In [ ]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

In [11]:
```
df = pd.read_csv(r"C:\Users\ahmed\OneDrive\Desktop\Panda tutorial\Ice Cream Ratings
df = df.set_index('Date')
df
```

Out[11]:

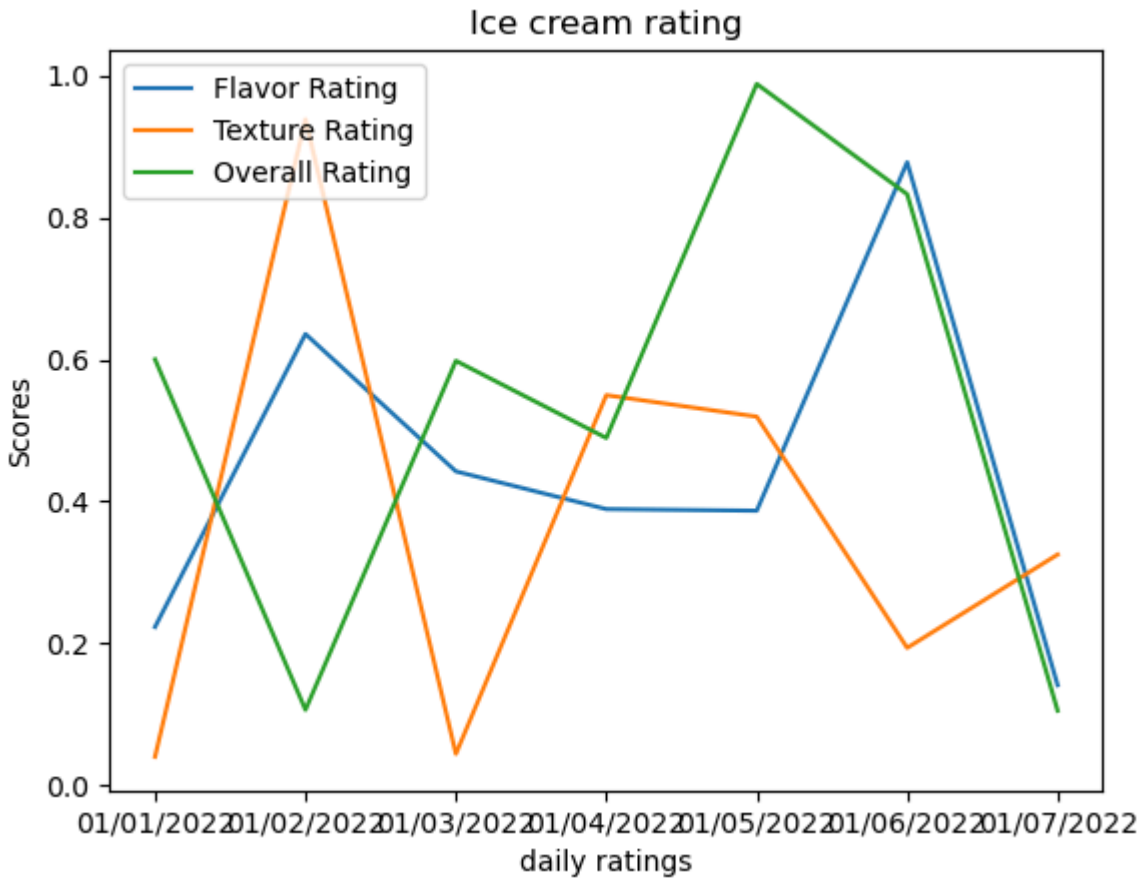
Date	Flavor Rating	Texture Rating	Overall Rating
01/01/2022	0.223090	0.040220	0.600129
01/02/2022	0.635886	0.938476	0.106264
01/03/2022	0.442323	0.044154	0.598112
01/04/2022	0.389128	0.549676	0.489353
01/05/2022	0.386887	0.519439	0.988280
01/06/2022	0.877984	0.193588	0.832827
01/07/2022	0.140995	0.325110	0.105147

In [91]:
```
print(plt.matplotlib.style)
```

```
<module 'matplotlib.style' from 'C:\\Users\\ahmed\\anaconda3\\Lib\\site-packages\\ma
tplotlib\\style\\__init__.py'>
```

