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Macrobenthic infaunal communities associated with deep-sea hydrocarbon seeps in the northern Gulf of Mexico

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1 Supplementary Table S1. Data for stations used in this study. A) All stations sampled from 2009 - 2013 used to explore macrobenthic
 2 communities at natural hydrocarbon seeps in this study. B) All background stations sampled during DGoMB cruises from 2000 –
 3 2002 and DWH response cruises in 2010. Rep = replicate, PC = pushcore, MC = multicore, BC = boxcore, and # of Reps = the
 4 number of cores collected for macrofaunal analysis at each DGoMB and DWH station.

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A)

Station	Year	Rep	Latitude	Longitude	Depth	Seep	Habitat	Method
DC583	2009	1	28.3856	87.3886	2461	Background	Background	PC
DC583	2009	2	28.3855	87.3885	2449	Near	Tubeworms	PC
DC583	2009	3	28.3849	87.3883	2447	Near	Tubeworms	PC
DC583	2009	4	28.3855	87.3884	2452	Background	Background	PC
DC583	2009	5	28.3855	87.3885	2449	Near	Tubeworms	PC
DC673	2010	1	28.31	87.311	2601	Near	Tubeworms	PC
DC673	2010	2	28.31	87.311	2601	Near	Tubeworms	PC
DC673	2010	3	28.31	87.311	2601	Near	Tubeworms	PC
GC246	2010	1	27.7016	90.6486	834	Near	Microbial mat	PC
GC246	2010	2	27.702	90.649	834	Near	Microbial mat	PC
GC354	2010	1	27.598	91.823	567	Near	Tubeworms	PC
GC354	2010	2	27.5977	91.827	527	Background	Background	PC
GC354	2010	3	27.598	91.823	567	Near	Tubeworms	PC
GC354	2010	4	27.5981	91.8231	567	Near	Tubeworms	PC
GC354	2010	5	27.5977	91.827	527	Background	Background	PC
GC354	2010	6	27.598	91.827	527	Background	Background	PC
GC600-1	2012	1	27.3644	90.5643	1263	Near	Seep	PC
GC600-1	2012	2	27.3644	90.5643	1263	Near	Seep	PC
GC600-2	2012	1	27.3698	90.5712	1221	Near	Microbial mat	PC
GC600-2	2012	2	27.3698	90.5712	1221	Near	Microbial mat	PC
GC600-2	2012	3	27.37	90.571	1220	Near	Microbial mat	PC
GC600-3	2012	1	27.3728	90.5749	1181	Near	Seep	MC

GC600-3	2012	2	27.3728	90.5746	1178	Near	Seep	MC
MC252	2012	1	28.7235	88.3773	1639	Background	Background	PC
MC252	2012	2	28.7235	88.3773	1639	Background	Background	PC
MC252	2012	1	28.7417	88.352	1477	Background	Background	MC
OC26	2012	1	28.7035	88.3598	1669	Near	Seep	PC
OC26	2012	2	28.7035	88.3598	1669	Near	Seep	PC
OC26	2012	3	28.7035	88.3598	1669	Near	Seep	PC
GC185	2013	1	27.7848	91.503	562	Background	Background	MC
GC232	2013	1	27.7418	91.3188	575	Near	Seep	MC
GC415	2013	1	27.53	90.9918	1046	Near	Seep	MC
GC415	2013	2	27.541	90.9952	1050	Near	Seep	MC
NN001	2013	1	28.3255	88.3862	1786	Background	Background	MC
TE001	2013	1	28.9331	88.9591	137	Near	Seep	MC

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B)

Station	Year	# of Reps	Latitude	Longitude	Depth	Seep	Habitat	Method
<u>DWH</u>								
2.24	2010	3	28.9236	-88.7173	408	Background	Background	MC
2.27	2010	3	29.0160	-88.8934	76	Background	Background	MC
ALTFF012	2010	3	28.2973	-88.6363	1738	Background	Background	MC
D002S	2010	3	28.5571	-87.7607	2389	Background	Background	MC
D003S	2010	3	28.1251	-88.0718	2286	Background	Background	MC
D015S	2010	3	28.2938	-88.4600	1576	Background	Background	MC
D046S	2010	3	28.0754	-87.7148	1458	Background	Background	MC
D064S	2010	3	27.3614	-90.5688	1200	Background	Background	MC
FFC1	2010	3	28.0596	-90.2491	325	Background	Background	MC
FFC4	2010	3	27.4604	-89.7795	211	Background	Background	MC
FFC7	2010	3	27.7330	-89.9770	1456	Background	Background	MC

