

1 **Supplementary Appendix 1** Detailed information for *Caranx ignobilis* and *C. melampygu*s samples included in this study.

2

Species	Catch Date	Tag No.	Approximate Fork Length (cm)	Approximate Catch Location	Island	Location Code	mtDNA Haplotype
<i>Caranx ignobilis</i>	24-Mar-07	U6314	81.3	Kamilo	Hawaii	KAM	Ci1
	20-May-07	TT074	116.8	Honokaa	Hawaii	HON	Ci1
	20-May-07	TT029	97.8	Kau	Hawaii	KAU	Ci1
	20-May-07	TT053	108.0	Kau	Hawaii	KAU	Ci1
	20-May-07	TT072	118.1	Kau	Hawaii	KAU	Ci1
	20-May-07	TT075	71.1	Kohala	Hawaii	KOH	Ci1
	20-May-07	TT051	91.4	North Kohala	Hawaii	NKOH	Ci1
	20-May-07	TT059	64.3	Pahala	Hawaii	PAHA	Ci1
	20-May-07	TT020	101.6	Puna	Hawaii	PUNA	Ci1
	20-May-07	TT042	86.4	Puna	Hawaii	PUNA	Ci1
	7-Apr-07	P40166	18.4	Waimea	Kauai	WAIMEA	Ci1
	5-May-07	P40167	26.7	Poipu	Kauai	POI	Ci1
	15-Apr-07	M0003	20.3	Kaneohe Bay	Oahu	KBAY	Ci1
	17-May-07	P42856	28.6	Kapahulu Library	Oahu	KAPA	Ci1
	26-May-07	P43236	29.2	Pearl Harbor	Oahu	PH	Ci1
	30-Jun-07	P49109	46.4	Pearl Harbor	Oahu	PH	Ci1
	20-May-07	TT030	86.4	Manuka Bay	Hawaii	KAU	Ci2
	7-Apr-07	P40165	17.8	Waimea	Kauai	WAIMEA	Ci2
	30-Mar-07	P26183	27.9	Kapahulu Library	Oahu	KAPA	Ci2
	2-Apr-07	P38320	26.7	Kapahulu Library	Oahu	KAPA	Ci2
	20-May-07	TT043	76.2	Kau	Hawaii	KAU	Ci3
	20-May-07	TT032	110.5	North Kohala	Hawaii	NKOH	Ci3
	20-May-07	TT021	78.7	Puna	Hawaii	PUNA	Ci3
	23-Mar-07	P41031	39.4	Pearl Harbor	Oahu	PH	Ci3
	2-Apr-07	P26185	22.9	Kapahulu Library	Oahu	KAPA	Ci3
	30-Jun-07	P43175	57.2	Pearl Harbor	Oahu	PH	Ci3

<i>Caranx melampygyus</i>	1-Apr-07	P26184	20.3	Kapahulu Library	Oahu	KAPA	Ci4
	20-May-07	TT018	73.7	Puna	Hawaii	PUNA	Ci5
	20-May-07	TT060	85.1	Pahala	Hawaii	PAHA	Ci6
	20-May-07	TT068	84.5	Kohala	Hawaii	KOH	Ci7
	20-May-07	TT073	99.1	Hamakua	Hawaii	HAM	Ci8
	4-Mar-07	P26743	40.6	Kamilo South Pt.	Hawaii	KAM	Cm1
	4-May-07	P35992	27.3	Mauna Kea Beach	Hawaii	MAUKEA	Cm1
	17-May-07	P48555	17.8	Mauna Kea Beach	Hawaii	MAUKEA	Cm1
	20-May-07	TT048	61.0	Hilo Bay front	Hawaii	HILO	Cm1
	20-May-07	TT002	70.9	Honokaa	Hawaii	HON	Cm1
	20-May-07	TT012	71.8	Honokaa	Hawaii	HON	Cm1
	20-May-07	TT013	72.4	Honokaa	Hawaii	HON	Cm1
	20-May-07	TT016	65.4	Kohala	Hawaii	KOH	Cm1
	20-May-07	TT017	66.0	Kohala	Hawaii	KOH	Cm1
	31-May-07	P48561	21.6	Makaiwa Bay	Hawaii	KAU	Cm1
	15-Mar-07	P37004	17.8	Port Allen	Kauai	ALLEN	Cm1
	24-Mar-07	GC002	38.1	Poipu	Kauai	POI	Cm1
	3-Mar-07	P37280	19.1	Kahului Harbor	Maui	KAHU	Cm1
	25-Mar-07	P37282	17.8	Kahului Harbor	Maui	KAHU	Cm1
	13-Mar-07	CC002	48.3	Kaunakakai	Molokai	MOLO	Cm1
	15-Apr-07	M0001	18.7	Kaneohe Bay	Oahu	KBAY	Cm1
	15-Apr-07	M0007	19.1	Kaneohe Bay	Oahu	KBAY	Cm1
	15-Apr-07	M0008	21.6	Kaneohe Bay	Oahu	KBAY	Cm1
	15-Apr-07	M0010	21.3	Kaneohe Bay	Oahu	KBAY	Cm1
	21-May-07	P40853	36.8	Hickam AFB	Oahu	HAFB	Cm1
	22-May-07	P40858	26.7	Hickam AFB	Oahu	HAFB	Cm1
	26-May-07	P43244	26.7	Pearl Harbor	Oahu	PH	Cm1
	29-May-07	RK006	20.3	Magic Island	Oahu	MAGIS	Cm1
	29-May-07	RK007	27.9	Magic Island	Oahu	MAGIS	Cm1
	11-Mar-07	P26746	61.0	Kamilo South Pt.	Hawaii	KAM	Cm2
	8-May-07	P35994	15.9	Mauna Kea Beach	Hawaii	MAUKEA	Cm2

