

Table S1. Count of ground beetle species (no = 99) captured in harvest residue retention treatments in clearcut stands, Georgia, 2012 and 2013.

Species	2012	2013
<i>Acupalpus indistinctus</i> Dejean	1	0
<i>Acupalpus pauperculus</i> Dejean	0	4
<i>Acupalpus testaceus</i> Dejean	0	6
<i>Amara aenea</i> (DeGeer)	0	1
<i>Anisodactylus haplomus</i> Chaudoir	1	4
<i>Aspidoglossa subangulata</i> (Chaudoir)	0	3
<i>Chlaenius emarginatus</i> Say	0	2
<i>Chlaenius pursillus</i> Say	1	0
<i>Cicindelidia punctulata punctulata</i> (Olivier)	7	0
<i>Cyclotrachelus levifaber</i> (Freitag)	1	0
<i>Dicaelus elongatus</i> Bonelli	1	2
<i>Eucaerus varicornis</i> LeConte	0	1
<i>Harpalus pensylvanicus</i> (DeGeer)	13	1
<i>Micratopus aenescens</i> (LeConte)	0	1
<i>Oodes americanus</i> Dejean	0	1
<i>Paratachys columbiensis</i> Hayward	1	3
<i>Pasimachus sublaevis</i> (Palisot de Beauvois)	3	0
<i>Polyderis laeva</i> (Say)	1	2
<i>Selenophorus ellipticus</i> Dejean	0	1
<i>Selenophorus fatuus</i> LeConte	0	1
<i>Selenophorus hylacis</i> (Say)	0	1
<i>Selenophorus opalinus</i> (LeConte)	11	3
<i>Selenophorus pedicularius</i> Dejean	1	0
<i>Semiardistomis puncticollis</i> (Dejean)	0	3
<i>Semiardistomis viridis</i> (Say)	0	1
<i>Stenolophus humidus</i> Hamilton	0	1
<i>Stenolophus infuscatus</i> (Dejean)	0	1
<i>Stenolophus ochropezus</i> (Say)	0	1
<i>Stenolophus plebejus</i> Dejean	0	8
<i>Tetragonoderus intersectus</i> (Germar)	3	0
<i>Tetracha carolina</i> (L.)	2	0
Total	47	52

Table S2. Results of likelihood ratio tests for treatment effects on species richness and species diversity of ground beetles in harvest residue retention treatments in clearcut stands, NC and GA, 2012 and 2013. We set $\alpha = 0.05$.

	Year/s	LRT _{TRT}	Pr(Chi) _{TRT}
North Carolina			
†Richness	2012	6.02	0.30
	2013	9.29	0.10
Shannon-Weaver (H')	Pooled	3.16	0.68
Georgia			
Richness	Pooled	4.61	0.47
Shannon-Weaver (H')	Pooled	1.34	0.93

†Indicates significant treatment $\times$ year interaction

Table S3. Mean ($\pm$ SE) number of functional trait assignments for ground beetle species in harvest residue retention treatments in clearcut stands, North Carolina, 2012 and 2013. Different letters indicate significantly different pairwise comparisons of treatment means. We set $\alpha = 0.05$.

