

Supplementary Material to “Understory bird taxonomic and functional diversity during secondary forest succession in the tropical Andes”

Table S1 - Principal Coordinates Analysis (PCoA, Gower distance method) to reduce the number of bird functional traits in the functional beta diversity. The bird functional traits were expressed in the first five PCoA axes and these explained 21.8% of the total variation.

Axes of PCoA		Axis 1	Axis 2	Axis 3	Axis 4	Axis 5
Relative corrected eigenvalues		0.062	0.053	0.04	0.038	0.025
Family	Species					
Columbidae	<i>Geotrygon montana</i>	0.34999	0.12701	-0.14204	-0.0386	-0.01288
Columbidae	<i>Leptotila verreauxi</i>	0.15328	0.16494	-0.04941	0.04398	0.01686
Columbidae	<i>Columbina talpacoti</i>	-0.25411	0.06265	-0.06	0.01858	0.08235
Trochilidae	<i>Florisuga mellivora</i>	-0.22749	0.04246	-0.10234	0.03395	0.06938
Trochilidae	<i>Eutoxeres aquila</i>	-0.26663	0.071	-0.0522	0.02092	0.09288
Trochilidae	<i>Glaucis hirsutus</i>	-0.30862	0.01791	-0.00088	0.00685	0.02666
Trochilidae	<i>Threnetes ruckeri</i>	-0.32572	0.02588	0.01107	-0.00006	0.02512
Trochilidae	<i>Phaethornis striigularis</i>	-0.29854	0.00872	-0.02543	0.01539	0.0141
Trochilidae	<i>Phaethornis anthophilus</i>	-0.29787	0.00389	-0.0362	0.01852	0.01282
Trochilidae	<i>Phaethornis guy</i>	-0.29261	0.001	-0.04366	0.02042	0.01053
Trochilidae	<i>Phaethornis longirostris</i>	-0.25393	0.06312	-0.06169	0.0223	0.08344
Trochilidae	<i>Chalybura buffonii</i>	-0.3313	-0.06669	0.01535	-0.02441	-0.02039
Trochilidae	<i>Amazilia tzacatl</i>	-0.31596	0.02749	0.01568	-0.00374	0.02641
Trochilidae	<i>Polyerata amabilis</i>	0.3052	0.1185	-0.11248	-0.03647	-0.00965
Momotidae	<i>Hylomanes momotula</i>	-0.0824	-0.02359	-0.04826	0.19404	-0.06603
Bucconidae	<i>Malacoptila panamensis</i>	-0.01383	-0.04476	-0.08634	-0.05588	-0.08467
Capitonidae	<i>Capito hypoleucus</i>	0.10562	-0.12537	-0.05545	0.13017	0.12666
Ramphastidae	<i>Pteroglossus torquatus</i>	0.4117	-0.21418	-0.20247	0.1187	0.17017
Picidae	<i>Picumnus olivaceus</i>	-0.01717	-0.011	0.11976	-0.00192	-0.09845
Picidae	<i>Dryobates kirkii</i>	-0.11897	0.05009	-0.00157	0.21495	0.04376
Psittacidae	<i>Forpus conspicillatus</i>	-0.06857	0.00347	0.0801	0.13889	-0.11107
Thamnophilidae	<i>Thamnophilus atrinucha</i>	0.08675	0.18625	0.14426	0.02794	0.01543
Thamnophilidae	<i>Epinecrophyllos fulviventris</i>	0.03582	-0.13934	-0.01889	0.21271	0.12927
Thamnophilidae	<i>Hafferia immaculata</i>	0.03854	0.05406	-0.0399	0.04018	-0.01768
Thamnophilidae	<i>Gymnopithys bicolor</i>	-0.02463	0.12745	-0.07063	-0.0164	-0.01885
Formicariidae	<i>Formicarius analis</i>	-0.00204	0.15297	0.11044	0.05298	-0.0468
Furnariidae	<i>Dendrocincla fuliginosa</i>	0.18798	0.12434	0.02687	0.07496	-0.04151
