Publication Table

Caption- This table represents trends in Final Ranger Action, types of Animal Reported and Source of Information over time for New York's Urban Park Rangers. The first part of the table shows the trends in Final Ranger Action as ACC (Animal Care Centres) or Rehabilitator, the second part of the table is focused primarily on showing trends in Source of Information and Type Of Animal being reported over the recorded time and incudes all Final Ranger Actions.

Year	Source Of Information	Type Of Animal				
		Native	Invasive	Domestic	Exotic	Total
	Final Ranger Action- **ACC or Rehabilitator**					
2018	Central	40	0	5	0	45
	Employee	80	1	14	0	95
	Public	25	0	5	0	30
	Others	202	0	1	1	204
	Total	347	1	25	1	374
2019	Central	30	1	8	0	39
	Employee	55	2	25	2	84
	Public	37	2	9	1	49
	Others	42	3	19	1	65
	Total	164	8	61	4	237
2020	Central	37	1	10	2	50
	Employee	90	4	25	1	120
	Public	57	5	17	2	81
	Others	27	2	14	0	43
	Total	211	12	66	5	294
2021	Central	18	3	10	1	32
	Employee	38	2	12	4	56
	Public	27	2	14	0	43
	Others	15	0	5	1	21
	Total	98	7	41	6	152
	Final Ranger Action- **All**					
2018	Central	100	3	11	2	***116***
	Employee	158	4	18	2	***182***
	Public	81	4	7	3	***95***
	Others	303	1	1	1	***306***
	Total	**642**	**12**	**37**	**8**	699
2019	Central	96	8	17	0	***121***
	Employee	163	9	36	5	***213***
	Public	121	10	16	5	***152***
	Others	106	8	24	3	***141***
	Total	**486**	**35**	**93**	**13**	627
2020	Central	128	2	27	3	***160***
	Employee	221	6	44	9	***280***
	Public	170	22	33	3	***228***
	Others	106	13	24	2	***145***
	Total	**625**	**43**	**128**	**17**	813
2021	Central	86	9	22	1	***118***
	Employee	116	4	20	6	***146***
	Public	86	11	19	0	***116***
	Others	62	2	8	1	***73***
	Total	**350**	**26**	**69**	**8**	453

Note: The Sources Of Information "Conservanices" and "Observed by Ranger" had insignificant values and were pooled with "Other" for an accumulated "Others" datarow. Species containing "N/A" were dropped.

Importable Table

Year	Call.Source	Species.Status	Final.Ranger.Action	Count
2018	Central	Domestic	ACC or Rehabilitator	5
2018	Central	Native	ACC or Rehabilitator	40
2018	Employee	Domestic	ACC or Rehabilitator	14
2018	Employee	Invasive	ACC or Rehabilitator	1
2018	Employee	Native	ACC or Rehabilitator	80
2018	Others	Domestic	ACC or Rehabilitator	1
2018	Others	Exotic	ACC or Rehabilitator	1
2018	Others	Native	ACC or Rehabilitator	202
2018	Public	Domestic	ACC or Rehabilitator	5
2018	Public	Native	ACC or Rehabilitator	25
2019	Central	Domestic	ACC or Rehabilitator	8
2019	Central	Invasive	ACC or Rehabilitator	1
2019	Central	Native	ACC or Rehabilitator	30
2019	Employee	Domestic	ACC or Rehabilitator	25
2019	Employee	Exotic	ACC or Rehabilitator	2
2019	Employee	Invasive	ACC or Rehabilitator	2
2019	Employee	Native	ACC or Rehabilitator	55
2019	Others	Domestic	ACC or Rehabilitator	19
2019	Others	Exotic	ACC or Rehabilitator	1
2019	Others	Invasive	ACC or Rehabilitator	3
2019	Others	Native	ACC or Rehabilitator	42
2019	Public	Domestic	ACC or Rehabilitator	9
2019	Public	Exotic	ACC or Rehabilitator	1
2019	Public	Invasive	ACC or Rehabilitator	2
2019	Public	Native	ACC or Rehabilitator	37
2020	Central	Domestic	ACC or Rehabilitator	10
2020	Central	Exotic	ACC or Rehabilitator	2
2020	Central	Invasive	ACC or Rehabilitator	1
2020	Central	Native	ACC or Rehabilitator	37
2020	Employee	Domestic	ACC or Rehabilitator	25
2020	Employee	Exotic	ACC or Rehabilitator	1
2020	Employee	Invasive	ACC or Rehabilitator	4
2020	Employee	Native	ACC or Rehabilitator	90
2020	Others	Domestic	ACC or Rehabilitator	14
2020	Others	Invasive	ACC or Rehabilitator	2
2020	Others	Native	ACC or Rehabilitator	27
2020	Public	Domestic	ACC or Rehabilitator	17
2020	Public	Exotic	ACC or Rehabilitator	2
2020	Public	Invasive	ACC or Rehabilitator	5