FFMT1	2010	1	28.5396	-89.8288	1015	Background	Background	MC
M011S	2010	3	28.0004	-88.8800	1700	Background	Background	BC
S01S	2010	2	29.2533	-88.6907	65	Background	Background	BC
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DGoMB								
C4	2000	2	27.4563	-89.7744	1455	Background	Background	BC
C7	2000	2	27.7306	-89.9784	1080	Background	Background	BC
MT1	2000	3	28.5408	-89.8269	487	Background	Background	BC
NB2	2000	1	27.1337	-91.9993	1530	Background	Background	BC
S37	2000	1	28.5567	-87.7622	2388	Background	Background	BC
S38	2000	1	28.2719	-87.3252	2635	Background	Background	BC
WC12	2000	1	27.3232	-91.5558	1168	Background	Background	BC
WC5	2000	1	27.7713	-91.7621	400	Background	Background	BC
BH	2001	1	27.798	-91.4703	546	Background	Background	BC
C7	2001	1	27.7299	-89.9817	1072	Background	Background	BC
MT1	2001	1	28.5381	-89.8277	490	Background	Background	BC
MT1	2002	2	28.558	-89.822	465	Background	Background	BC

Supplementary Table S1. Benthic community characteristics. The average abundance ($n\ m^{-2}$), richness (R), diversity (Hill's N1), and evenness (J') of macrobenthos at individual seep sites. Standard errors are given in parentheses. The number of cores for each calculation is given. These parameters were also averaged for all seep samples across depths (< 1000, 1000 – 2000, and > 2000 m), seep habitats (Microbial Mat, Soft-bottom Seep, and Tubeworm), and collection method (Multicore and pushcore). Similarity and multivariate dispersion (MVDISP) were also included.

Seep Station	N	Abundance	R	N1	J'	% similarity	MVDISP
DC583-09	3	2421 (278)	4.7 (0.33)	4.18 (0.38)	0.93 (0.02)	31.7	1.667
GC246-10	2	40892 (16577)	7.0 (4.00)	3.41 (1.00)	0.71 (0.09)	26.0	1.8
GC354-10	3	25156 (3738)	13.0 (1.73)	9.29 (1.14)	0.87 (0.01)	48.4	1
DC673-10	3	4526 (862)	8.7 (0.67)	7.65 (0.64)	0.94 (0.02)	55.1	0.833
GC600-12-1	2	17525 (1105)	9.0 (0)	4.03 (0.53)	0.63 (0.06)	64.3	0.3
GC600-12-2	3	17262 (12055)	7.3 (1.76)	4.51 (1.21)	0.77 (0.12)	60.4	0.567
GC600-12-3	2	9475 (63)	16.5 (0.5)	9.93 (1.12)	0.82 (0.05)	50.0	1.4
OC26-12	3	5052 (365)	9.7 (0.67)	8.33 (0.95)	0.93 (0.03)	54.3	0.8
GC232-13	1	5146	15.0	10.46	0.87	NA	NA
GC415-13	2	4142 (126)	10.5 (1.5)	7.27 (0.63))	0.85 (0.01)	52.2	0.9
TE001-13	1	3640	10.0	6.37	0.80	NA	NA
Depth							
> 2000 m	6	3473 (623)	6.7 (0.95)	5.92 (0.84)	0.93 (0.01)	43.4	0.733
1000 - 2000 m	12	10769 (3117)	10.3 (1.00)	6.75 (0.76)	0.81 (0.04)	56.7	0.956
< 1000 m	7	23720 (6862)	11.1 (1.62)	7.36 (1.22)	0.81 (0.03)	42.8	1.075
Habitat							
Tubeworm	9	10701 (3793)	8.8 (1.32)	7.04 (0.85)	0.91 (0.02)	45.0	1.145
Soft-bottom	11	7839 (1572)	11.5 (0.94)	7.66 (0.72)	0.82 (0.03)	54.9	0.937
Microbial Mat	5	26714 (10227)	7.2 (1.59)	4.07 (0.78)	0.74 (0.7)	51.8	0.824
Method							
Multicorer	6	6003 (1117)	13.2 (1.35)	8.54 (0.79)	0.83 (0.02)	51.1	0.525
Pushcore	19	14741 (3542)	8.5 (0.75)	6.15 (0.60)	0.84 (0.03)	49.4	1.042
All Stations	25	12644 (2792)	9.6 (.076)	6.72 (0.53)	0.84 (0.02)	25.0	

