

**Table**  
**Number**   **Table Name**

05.03	Time Differences Between Honolulu and Selected Cities
05.47	Sunrise, Sunset, and Hours of Daylight at Selected Locations, at Beginning of Each Season: 2009
05.48	Sunrise, Sunset, and Hours of Daylight at Selected Locations, at Beginning of Each Season: 2010
05.49	Hawaii Audubon Society Bird Counts of Major Species in the Honolulu Area: 2003 to 2007
05.54	Threatened and Endangered Species, for the United States and Hawaii

**Table 5.03-- TIME DIFFERENCES BETWEEN HONOLULU AND  
SELECTED CITIES**

[Standard time]

<b>City</b>	<b>Country</b>	<b>Day</b>	<b>Hour</b>	<b>Time difference</b>
Honolulu	United States	Same	9:00 a.m.	-
Anchorage	United States	Same	10:00 a.m.	+1
Vancouver	Canada	Same	11:00 a.m.	+2
Los Angeles	United States	Same	11:00 a.m.	+2
Las Vegas	United States	Same	11:00 a.m.	+2
Denver	United States	Same	12:00 p.m.	+3
Houston	United States	Same	1:00 p.m.	+4
Winnipeg	Canada	Same	1:00 p.m.	+4
Chicago	United States	Same	1:00 p.m.	+4
Atlanta	United States	Same	2:00 p.m.	+5
Miami	United States	Same	2:00 p.m.	+5
Toronto	Canada	Same	2:00 p.m.	+5
Lima	Peru	Same	2:00 p.m.	+5
New York City	United States	Same	2:00 p.m.	+5
Santiago	Chile	Same	3:00 p.m.	+6
Buenos Aires	Argentina	Same	4:00 p.m.	+7
Sao Paulo	Brazil	Same	4:00 p.m.	+7
London	United Kingdom	Same	7:00 p.m.	+10
Madrid	Spain	Same	8:00 p.m.	+11
Paris	France	Same	8:00 p.m.	+11
Frankfurt	Germany	Same	8:00 p.m.	+11
Rome	Italy	Same	8:00 p.m.	+11
Johannesburg	South Africa	Same	9:00 p.m.	+12
Jerusalem	Israel	Same	9:00 p.m.	+12
Moscow	Russia	Same	10:00 p.m.	+13
Baghdad	Iraq	Same	10:00 p.m.	+13
Kabul	Afghanistan	Same	11:30 p.m.	+14.5
Calcutta	India	Next	12:30 a.m.	+15.5
Bangkok	Thailand	Next	2:00 a.m.	+17
Singapore	Singapore	Next	3:00 a.m.	+18
Hong Kong	China	Next	3:00 a.m.	+18
Beijing	China	Next	3:00 a.m.	+18
Manila	Philippines	Next	3:00 a.m.	+18
Taipei	Taiwan	Next	3:00 a.m.	+18
Seoul	Korea	Next	4:00 a.m.	+19
Tokyo	Japan	Next	4:00 a.m.	+19
Sydney	Australia	Next	5:00 a.m.	+20
Auckland	New Zealand	Next	7:00 a.m.	+22

Source: 2009 HYP Media Finance LLC., *The Official Hawaiian Telcom White Pages O'ahu 2009*, pp. 20-23, and "Time Zone Converter" at <<http://www.timezoneconverter.com/cgi-bin/tzc.tzc>> accessed November 26, 2008.

**Table 5.47-- SUNRISE, SUNSET, AND HOURS OF DAYLIGHT AT  
SELECTED LOCATIONS, AT BEGINNING OF EACH SEASON: 2009**

[Based on Hawaii-Aleutian Standard Time which is 10 hours less than Universal Time Coordinated (UTC), the international standard for civil time]

<b>Subject</b>	<b>Hilo</b>	<b>Kahului</b>	<b>Honolulu</b>	<b>Lihue</b>
Sunrise (a.m.)				
March 20	6:24	6:30	6:35	6:41
June 20	5:42	5:46	5:50	5:55
Sept. 22	6:09	6:15	6:20	6:26
Dec. 21	6:50	6:58	7:05	7:12
Sunset (p.m.)				
March 20	6:32	6:37	6:43	6:49
June 20	7:02	7:10	7:16	7:23
Sept. 22	6:16	6:22	6:27	6:33
Dec. 21	5:47	5:50	5:55	6:00
Daylight (hours, minutes)				
March 20	12, 08	12, 07	12, 08	12, 08
June 20	13, 20	13, 24	13, 26	13, 28
Sept. 22	12, 07	12, 07	12, 07	12, 07
Dec. 21	10, 57	10, 52	10, 50	10, 48

Source: U.S. Naval Observatory, Astronomical Applications Department  
<<http://aa.usno.navy.mil/data/docs/EarthSeasons.php>> and  
<[http://aa.usno.navy.mil/cgi-bin/aa\\_rstablew.pl](http://aa.usno.navy.mil/cgi-bin/aa_rstablew.pl)> accessed December 9, 2008;  
calculations by the Hawaii State Department of Business, Economic Development & Tourism.

