

# **Minimal Effort Tables in Quarto**

Sally A.M. Hogenboom

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# Goal

This is an exploration of ‘out-of-the-box’ tables in Quarto. We compare the available packages to see which minimal effort tables one can produce in HTML and PDF output. Quarto uses a different formatting for [cross-referencing](#) which may cause some packages trouble. Please note that this is primarily an implementation of packages discussed in the [RMarkdown Cookbook](#).

To showcase the different tables we use the [palmerpenguins](#) data - because who doesn’t love penguins? It is by design that I used a dataset with too many columns to fit a single page. HTML output generally resolves the issues by creating slider divs, whereas PDF output at times struggles in unexpected ways. I believe it is good to see where issues may arise with ‘out-of-the-box’ solutions.

# knitr::kable()

This is a cross-reference to Table 1, rendered with the default package [knitr](#) version 1.41.

Table 1: knitr::kable()

Study	Sample Num-	Species	Region	Island	Stage	ID	Clutch Completion	Date	Egg (mm)	Culmen Length (mm)	Culmen Depth (mm)	Flipper Length (mm)	Body Mass (g)	Sex	Delta		Comments
															15 N (o/oo)	13 C (o/oo)	
PAL0708	Adelie	Anvers	Trig	Adult	N1A	Yes	2007	39.1	18.7	181	3750	MALE	NA	NA	NA	Not enough blood for isotopes.	
	Pen-guin (Py-goscelis adeliae)			1	Egg Stage		11-11										
PAL0708	Adelie	Anvers	Trig	Adult	N1A	Yes	2007	39.5	17.4	186	3800	FEMALE	NA	14.956	-	24.69454	NA
	Pen-guin (Py-goscelis adeliae)			1	Egg Stage		11-11										
PAL0708	Adelie	Anvers	Trig	Adult	N2A	Yes	2007	40.3	18.0	195	3250	FEMALE	NA	14.921	-	25.33302	NA
	Pen-guin (Py-goscelis adeliae)			1	Egg Stage		11-16										
PAL0708	Adelie	Anvers	Trig	Adult	N2A	Yes	2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	Adult not sampled.
	Pen-guin (Py-goscelis adeliae)			1	Egg Stage		11-16										

Study	Sample Num-ber	Species	Region	Island	Stage	Individual ID	Clutch Com-pleteness	Date Egg	Culmen Length (mm)	Culmen Depth (mm)	Flipper Length (mm)	Body Mass (g)	Sex	Delta		Comments
														15 N	13 C	
PAL0708	508	Adelie Pen-guin (Py-goscelis adeliae)	Anvers	Torg	Adult	N3A	Yes	200736.7	19.3	193	3450	FEMALE	NA	1651	-	NA
					1			11-16								25.32426
PAL0708	508	Adelie Pen-guin (Py-goscelis adeliae)	Anvers	Torg	Adult	N3A	Yes	200739.3	20.6	190	3650	MALE	NA	16496	-	NA
					1			11-16								25.29805
PAL0708	508	Adelie Pen-guin (Py-goscelis adeliae)	Anvers	Torg	Adult	N4A	No	200738.9	17.8	181	3625	FEMALE	NA	16718	-	Nest
					1			11-15								25.21799
					Egg Stage											never observed with full clutch.
PAL0708	508	Adelie Pen-guin (Py-goscelis adeliae)	Anvers	Torg	Adult	N4A	No	200739.2	19.6	195	4675	MALE	NA	16060	-	Nest
					1			11-15								24.89958
					Egg Stage											never observed with full clutch.
PAL0708	508	Adelie Pen-guin (Py-goscelis adeliae)	Anvers	Torg	Adult	N5A	Yes	200734.1	18.1	193	3475	NANA	NA	NA	NA	No blood sample obtained.
					1			11-09								

Study	Sample Num-	Species	Region	Island	Stage	ID	Clutch Completion	Date Egg	Culmen Length (mm)	Culmen Depth (mm)	Flipper Length (mm)	Body Mass (g)	Delta		Comments	
													15 N	13 C		
PAL007	008	Adelie	Anvers	Travis	Adult	N5A2	Yes	2007	42.0	20.2	190	4250	NA	9.13362	-	No
		Pen-guin (Py-goscelis adeliae)			1 Egg Stage			11-09						25.09368		Pod sample obtained for sexing.

