Hawaii Longline Fishery Seabird Bycatch for the Entire Fishing Grounds, Above 23°N, and 23°N–30°S¹

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The tables in this report include information concerning seabird bycatch and effort requested by the NOAA Fisheries Pacific Islands Fisheries Science Center International Fisheries Program for their use in preparing the National Report to the Western and Central Pacific Fisheries Commission.

Table 1 provides the requested bycatch estimates for seabirds. Table 2 provides the required information on total effort. Seabird bycatch events were assigned to above 23°N or 23°N–30°S, depending on their recorded capture locations. If the capture locations were missing, the bycatch event was assigned to one of these two regions based on the begin and end location of the haul back. If these two locations were split between the two areas, the bycatch event was assigned to the area where most of the haul back appeared to occur. The methods used to sample the deep-set fishery and compute the point estimate for the fishery are described in McCracken (in prep.). The shallow-set fishery has 100% observer coverage.

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¹ PIFSC Data Report DR-19-030. Issued 29 June 2019. https://doi.org/10.25923/dftj-9x62

Table 1. Observed and estimated number of bycatch events of seabirds for the Hawaii longline fisheries, deep-set and shallow-set combined. Estimates are provided for all species with an observed bycatch event from 2013–2018. Estimates are given for the entire fishing grounds (total), above 23°N, and 23°N–30°S.

		Obs	Observed Bycatch		Estimated Bycatch		
Species of Seabird	Year	>23°N	23°N-30°S	Total	>23°N	23°N-30°S	Total
Laysan Albatross	2018	35	0	35	159	0	159
•	2017	44	0	44	232	0	232
	2016	57	3	60	179	13	192
	2015	67	2	69	152	12	164
	2014	47	2	49	101	12	113
	2013	93	1	94	278	7	285
Black-footed Albatross	2018	192	10	202	888	52	940
	2017	137	11	148	459	63	522
	2016	132	12	144	467	58	525
	2015	140	8	148	541	41	582
	2014	55	6	61	166	38	204
	2013	71	7	78	253	35	288
Unidentified Albatross	2018	0	0	0	0	0	0
	2017	0	0	0	0	0	0
	2016	1	0	1	7	0	7
	2015	0	0	0	0	0	0
	2014	0	0	0	0	0	0
	2013	0	0	0	0	0	0
Red-footed Booby	2018	1	0	1	5	0	5
	2017	0	0	0	0	0	0
	2016	0	2	2	0	12	12
	2015	0	1	1	0	6	6
	2014	0	0	0	0	0	0
	2013	0	0	0	0	0	0
Brown Booby	2018	0	1	1	0	6	6
	2017	0	0	0	0	0	0
	2016	0	0	0	0	0	0
	2015	0	0	0	0	0	0
	2014	0	0	0	0	0	0
	2013	0	0	0	0	0	0
Shearwaters	2018	10	0	10	40	0	40
	2017	0	0	0	0	0	0
	2016	2	2	4	10	11	21
	2015	5	0	5	21	0	21
	2014	2	0	2	8	0	8
	2013	10	0	10	46	0	46
Gulls	2018	0	0	0	0	0	0
	2017	1	1	2	1	6	7
	2016	0	0	0	0	0	0
	2015	0	0	0	0	0	0
	2014	0	0	0	0	0	0
	2013	0	0	0	0	0	0

Table 2. Number of permits, trips, sets, and hooks recorded in the vessel logbook database (Pacific Islands Science Center, 2019) and Longline Observer Data System (Pacific Islands Regional Observer Program, 2019) for the Hawaii longline fisheries from 2013—22018. To derive Hawaii's longline fleet's effort, the deep-set fleet's effort (computed from the vessel logbook database) was added to the shallow-set fleet's effort (computed from the Longline Observer Data System).

Effort	Year	Permits	Trips	Sets	Hooks
Total	2018	142	1,608	21,287	58,482,420
	2017	144	1,539	20,551	54,309,519
	2016	141	1,462	20,093	51,722,815
	2015	141	1,452	19,586	48,618,369
	2014	139	1,380	19,222	47,472,924
	2013	135	1,379	19,662	47,769,598
Observed	2018	135	356	4,808	12,297,613
	2017	133	358	4,805	11,199,622
	2016	134	326	4,658	10,722,120
	2015	134	350	4,902	10,680,064
	2014	131	352	5,180	11,117,964
	2013	128	323	4,742	10,278,217

References

Pacific Islands Fisheries Science Center, (2019): Hawaii Longline Logbook, https://inport.nmfs.noaa.gov/inport/item/2721.

Pacific Islands Regional Office (2019), Longline Observer Data System, https://inport.nmfs.noaa.gov/inport/item/9027.

McCracken, M. L. (in prep), Sampling the Hawaii deep-set longline fishery and point estimators of bycatch, Technical report, PIFSC, NOAA, U.S. Department of Commerce.