Furnariidae	<i>Glyphorhynchus spirurus</i>	0.06004	0.11634	-0.08034	-0.02046	0.05753
Furnariidae	<i>Xiphorhynchus susurrans</i>	0.22356	0.06211	0.04915	0.00506	-0.02999
Furnariidae	<i>Dendroplex picus</i>	0.10936	-0.17344	-0.11753	0.25039	0.10142

Axes of PCoA		Axis 1	Axis 2	Axis 3	Axis 4	Axis 5
Furnariidae	<i>Campylorhamphus trochilirostris</i>	-0.07493	0.02612	-0.05363	0.21312	0.00434
Furnariidae	<i>Lepidocolaptes souleyetii</i>	0.06036	-0.07381	-0.07367	0.24366	0.16555
Furnariidae	<i>Xenops minutus</i>	-0.00793	-0.00022	-0.17975	0.26282	-0.03504
Furnariidae	<i>Automolus ochrolaemus</i>	-0.01733	-0.09081	-0.18074	0.27278	-0.09322
Furnariidae	<i>Synallaxis albescens</i>	-0.00603	-0.07143	-0.1225	0.18333	-0.03348
Pipridae	<i>Cryptopipo holochlora</i>	-0.09369	0.03738	-0.02617	0.20885	0.0228
Pipridae	<i>Lepidothrix coronata</i>	-0.03301	0.02063	-0.11252	0.22933	-0.02259
Pipridae	<i>Manacus manacus</i>	0.04072	0.13823	0.06016	0.06899	-0.07979
Pipridae	<i>Machaeropterus striolatus</i>	-0.07143	-0.08291	-0.00465	-0.09848	-0.09178
Pipridae	<i>Ceratopipra erythrocephala</i>	-0.05905	0.02411	-0.01191	-0.07712	0.00196
Tityridae	<i>Pachyrhamphus cinnamomeus</i>	-0.04275	0.02626	-0.02224	-0.07261	-0.00869
Onychorhynchidae	<i>Terenotriccus erythrurus</i>	-0.06438	0.02839	-0.00648	-0.08409	0.00091
Onychorhynchidae	<i>Myiobius atricaudus</i>	-0.06271	0.02576	-0.01077	-0.08155	0.0016
Tyrannidae	<i>Mionectes olivaceus</i>	0.11631	-0.1583	0.14607	-0.01525	-0.03197
Tyrannidae	<i>Mionectes oleagineus</i>	-0.11845	-0.03841	0.15866	0.11148	-0.13118
Tyrannidae	<i>Leptopogon amaurocephalus</i>	-0.03998	0.03415	0.10601	0.06628	-0.09231
Tyrannidae	<i>Leptopogon superciliosus</i>	-0.02175	-0.07165	0.14042	-0.02057	-0.13786
Tyrannidae	<i>Rhynchocyclus olivaceus</i>	-0.01529	-0.0146	0.11343	0.00154	-0.09933
Tyrannidae	<i>Tolmomyias assimilis</i>	0.08131	-0.14913	0.17524	-0.02449	-0.01022
Tyrannidae	<i>Oncostoma olivaceum</i>	0.06682	-0.08226	0.1397	-0.01485	-0.07712
Tyrannidae	<i>Poecilotriccus sylvia</i>	-0.09159	-0.03108	0.14847	0.05753	-0.09216
Tyrannidae	<i>Todirostrum cinereum</i>	0.01392	0.02932	0.09641	0.00538	-0.05323
Tyrannidae	<i>Camptostoma obsoletum</i>	0.00377	-0.14393	0.17726	-0.02949	-0.08733
Tyrannidae	<i>Elaenia flavogaster</i>	0.04468	-0.07023	0.20959	-0.02205	0.04809
Tyrannidae	<i>Tyrannulus elatus</i>	-0.02967	-0.14954	-0.04376	-0.05599	-0.05904
Tyrannidae	<i>Attila spadiceus</i>	-0.02001	-0.07327	0.06892	-0.1175	0.08741
Tyrannidae	<i>Legatus leucophaeus</i>	-0.03749	-0.20465	-0.11032	-0.08224	-0.10177
Tyrannidae	<i>Pitangus sulphuratus</i>	0.14347	-0.11961	0.11205	-0.00377	0.02089
Tyrannidae	<i>Myiodynastes maculatus</i>	0.19802	-0.21226	0.0822	0.00845	-0.06532