Functional trait	Year/s	LRT _{TRT}	Pr(Chi) _{TRT}	NOBHGs	15DISP	15CLUS	30DISP	30CLUS	NOBIOHARV
Habitat type									
†Open ground	2012	17.67	0.03	2.25 ^b (2.25)	5.50 ^a (4.19)	1.00 ^b (0.58)	3.25 ^b (2.29)	2.00 ^b (1.41)	1.75 ^b (1.11)
	2013	51.73	<0.001	5.25 ^c (2.39)	19.75 ^a (10.36)	16.25 ^a (9.50)	9.00 ^{ab} (4.80)	9.50 ^{ab} (1.89)	23.00 ^a (9.40)
Pine forest	2013	11.68	0.04	0.25 ^b (0.25)	0 ^b	0.50 ^{ab} (0.29)	0 ^b	0.75 ^{ab} (0.48)	1.25 ^a (0.25)
Shaded	Pooled	1.73	0.89	1.00 (0.71)	2.25 (0.48)	2.50 (1.55)	2.75 (1.38)	2.75 (1.03)	2.00 (0.41)
Soil type									
†Dry	2012	11.93	0.06	1.75 (1.75)	4.00 (3.67)	0.75 (0.48)	2.25 (2.25)	1.50 (1.19)	1.50 (1.19)
	2013	64.10	<0.001	3.75 ^c (1.93)	19.00 ^a (10.45)	14.50 ^a (9.30)	6.75 ^{ab} (3.90)	7.00 ^{ab} (1.22)	19.75 ^a (9.39)
Moist	Pooled	6.30	0.28	1.75 (1.11)	2.00 (0.58)	1.75 (0.25)	1.50 (0.87)	3.25 (1.31)	3.75 (1.38)
Wet	Pooled	3.46	0.63	1.50 (1.50)	2.25 (1.31)	3.50 (2.53)	4.25 (1.70)	3.25 (2.02)	3.25 (1.32)
Diel activity									
Diurnal	2013	2.44	0.78	0.25 (0.25)	0.50 (0.50)	0.25 (0.25)	1.00 (1.00)	0.50 (0.50)	0.75 (0.75)
†Mostly nocturnal	2012	16.46	0.006	1.75 ^b (1.75)	4.25 ^a (3.59)	0.75 ^b (0.48)	2.00 ^{ab} (2.00)	0.75 ^b (0.48)	1.75 ^b (1.11)
	2013	61.60	<0.001	3.25 ^c (1.70)	18.50 ^a (10.07)	14.25 ^a (9.67)	6.25 ^{ab} (3.54)	7.25 ^{ab} (0.95)	18.25 ^a (8.81)
Nocturnal	Pooled	5.51	0.36	3.50 (1.85)	3.75 (0.85)	5.00 (2.68)	5.50 (2.18)	6.00 (2.35)	7.50 (1.32)
Dispersal power ¹									
†Frequent flyer	2012	5.01	0.42	1.75 (1.75)	4.75 (3.47)	1.25 (0.48)	3.00 (2.04)	2.25 (1.44)	2.50 (1.85)
	2013	49.11	<0.001	6.25 ^c (3.04)	20.50 ^a (9.74)	17.75 ^a (8.83)	9.50 ^{ab} (4.37)	9.00 ^{ab} (1.22)	22.50 ^a (8.91)
Infrequent flyer	Pooled	8.83	0.12	1.00 (0.58)	2.50 (0.87)	1.50 (0.50)	3.50 (1.50)	4.25 (1.25)	3.50 (0.65)
Locomotion									
Fast runner	2013	18.72	0.002	1.00 ^b (0.71)	0.50 ^b (0.50)	1.00 ^b (0.71)	1.75 ^b (1.44)	1.50 ^b (0.87)	4.50 ^a (0.65)
†Moderate runner	2012	12.10	0.03	1.75 ^b (1.75)	5.50 ^a (3.28)	1.50 ^b (0.65)	2.50 ^{ab} (2.50)	2.25 ^{ab} (1.44)	2.25 ^{ab} (1.60)
	2013	51.70	<0.001	4.00 ^c (2.71)	20.50 ^a (9.75)	17.00 ^a (8.95)	8.75 ^{ab} (3.99)	10.00 ^{ab} (2.35)	20.00 ^a (9.70)
†Frequent climber	2012	66.96	<0.001	1.50 ^{ab} (1.50)	3.75 ^a (3.42)	0.75 ^b (0.48)	1.50 ^{ab} (1.50)	0.75 ^b (0.48)	1.50 ^{ab} (1.19)
	2013	66.97	<0.001	2.75 ^b (1.49)	18.25 ^a (10.45)	12.25 ^a (9.36)	5.00 ^{ab} (3.00)	5.75 ^{ab} (1.11)	15.75 ^a (9.23)