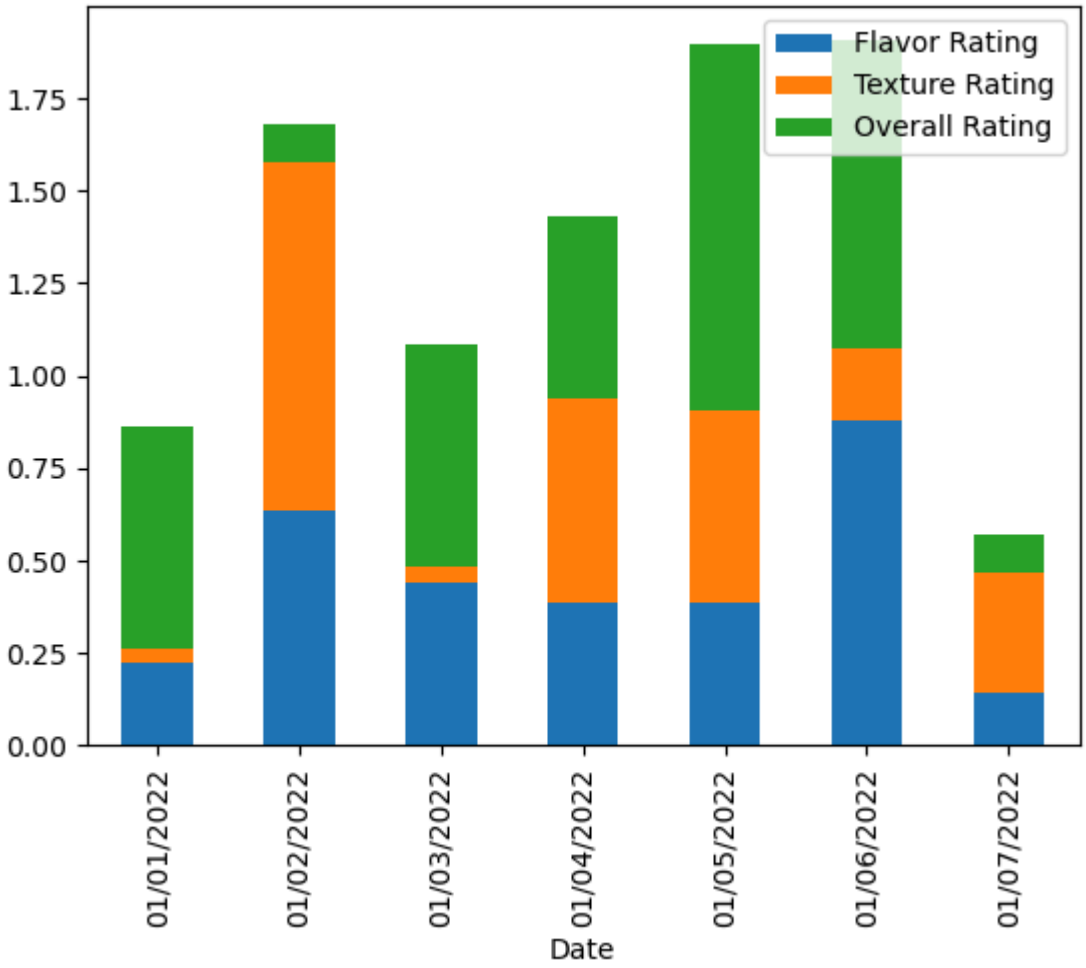
In [29]:
```
df.plot(kind = 'line', title = 'Ice cream rating', xlabel = 'daily ratings', ylabel
```

Out[29]:
```
<Axes: title={'center': 'Ice cream rating'}, xlabel='daily ratings', ylabel='Score
s'>
```