Tyrannidae	<i>Myiozetetes cayanensis</i>	0.07921	-0.19718	-0.05992	-0.09853	0.01461
Tyrannidae	<i>Tyrannus melancholicus</i>	0.04252	-0.1049	0.06493	0.01308	-0.18312
Tyrannidae	<i>Sayornis nigricans</i>	0.01498	-0.20536	-0.095	-0.08652	-0.07055
Tyrannidae	<i>Empidonax virescens</i>	-0.0649	0.01425	-0.05998	-0.0102	-0.06639
Tyrannidae	<i>Contopus virens</i>	-0.11097	-0.05697	-0.03907	-0.0223	-0.05784
Vireonidae	<i>Vireo flavoviridis</i>	0.04011	-0.20867	0.14929	0.05633	-0.00762
Hirundinidae	<i>Stelgidopteryx ruficollis</i>	0.12812	-0.0688	0.10385	-0.01682	-0.06368
Troglodytidae	<i>Microcerculus marginatus</i>	-0.00479	-0.1928	0.03424	0.17256	0.07833
Troglodytidae	<i>Troglodytes aedon</i>	0.0812	0.14546	0.11472	0.05569	0.03039
Troglodytidae	<i>Pheugopedius spadix</i>	-0.00348	0.13663	-0.01261	0.1169	0.01015
Troglodytidae	<i>Pheugopedius fasciatoventris</i>	0.07543	0.12431	0.10249	0.06062	0.02615
Troglodytidae	<i>Cantorchilus nigricapillus</i>	0.1109	0.12197	0.06958	0.06826	0.00995
Troglodytidae	<i>Henicorhina leucosticta</i>	0.0459	0.13617	0.04925	0.07109	-0.07264
Poliopitilidae	<i>Microbates cinereiventris</i>	0.07841	0.14422	0.12015	0.05256	0.03011
Turdidae	<i>Catharus minimus</i>	-0.06762	0.07857	-0.04516	-0.01594	0.0062
Turdidae	<i>Catharus ustulatus</i>	0.0727	0.0619	-0.13523	-0.06914	-0.05194

Axes of PCoA		Axis 1	Axis 2	Axis 3	Axis 4	Axis 5
Turdidae	<i>Turdus leucomelas</i>	0.06246	0.06196	-0.11974	-0.06693	-0.0469
Turdidae	<i>Turdus ignobilis</i>	0.10079	-0.05398	-0.21027	-0.1064	-0.11172
Fringillidae	<i>Euphonia concinna</i>	0.09904	-0.05424	-0.21137	-0.10424	-0.11068
Fringillidae	<i>Euphonia minuta</i>	0.01632	-0.03684	0.02734	-0.09452	0.1304
Fringillidae	<i>Euphonia lanirostris</i>	0.07889	-0.03213	0.1744	-0.01109	0.09621
Fringillidae	<i>Euphonia xanthogaster</i>	0.00691	0.22186	0.01062	-0.09483	0.08324
Passerellidae	<i>Arremon aurantirostris</i>	0.09252	-0.03493	0.15027	-0.00501	0.08225
Parulidae	<i>Parkesia noveboracensis</i>	0.05707	-0.07313	0.19443	-0.01828	0.04141
Parulidae	<i>Mniotilta varia</i>	0.14827	0.16087	0.06296	0.05194	-0.02093
Parulidae	<i>Oporornis agilis</i>	0.00889	0.09571	-0.00288	-0.06563	-0.01725
Parulidae	<i>Geothlypis philadelphia</i>	-0.02169	-0.1229	-0.0121	-0.12313	-0.00066
Parulidae	<i>Setophaga castanea</i>	-0.01632	0.09368	-0.02246	-0.1201	-0.04321
Parulidae	<i>Setophaga fusca</i>	0.01464	0.1263	-0.0164	-0.03502	0.06692
Parulidae	<i>Myiothlypis fulvicauda</i>	-0.05837	-0.13045	0.001	-0.06844	-0.04066
Parulidae	<i>Basileuterus delatarii</i>	-0.06312	-0.20362	0.05178	-0.09195	0.05147
Mitrospingidae	<i>Mitrospingus cassinii</i>	0.10003	0.13729	0.11885	0.03961	-0.00403
Cardinalidae	<i>Piranga rubra</i>	0.05758	0.09065	0.09041	-0.00603	-0.07689
Cardinalidae	<i>Driophlox gutturalis</i>	0.02274	-0.0112	-0.12753	-0.06752	-0.05699