Digging									
†Burrower	2012	13.82	0.02	1.75 ^b (1.75)	4.50 ^a (3.84)	1.00 ^b (0.41)	1.50 ^b (1.50)	1.25 ^b (0.75)	2.00 ^b (1.68)
	2013	51.68	<0.001	3.50 ^b (1.94)	19.50 ^a (9.51)	15.50 ^a (8.70)	8.00 ^{ab} (3.14)	9.50 ^{ab} (2.53)	19.00 ^a (9.35)
†Non-burrower	2012	6.51	0.26	0.75 (0.48)	2.25 (0.85)	0.75 (0.48)	2.25 (1.11)	2.25 (1.03)	1.00 (0)
	2013	13.83	0.02	3.00 ^b (1.08)	2.00 ^b (0.58)	3.50 ^b (1.55)	4.25 ^{ab} (2.32)	3.00 ^b (0.58)	7.00 ^a (0.71)
Relationship to human activity									
†Positive	2012	14.01	0.02	2.25 ^{ab} (2.25)	4.50 ^a (3.52)	1.00 ^b (0.58)	2.25 ^{ab} (2.25)	1.50 ^{ab} (1.19)	1.50 ^{ab} (1.19)
	2013	67.16	<0.001	3.25 ^b (1.49)	19.00 ^a (10.12)	14.75 ^{ab} (9.24)	6.00 ^b (3.03)	7.25 ^b (0.95)	18.75 ^a (8.98)
†Negative	2012	7.03	0.22	0.25 (0.25)	2.25 (0.75)	0.75 (0.25)	1.50 (0.65)	2.00 (0.71)	1.25 (0.63)
	2013	11.35	0.04	3.25 ^b (1.60)	2.50 ^b (0.65)	4.25 ^{ab} (2.66)	6.25 ^{ab} (2.46)	5.25 ^{ab} (1.49)	7.25 ^a (1.65)

†Indicates significant treatment × year interaction

Table S4. Mean ($\pm$ SE) number of captured ground beetle genera and species in harvest residue retention treatments in clearcut stands, North Carolina, 2013. Different letters indicate significantly different pairwise comparisons of treatment means. We set $\alpha = 0.05$.

Taxa	LRT _{TRT}	Pr(Chi) _{TRT}	NOBHG _s	15DISP	15CLUS	30DISP	30CLUS	NOBIOHARV
<i>Acupalpus</i> spp.	9.17	0.09	1.25 (0.63)	0	0.50 (0.29)	0.75 (0.75)	0	0.75 (0.25)
<i>Anisodactylus</i> spp.	14.49	0.01	0.75 ^b (0.48)	0.50 ^b (0.29)	2.25 ^a (1.31)	0.75 ^{ab} (0.48)	1.50 ^a (0.50)	3.50 ^a (0.65)
<i>Anisodactylus haplomus</i> Chaudoir	11.68	0.04	0.25 (0.25)	0	0.50 (0.29)	0	0.75 (0.48)	1.25 (0.25)
<i>Anisodactylus rusticus</i> (Say)	9.99	0.08	0.50 ^b (0.50)	0.25 ^b (0.25)	0.50 ^b (0.50)	0.50 ^b (0.29)	0.25 ^b (0.25)	2.00 ^a (0.58)
<i>Harpalus pensylvanicus</i> (DeGeer)	67.12	<0.001	2.50 ^b (1.55)	17.75 ^a (10.17)	12.00 ^{ab} (9.46)	4.75 ^b (2.81)	5.75 ^b (1.11)	15.50 ^a (9.35)
<i>Notioba nitidipennis</i> (LeConte)	5.98	0.31	0.75 (0.75)	0.25 (0.25)	0	0.50 (0.29)	0.50 (0.29)	0.50 (0.50)
<i>Selenophorus</i> spp.	6.90	0.23	0.50 (0.50)	0.25 (0.25)	0.25 (0.25)	0.50 (0.50)	0	1.00 (0.71)
<i>Stenolophus</i> spp.	9.45	0.09	0.25 (0.25)	1.50 (0.87)	3.00 (2.35)	2.50 (1.04)	3.00 (1.78)	2.25 (1.31)
<i>Stenolophus ochropezus</i> (Say)	5.30	0.38	0.25 (0.25)	1.00 (0.71)	1.75 (1.44)	1.50 (0.87)	1.25 (0.75)	0.50 (0.50)
<i>Stenolophus plebejus</i> (Dejean)	9.51	0.09	0	0.50 (0.29)	1.00 (0.71)	0.75 (0.48)	1.75 (1.11)	1.50 (0.65)
“Tiger” beetles ¹	7.76	0.17	0.25 (0.25)	0.25 (0.25)	0	1.00 (1.00)	0.50 (0.50)	1.00 (0)

¹Included *Cicindela sexguttata* Fabricius, *Cicindelidia punctulata punctulata* Olivier, and *Tetracha carolina* (L.)