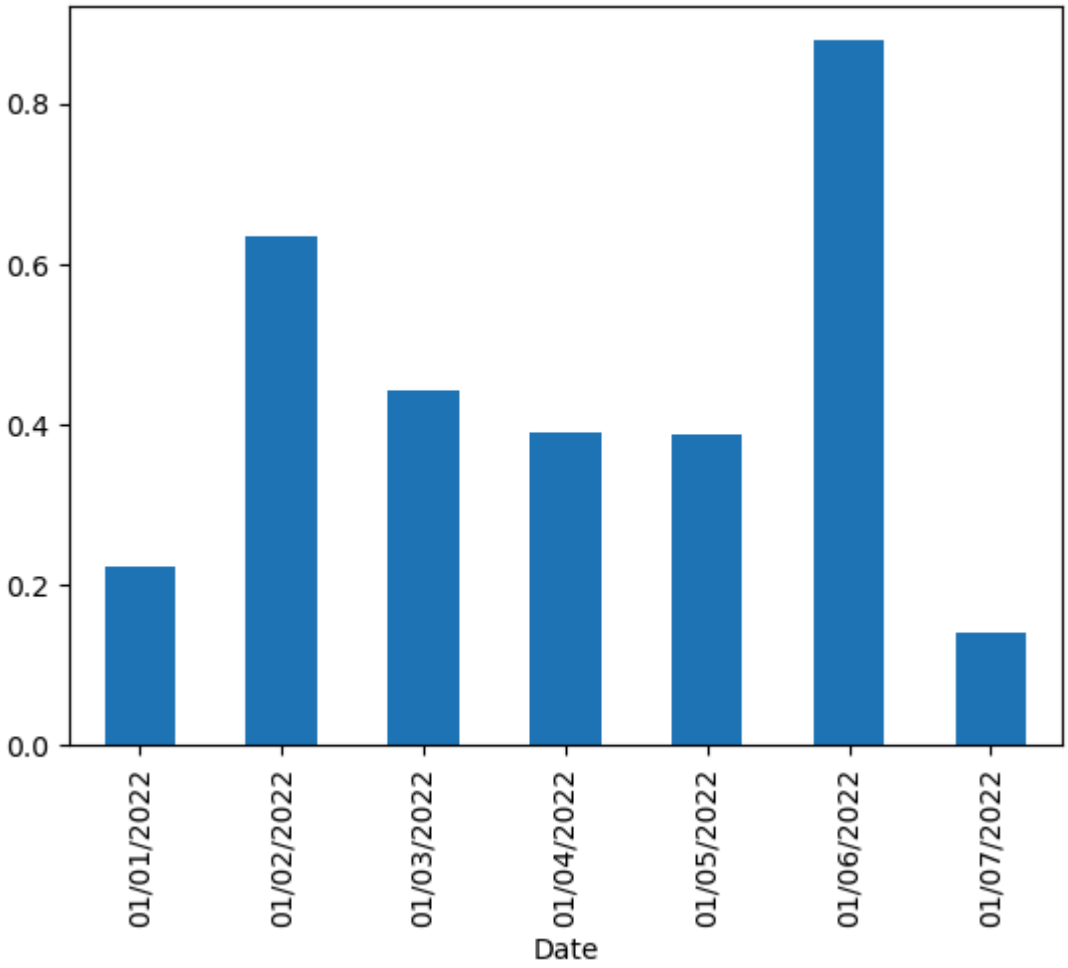
In [31]:
```
df.plot(kind = 'bar', stacked = True)
```

Out[31]: <Axes: xlabel='Date'>



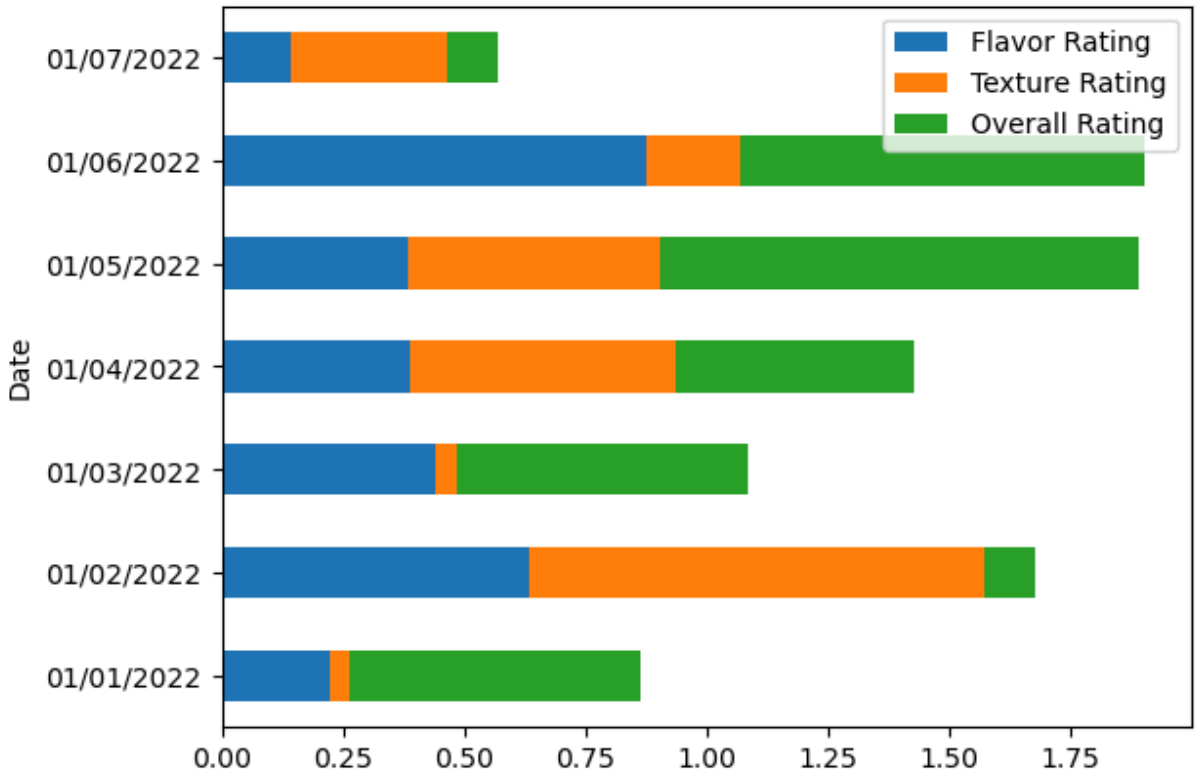
In [37]:
```
df['Flavor Rating'].plot(kind = 'bar', stacked = True)
```