11-May-07	KW001	15.2	Hapuna Beach	Hawaii	HAPBCH	Cm2
11-May-07	P35995	21.6	Mauna Kea Beach	Hawaii	MAUKEA	Cm2
20-May-07	TT003	70.9	Honokaa	Hawaii	HON	Cm2
20-May-07	TT058	49.5	Kaalualu	Hawaii	KA	Cm2
20-May-07	TT015	58.4	Kohala	Hawaii	KOH	Cm2
20-May-07	TT006	71.8	North Kohala	Hawaii	NKOH	Cm2
20-May-07	TT008	71.8	North Kohala	Hawaii	NKOH	Cm2
20-May-07	TT056	63.5	Volcanoes Nat'l Park	Hawaii	HVNP	Cm2
31-May-07	P48562	20.3	Makaiwa Bay	Hawaii	KAU	Cm2
27-Mar-07	P37005	17.8	Poipu	Kauai	POI	Cm2
5-Apr-07	P40164	30.5	Poipu	Kauai	POI	Cm2
14-Apr-07	PA001	15.2	Port Allen	Kauai	ALLEN	Cm2
3-Mar-07	RH001	16.5	Kahului Harbor	Maui	KAHU	Cm2
25-Mar-07	P37281	20.3	Kahului Harbor	Maui	KAHU	Cm2
19-Apr-07	RK003	34.3	Magic Island	Oahu	MAGIS	Cm2
21-May-07	P40846	21.6	Hickam AFB	Oahu	HAFB	Cm2
26-May-07	P40870	24.1	Hickam AFB	Oahu	HAFB	Cm2
26-May-07	P43242	23.5	Pearl Harbor	Oahu	PH	Cm2
29-May-07	P40873	18.4	Hickam AFB	Oahu	HAFB	Cm2
5-Jun-07	P40882	33.7	Hickam AFB	Oahu	HAFB	Cm2
20-May-07	TT001	70.9	Honokaa	Hawaii	HON	Cm3
20-May-07	TT004	74.3	North Kohala	Hawaii	NKOH	Cm3
6-Sep-06	RB001	39.4	Chun's Reef	Oahu	CHUN	Cm4
15-May-07	RK005	21.0	Magic Island	Oahu	MAGIS	Cm4
20-Jun-07	P39290	27.9	Kaneohe Bay	Oahu	KBAY	Cm5
3-Mar-07	P40163	17.8	Hanapepe	Kauai	PEPE	Cm6
31-May-07	P48560	20.3	Makaiwa Bay	Hawaii	KAU	Cm7
7-Apr-07	RK001	26.7	Magic Island	Oahu	MAGIS	Cm8
12-Apr-07	RK002	27.3	Magic Island	Oahu	MAGIS	Cm9
20-May-07	TT007	71.8	North Kohala	Hawaii	NKOH	Cm10

	20-May-07	TT011	71.8	Honokaa	Hawaii	HON	Cm11
	29-Apr-07	RK004	19.7	Magic Island	Oahu	MAGIS	Cm12
<i>C. ignobilis</i> x <i>C. melampygyus</i>	20-May-07	TT022	77.5	South Kona	Hawaii	SKONA	Cm1
<i>C. ignobilis</i> x <i>C. melampygyus</i>	25-Mar-07	P37283	21.6	Kahului Harbor	Maui	KAHU	Cm2

3

4