

In [14]:

```
#Najmudin Rain
#18BCE2505
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
dataset = pd.read_csv("database.csv", low_memory=False)
dataset.head()
```

Out[14]:

	Record ID	Incident Year	Incident Month	Incident Day	Operator ID	Operator	Aircraft	Aircraft Type	Aircraft Make	Aircraft Model	...	Fuselage Strike	Fuselage Damage	Landing Gear Strike
0	127128	1990	1	1	DAL	DELTA AIR LINES	B-757-200	A	148	26	...	0	0	0
1	129779	1990	1	1	HAL	HAWAIIAN AIR	DC-9	A	583	90	...	0	0	0
2	129780	1990	1	2	UNK	UNKNOWN	UNKNOWN	NaN	NaN	NaN	...	0	0	0
3	2258	1990	1	3	MIL	MILITARY	A-10A	A	345	NaN	...	0	0	0
4	2257	1990	1	3	MIL	MILITARY	F-16	A	561	NaN	...	0	0	0

5 rows × 66 columns

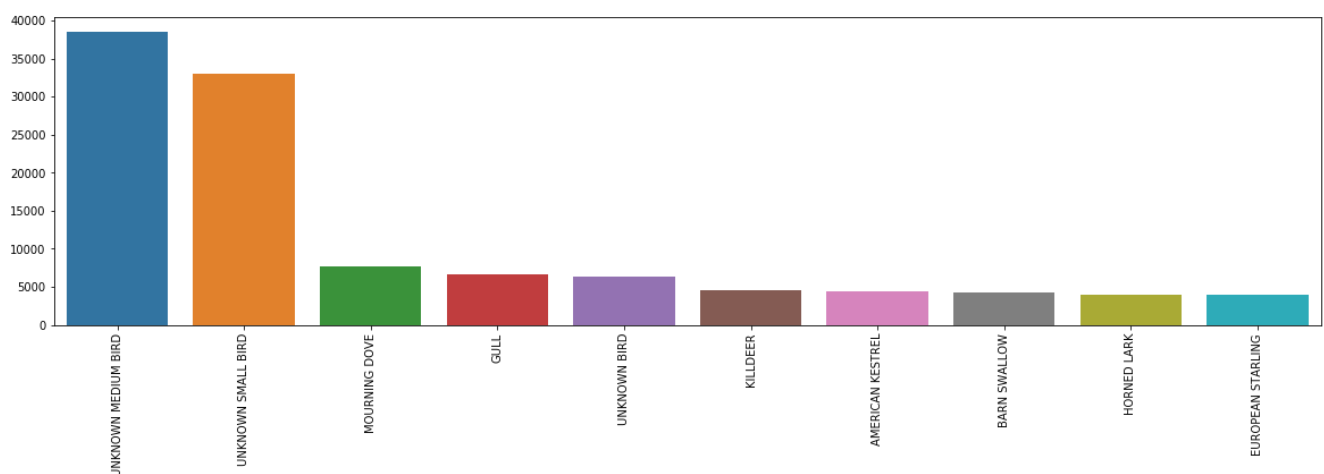
In [15]:

```
import collections
from collections import Counter
import operator
damagePerSpecies = dict(Counter(dataset['Species Name']))
#x = sorted(damagePerSpecies.items(), key=operator.itemgetter(0))
damagePerSpecies = sorted(damagePerSpecies.items(), key=lambda x: x[1], reverse=True)[0:10]
species = []
damageVal = []
for i in damagePerSpecies:
    species.append(i[0])
    damageVal.append(i[1])

import seaborn as sns
%matplotlib inline
fig=plt.figure(figsize=(20,5))
ax1=fig.add_subplot(111)
plt.xticks(rotation=90)
sns.barplot(x=species, y=damageVal, ax=ax1)
```

Out[15]:

<matplotlib.axes._subplots.AxesSubplot at 0x1e0725624c8>



In [23]:

```
damagePart = ["Aircraft Damage", "Radome Damage", "Windshield Damage", "Nose Damage", "Engine1 Damage",  
             , "Engine2 Damage", "Engine3 Damage", "Engine4 Damage", "Propeller Damage", "Wing or Rotor  
Damage", "Fuselage Damage", "Landing Gear Damage", "Tail Damage", "Lights Damage", "Other Damage"]  
damageSum = []  
for str in damagePart:  
    x = sum(dataset[str])  
    damageSum.append(x)  
fig=plt.figure(figsize=(20,5))  
ax2=fig.add_subplot(111)  
plt.xticks(rotation=90)  
sns.barplot(x=damagePart, y=damageSum, ax=ax2)
```

Out [23]:

<matplotlib.axes._subplots.AxesSubplot at 0x1e00047fe48>