Out[37]:
```
<Axes: xlabel='Date'>
```



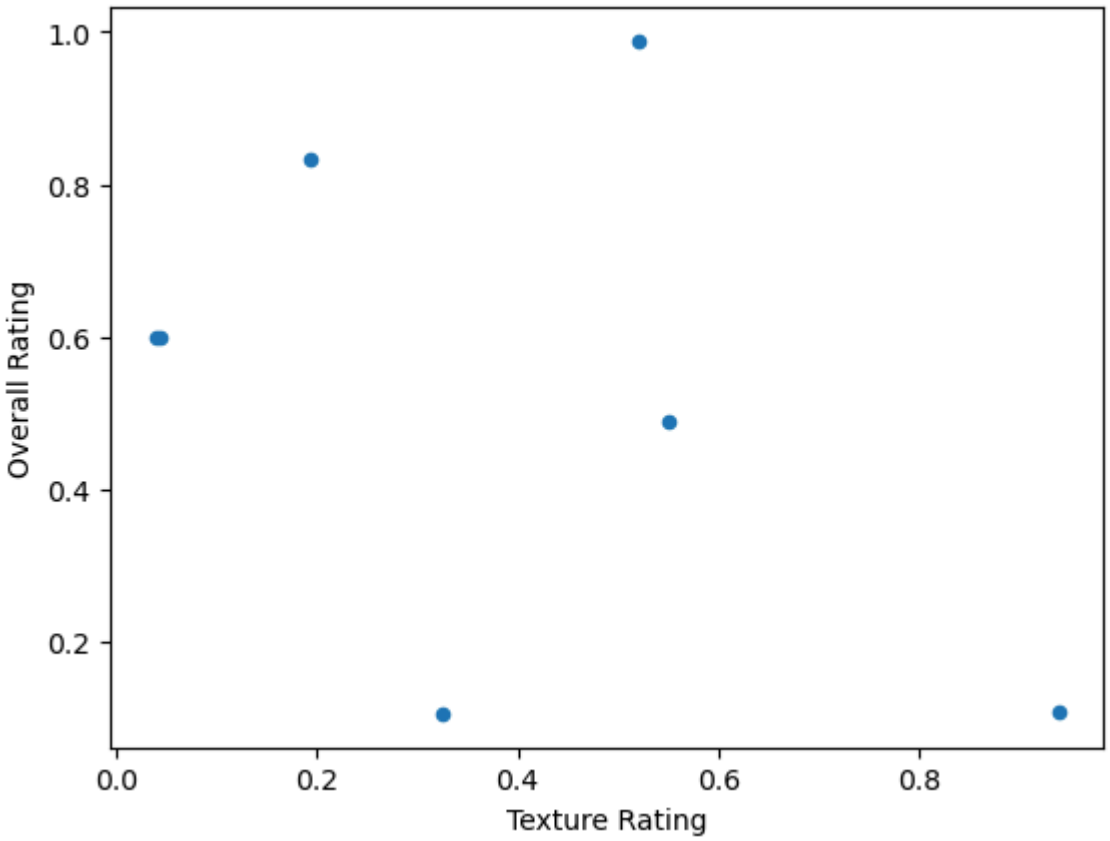
In [39]:
```
df.plot.barh(stacked = True)
```