2020	Public	Native	ACC or Rehabilitator	57
2021	Central	Domestic	ACC or Rehabilitator	16
2021	Central	Invasive	ACC or Rehabilitator	1
2021	Central	Native	ACC or Rehabilitator	27
2021	Employee	Domestic	ACC or Rehabilitator	12
2021	Employee	Exotic	ACC or Rehabilitator	4
2021	Employee	Invasive	ACC or Rehabilitator	2
2021	Employee	Native	ACC or Rehabilitator	38
2021	Others	Domestic	ACC or Rehabilitator	5
2021	Others	Exotic	ACC or Rehabilitator	1
2021	Others	Native	ACC or Rehabilitator	15
2021	Public	Domestic	ACC or Rehabilitator	10
2021	Public	Exotic	ACC or Rehabilitator	1
2021	Public	Invasive	ACC or Rehabilitator	3
2021	Public	Native	ACC or Rehabilitator	18
2018	Central	Domestic	All	11
2018	Central	Exotic	All	2
2018	Central	Invasive	All	3
2018	Central	Native	All	100
2018	Employee	Domestic	All	18
2018	Employee	Exotic	All	2
2018	Employee	Invasive	All	4
2018	Employee	Native	All	158
2018	Others	Domestic	All	1
2018	Others	Exotic	All	1
2018	Others	Invasive	All	1
2018	Others	Native	All	303
2018	Public	Domestic	All	7
2018	Public	Exotic	All	3
2018	Public	Invasive	All	4
2018	Public	Native	All	81
2019	Central	Domestic	All	17
2019	Central	Invasive	All	8
2019	Central	Native	All	96
2019	Employee	Domestic	All	36
2019	Employee	Exotic	All	5
2019	Employee	Invasive	All	9
2019	Employee	Native	All	163
2019	Others	Domestic	All	24
2019	Others	Exotic	All	3
2019	Others	Invasive	All	8

2019	Others	Native	All	106
2019	Public	Domestic	All	16
2019	Public	Exotic	All	5
2019	Public	Invasive	All	10
2019	Public	Native	All	121
2020	Central	Domestic	All	27
2020	Central	Exotic	All	3
2020	Central	Invasive	All	2
2020	Central	Native	All	128
2020	Employee	Domestic	All	44
2020	Employee	Exotic	All	9
2020	Employee	Invasive	All	6
2020	Employee	Native	All	221
2020	Others	Domestic	All	24
2020	Others	Exotic	All	2
2020	Others	Invasive	All	13
2020	Others	Native	All	106
2020	Public	Domestic	All	33
2020	Public	Exotic	All	3
2020	Public	Invasive	All	22
2020	Public	Native	All	170
2021	Central	Domestic	All	28
2021	Central	Invasive	All	7
2021	Central	Native	All	95
2021	Employee	Domestic	All	20
2021	Employee	Exotic	All	6
2021	Employee	Invasive	All	4
2021	Employee	Native	All	116
2021	Others	Domestic	All	8
2021	Others	Exotic	All	1
2021	Others	Invasive	All	2
2021	Others	Native	All	62
2021	Public	Domestic	All	15
2021	Public	Exotic	All	1
2021	Public	Invasive	All	12
2021	Public	Native	All	77

Code Used:

```
#Required libraries
library(dplyr)

#Read the dataset csv file
bdf<-read.csv("Urban_Park_Ranger_Animal_Condition_Response.csv")

##Extracting the Year from the column "Date.and.Time.of.initial.call"
#Format Year
bdf <- bdf %>%
  mutate(`Date.and.Time.of.initial.call` = as.POSIXct(`Date.and.Time.of.initial.call`, format =
"%m/%d/%Y %I:%M:%S %p"))

bdf <- bdf %>%
  filter(!is.na(`Date.and.Time.of.initial.call`))

#Added new Year column on dataset
bdf <- bdf %>%
  mutate(Year = year(`Date.and.Time.of.initial.call`))


#Filter data for Ranger Action= ACC and Rehabilitator and Species status= c("Native",
"Invasive", "Domestic", "Exotic")
# Also Call Sources = Conservancies,Observed by Ranger and Other combined as "Others"

filtered_data <- bdf %>%
  filter(
    Species.Status %in% c("Native", "Invasive", "Domestic", "Exotic"),
    Final.Ranger.Action %in% c("ACC","Rehabilitator")
  ) %>%
  mutate(
    Final.Ranger.Action ="ACC or Rehabilitator",
    Call.Source=ifelse(Call.Source %in% c("Central","Employee","Public"),Call.Source,
                       "Others"
    )
  )

# Getting the count
acc_rehab_records <- filtered_data %>%
  count(Year, Call.Source, Species.Status, Final.Ranger.Action) %>%
  rename(Count=n)
```

```
# Filtering Species status= c("Native", "Invasive", "Domestic", "Exotic")
# Call Sources = Conservancies,Observed by Ranger and Other combined as "Others"
# Final Ranger Action = All
filtered_data <- bdf %>%
  filter(
    Species.Status %in% c("Native", "Invasive", "Domestic", "Exotic"),  # Include only specified
Species.Status values
    ) %>%
  mutate(
    Call.Source=ifelse(Call.Source %in% c("Central","Employee","Public"),Call.Source,
                       "Others"
    ),
    Final.Ranger.Action="All"
  )

# Getting count
all_records <- filtered_data %>%
  count(Year, Call.Source, Species.Status, Final.Ranger.Action)%>%
  rename(Count=n)

#Concatenating the datasets
combined_data<-rbind(acc_rehab_records,all_records)

#Create csv file
write.csv(combined_data,file="Table2.csv",row.names = F)
```

Once the CSV file was generated, used the data to create the Publication table in Excel.

1. Added Caption
2. Added years as stubs.
3. Added Final Ranger action=ACC or Rehab/ All as Table Spanner
4. Added Call source among the year stubs.
5. Added Species as Column heads.
6. Added total values to highlight trends in ACC/ Rehabilitator, Call Source and Species.
7. Colour coding for better visuals.
8. Added Foot Note.