Visual Basic to Format the Data

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For the 1000m sample in the 2021 data, there is information on the total kilogram weights of the major litter group types such as plastic or metal. It may be possible to efficiently extract this information from the Excel worksheets using a series of custom made Visual Basic modules for Excel. Below I detail the steps I used to achieve this..

1. Load the excel file and clear formatting across all sheets
2. Open the VBA developer console and create a new module for the workbook (on the VBA window click insert + new module)
3. Use the following code for a module that would delete all charts on across all sheets on the.Workbook:

```vba
Sub DeleteAllChartsInWorkbook()
Dim sh As Object
For Each sh In ActiveWorkbook.Sheets
sh.ChartObjects.Delete
Next
End Sub
```

4. Click the run arrow
5. Create a new module and use the following code that will delete all the data bar the climate information, 1000m sample coords, and the aggregated litter weights

```vba
Sub DeleteRowsColumns()
    Dim ws As Worksheet
    For Each ws In ThisWorkbook.Worksheets
        ws.Columns("A").Delete
        ws.Rows("263:140").Delete
        ws.Rows("137:10").Delete
        ws.Rows("8:8").Delete
        ws.Rows("7:7").Delete
        ws.Rows("2:2").Delete
    Next ws
End Sub
```

6. Delete the final column and holiday columns in each sheet manually (variance in days in month means the is hard to automate)

7. Run a find and replace with the term "GRÁFICOS POR PLAYAS:" and replace with blank across the workbook

8. Use the following code to make a module that removes the last column

```vba
Sub DeleteColumnswithSpecificValue()
    Dim ws As Worksheet
    Dim cell As Range
    For Each cell In Range("1:2")
        If cell.Value = "TODOS LOS DÍAS DEL MES" Then
            cell.EntireColumn.Delete
        End If
    Next cell
End Sub
```

9. Use the following code to make and run a module that clears all formatting

```vba
Sub ClearAllFormatting()
    Dim ws As Worksheet

    For Each ws In ThisWorkbook.Worksheets
        ws.Cells.clearformats
    Next ws
End Sub
```

10. Use the following code to unmerge all the merged data

```vba
Sub UnmergeAndFillRows1and2()
    Dim ws As Worksheet
    Dim cell As Range
    Dim mergedCells As Range

    For Each ws In ThisWorkbook.Worksheets
        For Each cell In ws.Range("1:3")
            If cell.MergeCells Then
                Set mergedCells = cell.MergeArea
                mergedCells.UnMerge
                mergedCells.Value = cell.Value
            End If
        Next cell
    Next ws
End Sub
```

11. Manually input the data for the months as a row above all the data points
12. Copy and pivot all the months into a new workbook whereupon they should stack
13. Save as a .csv