Out[39]: <Axes: ylabel='Date'>



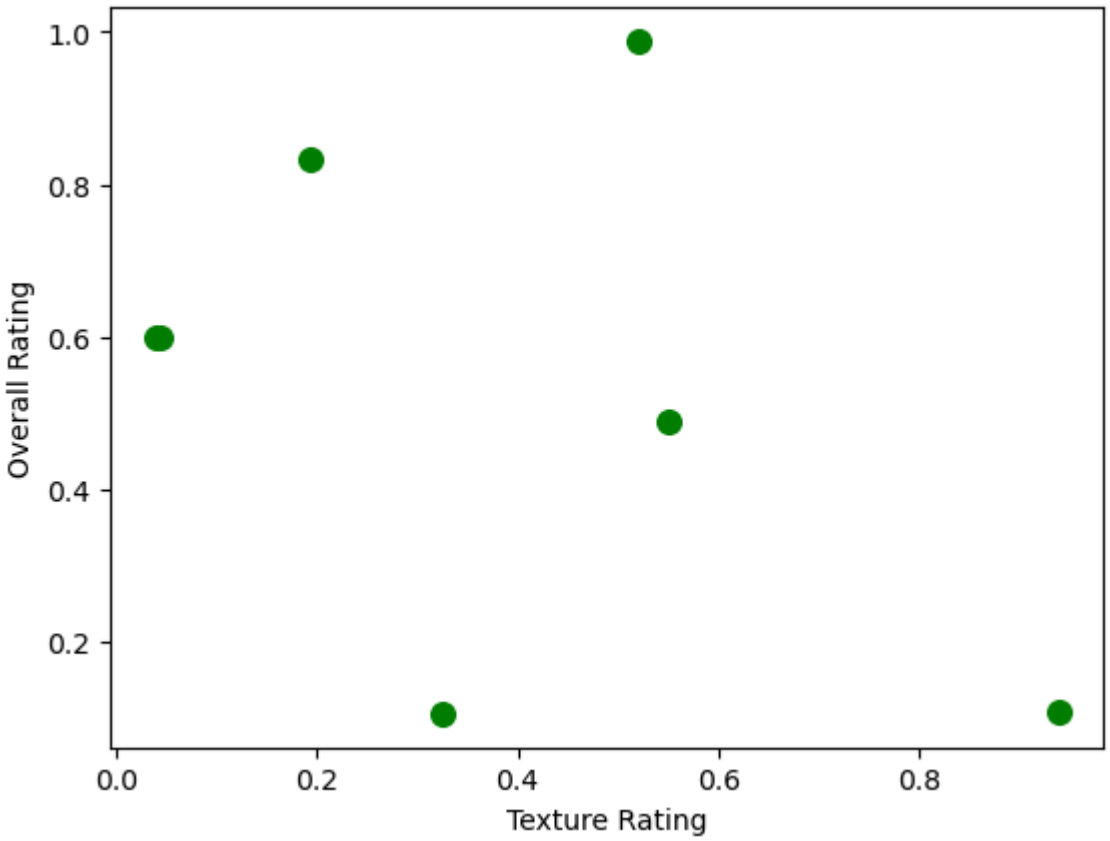
In [41]:
```
df.plot.scatter(x = 'Texture Rating', y = 'Overall Rating')
```