## kableExtra::kable()

This is a cross-reference to Table [2](#), rendered with the package [kableExtra](#) version 1.3.4.

Table 2: kableExtra::kable()

studyName	Sample Number	Species	Region	Island	Stage
PAL0708	1	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stage
PAL0708	2	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stage
PAL0708	3	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stage
PAL0708	4	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stage
PAL0708	5	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stage
PAL0708	6	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stage
PAL0708	7	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stage
PAL0708	8	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stage
PAL0708	9	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stage
PAL0708	10	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stage



## **flextable::flextable()**

This is a cross-reference to Table [3](#), rendered with the package [flextable](#) version 0.8.3.

Table 3: flextable::flextable()

studyName	SampleSpecies Number	Region	Island	Stage	Individual ID	Clutch Comple- tion	Date Egg	Culm Leng (mm)
PAL0708	1Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen	Adult, 1 Egg Stage	N1A1	Yes	2007-11-11	39
PAL0708	2Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen	Adult, 1 Egg Stage	N1A2	Yes	2007-11-11	39
PAL0708	3Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen	Adult, 1 Egg Stage	N2A1	Yes	2007-11-16	40
PAL0708	4Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen	Adult, 1 Egg Stage	N2A2	Yes	2007-11-16	
PAL0708	5Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen	Adult, 1 Egg Stage	N3A1	Yes	2007-11-16	30
PAL0708	6Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen	Adult, 1 Egg Stage	N3A2	Yes	2007-11-16	39
PAL0708	7Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen	Adult, 1 Egg Stage	N4A1	No	2007-11-15	38
PAL0708	8Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen	Adult, 1 Egg Stage	N4A2	No	2007-11-15	39
PAL0708	9Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen	Adult, 1 Egg Stage	N5A1	Yes	2007-11-09	34
PAL0708	10Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen	Adult, 1 Egg Stage	N5A2	Yes	2007-11-09	42

# huxtable::hux()

This is a cross-reference to Table 4, rendered with the package [huxtable](#) version 5.5.1.

Table 4: huxtable::hux()

Individual ID	Clutch Completion	Date Egg	Culmen Length (mm)	Culmen Depth (mm)	Flipper Length (mm)
N1A1	Yes	2007-11-11	39.1	18.7	180
N1A2	Yes	2007-11-11	39.5	17.4	180
N2A1	Yes	2007-11-16	40.3	18	190
N2A2	Yes	2007-11-16			
N3A1	Yes	2007-11-16	36.7	19.3	190
N3A2	Yes	2007-11-16	39.3	20.6	190
N4A1	No	2007-11-15	38.9	17.8	180
N4A2	No	2007-11-15	39.2	19.6	190
N5A1	Yes	2007-11-09	34.1	18.1	190
N5A2	Yes	2007-11-09	42	20.2	190

## DT::datatable()

This is a cross-reference to [?@tbl-DT](#), rendered with the package [DT](#) version 0.26.

**i** Note

Only HTML

## **formattable::formattable()**

This is a cross-reference to **?@tbl-formattable**, rendered with the package [formattable](#) version 0.2.1.

Table 5: formattable::formattable()

studyName

Sample Number

Species

Region

Island

Stage

Individual ID

Clutch Completion

Date Egg

Culmen Length (mm)

Culmen Depth (mm)

Flipper Length (mm)

Body Mass (g)

Sex

14

Delta 15 N (o/oo)

Delta 13 C (o/oo)

## reactable::reactable()

This is a cross-reference to **?@tbl-reactable**, rendered with the package [reactable](#) version 0.4.1. [reactablefmtr](#) offers an extension of the syntax for styling - but not a standalone option.

**i** Note

Only HTML

## **rhandsontable::rhandsontable()**

This is a cross-reference to `?@tbl-rhandsontable`, rendered with the package [rhandsontable](#) version 0.3.8.

**i** Note

Only HTML



## **pixiedust**

Only works for output from the **broom** package, so not regular datasets.

