vol. 163, no. 3 the american naturalist march 2004

E-Article

The Mid-Domain Effect and Species Richness Patterns: What Have We Learned So Far?

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21 DE

DE

DE.

What Are Mid-Domain Effect Models, and What Do They Show?

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(H 1983; C 1984; G G 1996; G 2001).

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(H 2000).

(C 1984 G G 1996). A

(G G 1996) ( ) (G 2001). A

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E

(C 1987), (. 1987), (2000); (., B. 1998); (., 1997; G 2001); (., 1993; G . 1996). DE

( )

I ( ) ( ), ( ) (1999; B . 2001; 2001, 2002; D. -R . 2002; H D. -R 2002; 2002). (2001).

I ( ) ( ) (; C H 1994; C 1998; 1998; . 1999; C 2000*a*; 2000; G 2001; G 2002; 2002; 2002; C. 2003). E DE (1) (2002, . 351), A B (A A E DE) DE.

I DE

B

(C H 1994; C 1998) (2002),

Population Processes versus Biogeographic Patterns

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(H 2003).

Table 1: E -D E

			G	1-D	2-D		?
E 2002				78%			
				66%			
G 2001				51%	F		
				46%			
				96%			

000

C (2004)

1997
2002

C 1998

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B (1)
B (2)

E 18%
E 49%
E 7%
E 14%
E 32%
E 76%
E 50%
E 45%

B
A
A
A
G

E
E 13%
E 91%
E 37%
D

A

Theo e ical Range Si e F e enc Di ib ion

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DE (C H 1994;
1998) FD .

(C H ' 1994 2,
C 2000*a*. . 1 2
1998 A ' 1957
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2000*a*)

(FD
$d(\ ) = 2 - ^2$,
$0 < < 1$.)

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(A 1984; B 1995; G 1996, 2003; 1999), (

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(., G 2002; C 2003)
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II . . (2003) . . . . . I- . . . . . II . . .

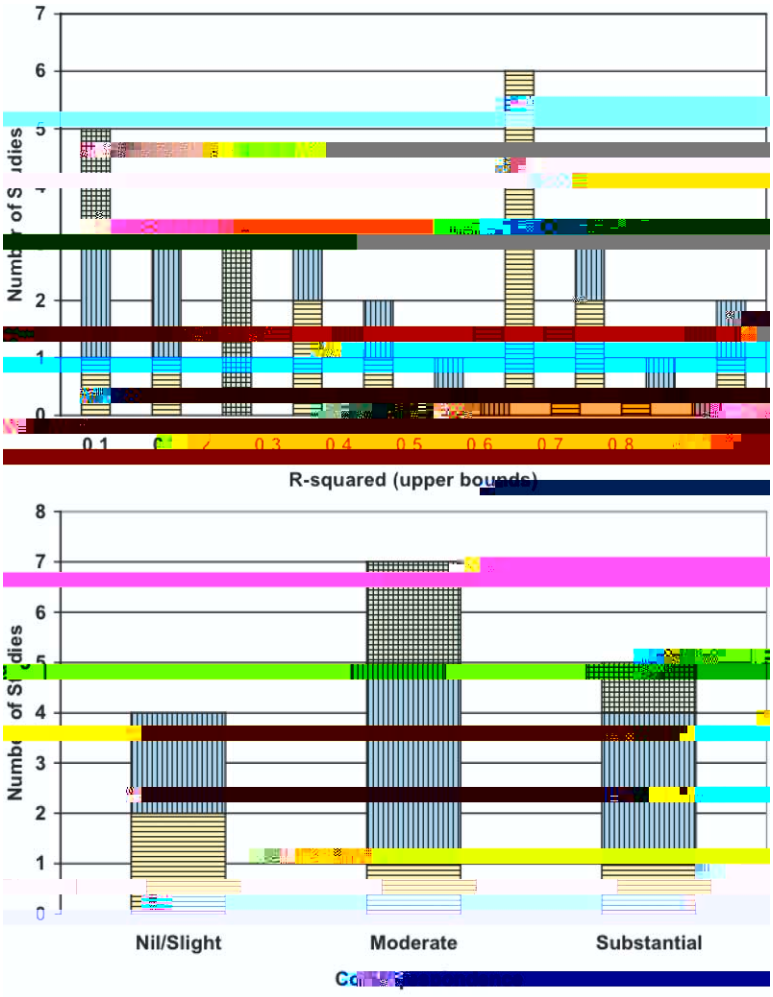

Figure 1: A . . . . . (DE) . . . . . 1, ... *Ho i on al ha ching, ello backg o nd:* . . . . . DE . . ; *e ical ha ching, bl e backg o nd:* . . . . . ; *c o -ha ching, g een backg o nd:* . . . . . (. . . . . ; . . . . . 1). . . . . E . . . . . .

1. (2003)

1 (2002). DE

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(2002; C . 2003).