**Table 5.48-- SUNRISE, SUNSET, AND HOURS OF DAYLIGHT AT  
SELECTED LOCATIONS, AT BEGINNING OF EACH SEASON: 2010**

[Based on Hawaii-Aleutian Standard Time which is 10 hours less than Universal Time Coordinated (UTC), the international standard for civil time]

<b>Subject</b>	<b>Hilo</b>	<b>Kahului</b>	<b>Honolulu</b>	<b>Lihue</b>
Sunrise (a.m.)				
March 20	6:24	6:30	6:35	6:41
June 21	5:43	5:46	5:50	5:55
Sept. 22	6:09	6:15	6:20	6:26
Dec. 21	6:50	6:58	7:04	7:12
Sunset (p.m.)				
March 20	6:31	6:37	6:43	6:49
June 21	7:02	7:10	7:16	7:24
Sept. 22	6:16	6:22	6:27	6:34
Dec. 21	5:47	5:50	5:55	6:00
Daylight (hours, minutes)				
March 20	12, 07	12, 07	12, 08	12, 08
June 21	13, 19	13, 24	13, 26	13, 29
Sept. 22	12, 07	12, 07	12, 07	12, 08
Dec. 21	10, 57	10, 52	10, 51	10, 48

Source: U.S. Naval Observatory, Astronomical Applications Department  
<<http://aa.usno.navy.mil/data/docs/EarthSeasons.php>> and  
<[http://aa.usno.navy.mil/cgi-bin/aa\\_rstablew.pl](http://aa.usno.navy.mil/cgi-bin/aa_rstablew.pl)> accessed December 9, 2008;  
calculations by the Hawaii State Department of Business, Economic Development & Tourism.

**Table 5.49-- HAWAII AUDUBON SOCIETY BIRD COUNTS OF MAJOR SPECIES IN THE HONOLULU AREA: 2003 TO 2007**

[Counts are made in late December at various locations between Hawaii Kai and Aiea, and between Waimanalo and Kaneohe. Annual changes reflect differences in numbers of bird counters and counting time in the field, as well as changes in bird populations. Totals by species are also affected by the types of habitats studied]

Species	2003	2004	2005	2006	2007
Endemic species: 1/					
'Apapane	21	-	6	2	12
Hawaiian Moorhen 2/	29	24	22	9	19
Hawaiian Stilt 2/	159	175	134	168	174
Oahu 'Amakihi	96	3/ 21	40	28	7
Oahu 'Elepaio	15	3	6	4	10
Indigenous species: 4/					
Black-crowned Night Heron	35	66	39	51	40
Brown Booby	15	7	-	14	5
Great Frigatebird	17	17	115	39	14
Laysan Albatross	2	-	-	1	-
Red-footed Booby	517	996	829	3/ 267	432
White Tern	1	6	(5/)	6/ 28	11
Alien species: 7/					
Cattle Egret	149	189	102	106	98
Common Myna	1,015	1,435	703	861	767
Common Waxbill	297	553	428	672	297
House Finch	117	323	108	191	138
House Sparrow	170	296	140	173	109
Japanese White-eye	298	284	196	266	151
Java Sparrow	506	909	556	553	221
Northern Cardinal	56	92	26	28	22
Nutmeg Mannikin	11	97	9	70	8
Red-billed Leiothrix	123	85	97	68	128
Red-crested Cardinal	180	225	111	141	183
Red-vented Bulbul	551	524	338	401	330
Red-whiskered Bulbul	178	122	123	83	14
Rock Dove	304	268	198	206	66
Spotted Dove	636	717	313	536	237
White-rumped Shama	72	41	27	34	17
Yellow-fronted Canary	10	18	18	7	39
Zebra Dove	1,176	1,902	1,054	1,195	488
Visitor species: 8/					
Mallard	156	74	50	46	110
Pacific Golden-Plover	788	978	859	682	492
Ruddy Turnstone	232	336	199	214	205
Sanderling	10	10	4	7	4
Wandering Tattler	38	30	16	28	20

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**Table 5.49-- HAWAII AUDUBON SOCIETY BIRD COUNTS OF MAJOR SPECIES IN THE HONOLULU AREA: 2003 TO 2007 -- Con.**

- 1/ Birds peculiar to Hawaii, and found nowhere else.
- 2/ Endangered species.
- 3/ Low count.
- 4/ Native to Hawaii, but also found elsewhere.
- 5/ Reported in the area during count week, but not reported during the count .
- 6/ High count.
- 7/ Formerly termed "introduced". Includes accidental escapes from captivity.
- 8/ Formerly termed "migratory". Includes stragglers and seasonal migrants.

Source: Hawaii Audubon Society, *'Elepaio*, Volume 64, Number 9, "Results of 2003-2004 Christmas Bird Count - Main Hawaiian Islands", December 2004/January 2005; Volume 65, Number 5, "Results of 2004-2005 Christmas Bird Count - Main Hawaiian Islands", June/July 2005; Volume 66, Number 6, "Results of the 2005 - 2006 Christmas Bird Count", August/September 2006; Volume 67, Number 5, "Results of Audubon's 107th Annual Christmas Bird Count", June/July 2007; Volume 68, Number 5, "Results of Audubon's 108th Annual Christmas Bird Count", June/July 2008; <<http://www.hawaiiudubon.com/newsletter.html>> accessed December 12, 2008.

**Table 5.54-- THREATENED AND ENDANGERED SPECIES, FOR THE UNITED STATES AND HAWAII**

[As of December 12, 2008]

<b>Group</b>	<b>United States</b>	<b>Hawaii</b>
Animal species	877	99
Amphibians	37	-
Arachnids	13	1
Birds	129	36
Clams	118	-
Corals	2	-
Crustaceans	30	7
Fishes	177	-
Insects	95	23
Mammals	122	3
Reptiles	50	4
Snails	104	25
Plant species	921	375
Conifers and cycads	3	-
Ferns and allies	34	19
Flowering plants	882	356
Lichens	2	-

Source: U.S. Fish & Wildlife Service, Threatened and Endangered Species System (TESS)  
 <[http://ecos.fws.gov/tess\\_public](http://ecos.fws.gov/tess_public)> accessed December 12, 2008