## stargazer::stargazer

This is a cross-reference to Table 6, rendered with the package [stargazer](#) version 5.2.3.

**i** Note

**results:** **asis** (i.e., creates LaTeX output)

% Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac at gmail.com % Date and time: do, dec 15, 2022 - 14:50:37

Table 6: stargazer::stargazer()

Statistic	N	Mean	St. Dev.	Min	Max
-----------	---	------	----------	-----	-----

# xtable::xtable()

This is a cross-reference to Table 7, rendered with the package `xtable` version 1.8.4.

**i** Note

`results: asis` (i.e., creates LaTeX output)

% latex table generated in R 4.2.2 by xtable 1.8-4 package % Thu Dec 15 14:50:37 2022

Table 7: xtable::xtable()

	studyName	Sample Number	Species	Region	Island	Stage
1	PAL0708	1.00	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
2	PAL0708	2.00	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
3	PAL0708	3.00	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
4	PAL0708	4.00	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
5	PAL0708	5.00	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
6	PAL0708	6.00	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
7	PAL0708	7.00	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
8	PAL0708	8.00	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
9	PAL0708	9.00	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
10	PAL0708	10.00	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg

## tangram::tangram()

This is a cross-reference to `?@tbl-tangram`, rendered with the package [tangram](#) version 0.8.1.

**i** Note

`results:` markup (i.e., creates md output)

Table 8: ?(caption)

studyName	Sample Number	Species	Region	Island	Stage
PAL0708	1	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
PAL0708	2	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
PAL0708	3	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
PAL0708	4	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
PAL0708	5	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
PAL0708	6	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
PAL0708	7	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
PAL0708	8	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
PAL0708	9	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg
PAL0708	10	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg

## ztable::ztable()

This is a cross-reference to `?@tbl-ztable`, rendered with the package [ztable](#) version 0.2.3.

Error

Could not get package to work - issue with 'list' output.

## condformat::condformat()

This is a cross-reference to `?@tbl-condformat`, rendered with the package [condformat](#) version 0.10.0.

**i** Note

Only HTML

## pander::pandoc.table()

This is a cross-reference to `?@tbl-pander`, rendered with the package [pander](#) version 0.6.5.

**i** Note

`results:` `markup` (i.e., creates md output)



Table 9: ?(caption)

studyName	Sample Number	Species	Region	Island
PAL0708	1	Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen
PAL0708	2	Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen
PAL0708	3	Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen
PAL0708	4	Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen
PAL0708	5	Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen
PAL0708	6	Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen
PAL0708	7	Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen
PAL0708	8	Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen
PAL0708	9	Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen
PAL0708	10	Adelie Penguin (Pygoscelis adeliae)	Anvers	Torgersen

Table: Table continues below

Stage	Individual ID	Clutch Completion	Date Egg
Adult, 1 Egg Stage	N1A1	Yes	2007-11-11
Adult, 1 Egg Stage	N1A2	Yes	2007-11-11
Adult, 1 Egg Stage	N2A1	25 Yes	2007-11-16
Adult, 1 Egg Stage	N2A2	Yes	2007-11-16
Adult, 1 Egg Stage	N3A1	Yes	2007-11-16
Adult, 1 Egg Stage	N3A2	Yes	2007-11-16

## papaja::apa\_table()

This is a cross-reference to `?@tbl-papaja`, rendered with the package [papaja](#) version 0.1.1.

### Error

```
compilation failed- error Extra }, or forgotten \endgroup. 1.6308
...label{tbl-papaja}papaja::apa\_table() }}
```

## gt::gt()

This is a cross-reference to Table 10, rendered with the package [gt](#) version 0.8.0.

studyName	Sample Number	Species	Region	Island	Stage
PAL0708	1	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stag
PAL0708	2	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stag
PAL0708	3	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stag
PAL0708	4	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stag
PAL0708	5	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stag
PAL0708	6	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stag
PAL0708	7	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stag
PAL0708	8	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stag
PAL0708	9	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stag
PAL0708	10	Adelie Penguin ( <i>Pygoscelis adeliae</i> )	Anvers	Torgersen	Adult, 1 Egg Stag