Out[41]:
```
<Axes: xlabel='Texture Rating', ylabel='Overall Rating'>
```



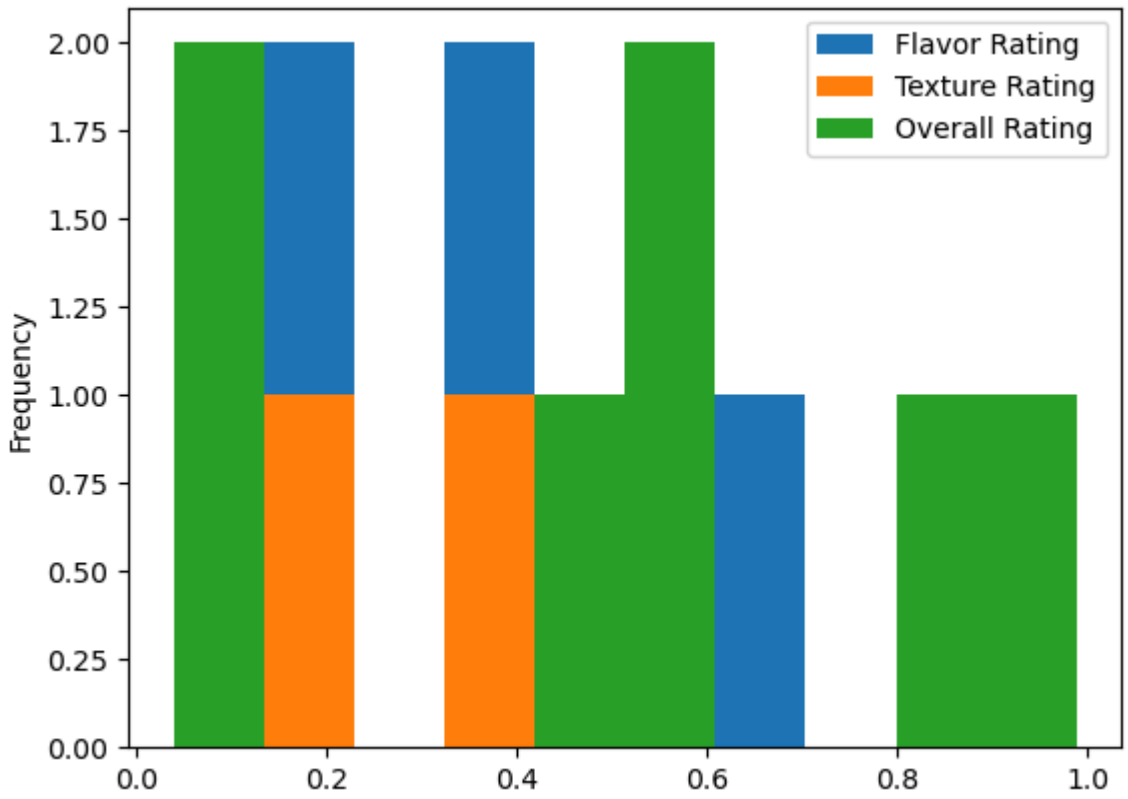
In [47]:
```
df.plot.scatter(x = 'Texture Rating', y = 'Overall Rating', s = 70, c = 'green')
```