DE

(., H

D. -R 2002; 2003)

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DE (., 1999

C 2003

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(

C 1998; . 1999; H D. -R

2002; 2002; G 2002)

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(1999) (2002)

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Dimen ionali

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(20-25( )-)05 -/F-), 34 9( )

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M l i a ia e App oache

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A , C 2003 A
, C 2004 A
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A ( )
DE
(
1995; 1997; 1997). E ,
, 5° B -
(;
)
(2001)
(C C -
1980; G C 2001). (1997)
C (2004) -
C -
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I -
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E 2002) DE

6* (6*)10(-320( )-46 *)-464 ( )-2906

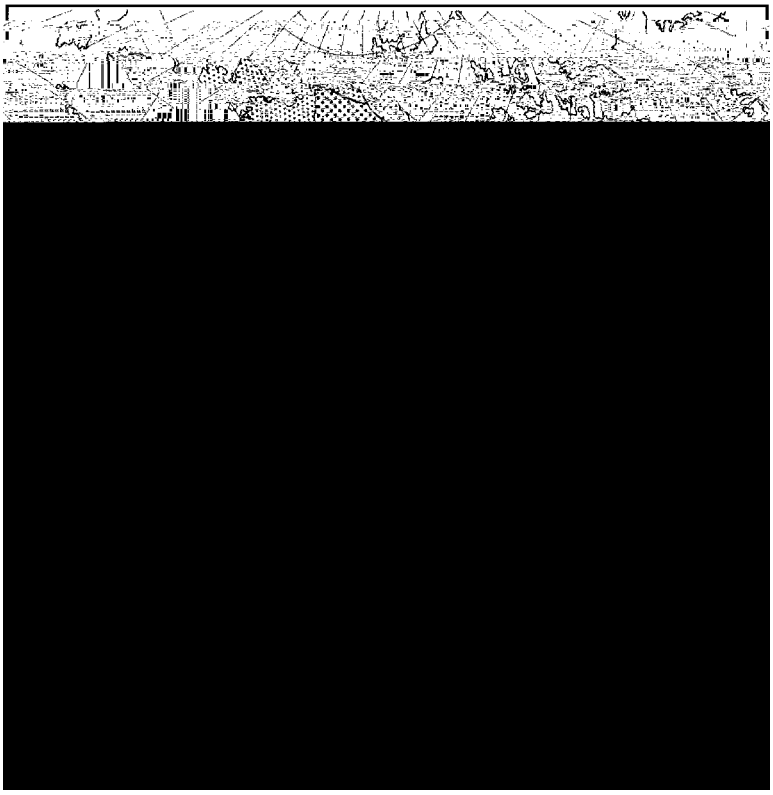

Figure C1:

Figure C2:

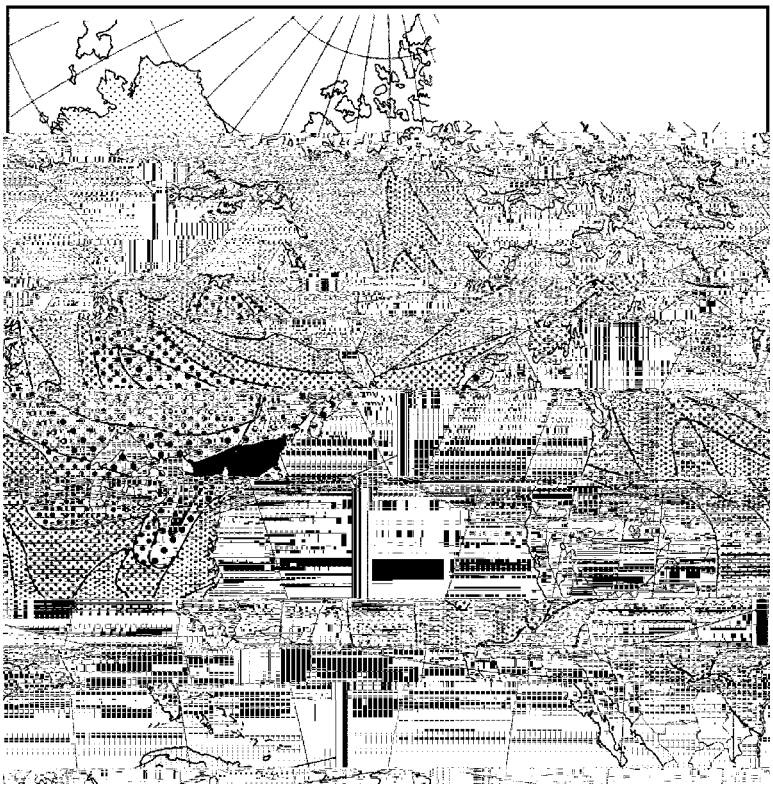

Figure C3: A (1970)

D -R

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C1, C2, C3)

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H DE

, H D -R (2002, 423)

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-5 10.1( )

. E . 4: 379 391.

G , . , G. . E . 2002. E : 7.0. A I - -B ://

G , . , G. . G . 1996. I , , D.C.

G , . , E. . , . A. G , E. . , E. A , A. D. B , . 1996.

in . D , ., C G -
, C., . C , . F , . A.
. 2003. 421:933 936.
- , ., . 1999. -

81:93 98.

. B. 1987.

(B .) 73:579 582.

, F. A., . . G , . . C . . 2003.

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, A E -

72:677 690.

A E : . C