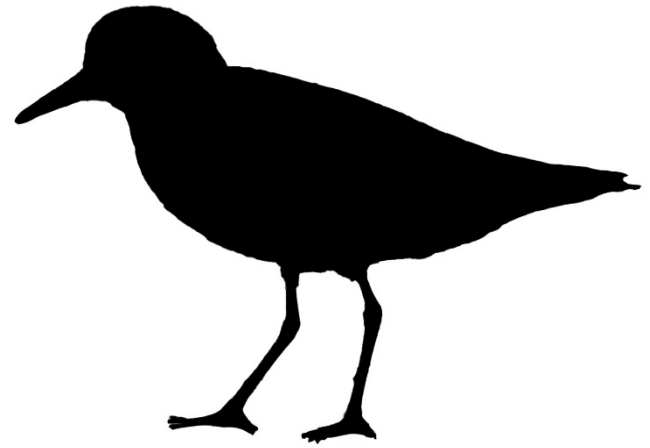
Can you name
them?





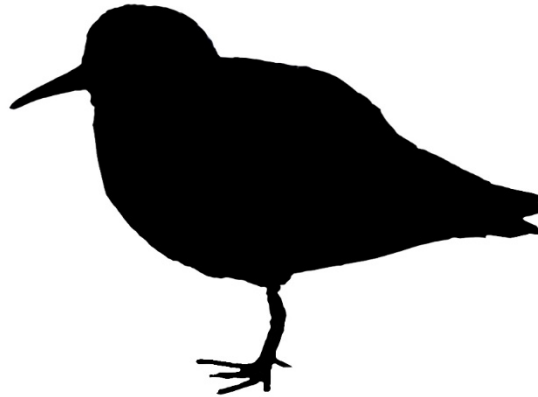
1 Baird's

2 Semipalmated



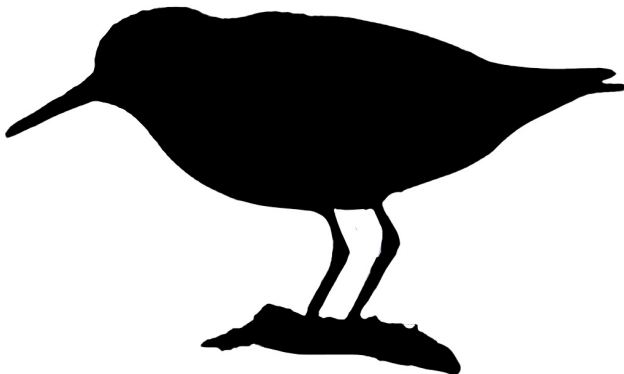
5 Least

And tell me
why?

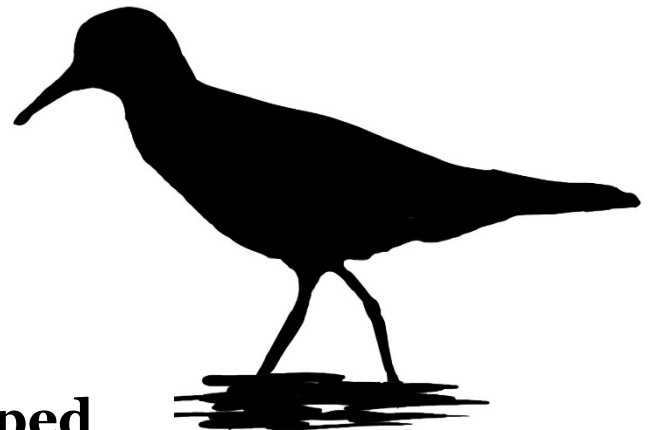


Can you name
them?

4 Western



3 White-rumped



Can you ID?

Least



Semipalmated

Can you ID?

Western

Semipalmated



Can you ID?

Western

Semipalmated



Can you ID?

White-rumped



Least



Can you ID?

White-rumped

Semipalmated

Least



Can you ID?

White-rumped



Baird's



Can you ID?



Baird's



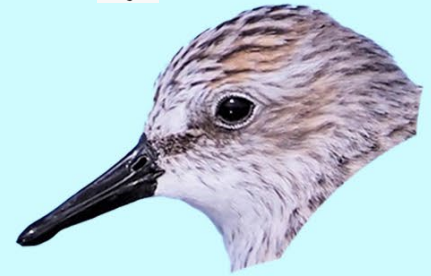
Pectoral

Photos by Jeffrey E. Patterson

Where's
Western ?



Western



Least

Where's
Least ?



Western



Photos by Jeffrey E. Patterson

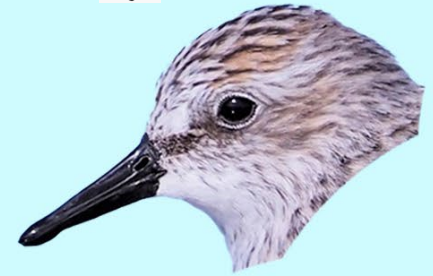
Where's
Western ?



Baird's



Western



Semipalmated



Least



Western



White-rumped

Where's
Least ?

Photos by Jeffrey E. Patterson

Jan Feb Mar **Apr** May Jun Jul Aug Sep Oct Nov Dec



Photos by Jeffrey E. Patterson