Cardinalidae	<i>Cyanoloxia cyanoides</i>	0.08673	-0.12823	-0.05291	-0.08368	0.07016
Thraupidae	<i>Chlorophanes spiza</i>	0.03081	0.11662	-0.15698	0.00238	-0.0365
Thraupidae	<i>Hemithraupis flavicollis</i>	0.0715	0.14882	-0.09796	-0.03786	0.04147
Thraupidae	<i>Sicalis flaveola</i>	-0.13307	-0.05153	-0.03475	-0.1306	-0.00877
Thraupidae	<i>Volatinia jacarina</i>	0.02651	-0.03683	0.01722	-0.08528	0.11843
Thraupidae	<i>Loriotus luctuosus</i>	-0.1444	-0.16519	0.17831	0.03615	0.04103
Thraupidae	<i>Tachyphonus delatarii</i>	0.02152	0.12946	-0.01186	-0.06928	-0.01565
Thraupidae	<i>Eucometis penicillata</i>	0.00704	0.17921	0.00122	-0.07343	0.07396
Thraupidae	<i>Ramphocelus dimidiatus</i>	-0.02991	-0.04362	-0.03729	-0.07072	-0.0467
Thraupidae	<i>Ramphocelus flammigerus</i>	-0.01566	-0.04826	-0.05444	-0.06524	-0.05642
Thraupidae	<i>Cyanerpes caeruleus</i>	0.05136	0.05893	-0.11678	-0.05852	-0.04464
Thraupidae	<i>Tersina viridis</i>	-0.00133	0.0003	-0.08086	-0.04453	-0.02572
Thraupidae	<i>Dacnis lineata</i>	0.01699	-0.00636	-0.1087	-0.03963	-0.02955
Thraupidae	<i>Dacnis cayana</i>	-0.08611	-0.04201	0.04014	-0.14726	0.22066
Thraupidae	<i>Sporophila minuta</i>	0.01225	-0.19831	0.02847	0.03979	-0.04119
Thraupidae	<i>Sporophila funerea</i>	-0.07796	-0.04442	0.03639	-0.14264	0.20702
Thraupidae	<i>Sporophila crassirostris</i>	-0.00402	-0.04432	0.1869	-0.02652	0.15338
Thraupidae	<i>Sporophila intermedia</i>	-0.0415	0.22194	-0.04728	-0.0734	-0.03293
Thraupidae	<i>Sporophila nigricollis</i>	0.04485	0.19567	-0.04159	-0.07168	0.05605
Thraupidae	<i>Saltator maximus</i>	-0.04644	0.22348	-0.04259	-0.07596	-0.02738
Thraupidae	<i>Saltator striatipectus</i>	0.01163	0.2148	0.00334	-0.09029	0.07893
Thraupidae	<i>Coereba flaveola</i>	0.13496	-0.14584	-0.09783	-0.08768	0.06241
Thraupidae	<i>Tiaris olivaceus</i>	0.03076	-0.01298	-0.13389	-0.03876	-0.03327
Thraupidae	<i>Asemospiza obscura</i>	0.10221	0.22545	0.16328	0.02261	0.01111
Thraupidae	<i>Asemospiza fuliginosa</i>	0.13409	0.1994	0.11728	0.03638	-0.00242
Thraupidae	<i>Stelpnia vitriolina</i>	0.00314	-0.11094	-0.03934	-0.07928	0.00109
Thraupidae	<i>Stelpnia larvata</i>	-0.0384	0.01688	-0.02837	-0.06208	-0.00574

Axes of PCoA		Axis 1	Axis 2	Axis 3	Axis 4	Axis 5
Thraupidae	<i>Stilpnia cyanicollis</i>	-0.02983	-0.04342	-0.03488	-0.07319	-0.04468
Thraupidae	<i>Tangara inornata</i>	0.0517	-0.0458	-0.00889	-0.07457	0.10356
Thraupidae	<i>Tangara gyrola</i>	-0.01403	-0.04968	-0.05241	-0.06699	-0.05262
Thraupidae	<i>Tangara icterocephala</i>	-0.02701	0.01114	-0.04163	-0.05643	-0.01071
Thraupidae	<i>Thraupis episcopus</i>	0.09198	-0.12517	-0.04859	-0.08499	0.06295
Thraupidae	<i>Thraupis palmarum</i>	0.10593	-0.1284	-0.06401	-0.08431	0.06163