Out[47]: <Axes: xlabel='Texture Rating', ylabel='Overall Rating'>



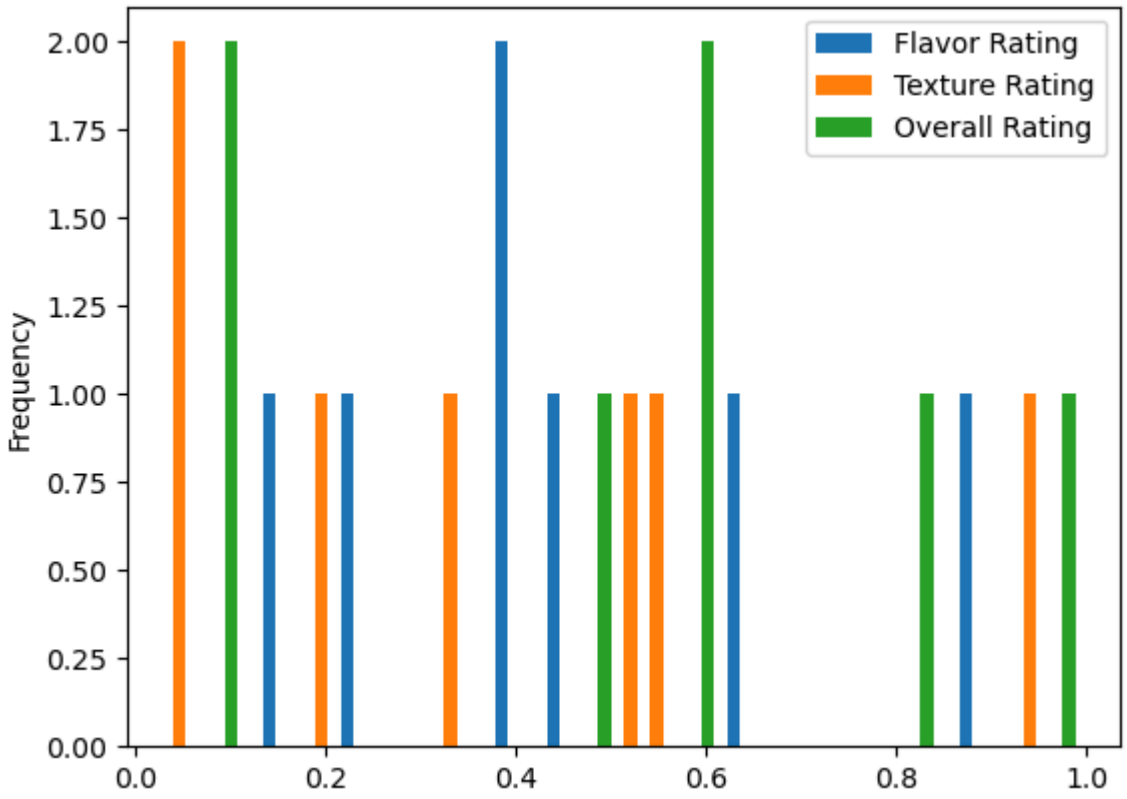
In [49]:
```
df.plot.hist()
```

Out[49]: <Axes: ylabel='Frequency'>



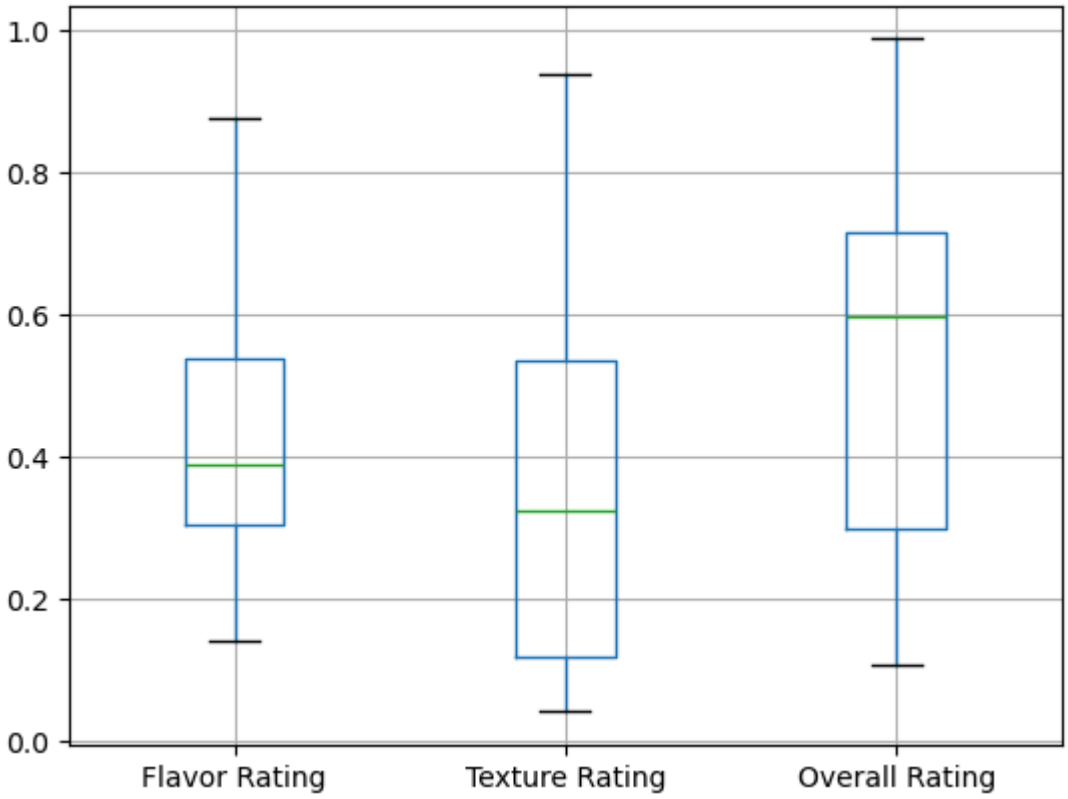
In [53]:
```
df.plot.hist(bins = 70)
```

Out[53]: <Axes: ylabel='Frequency'>



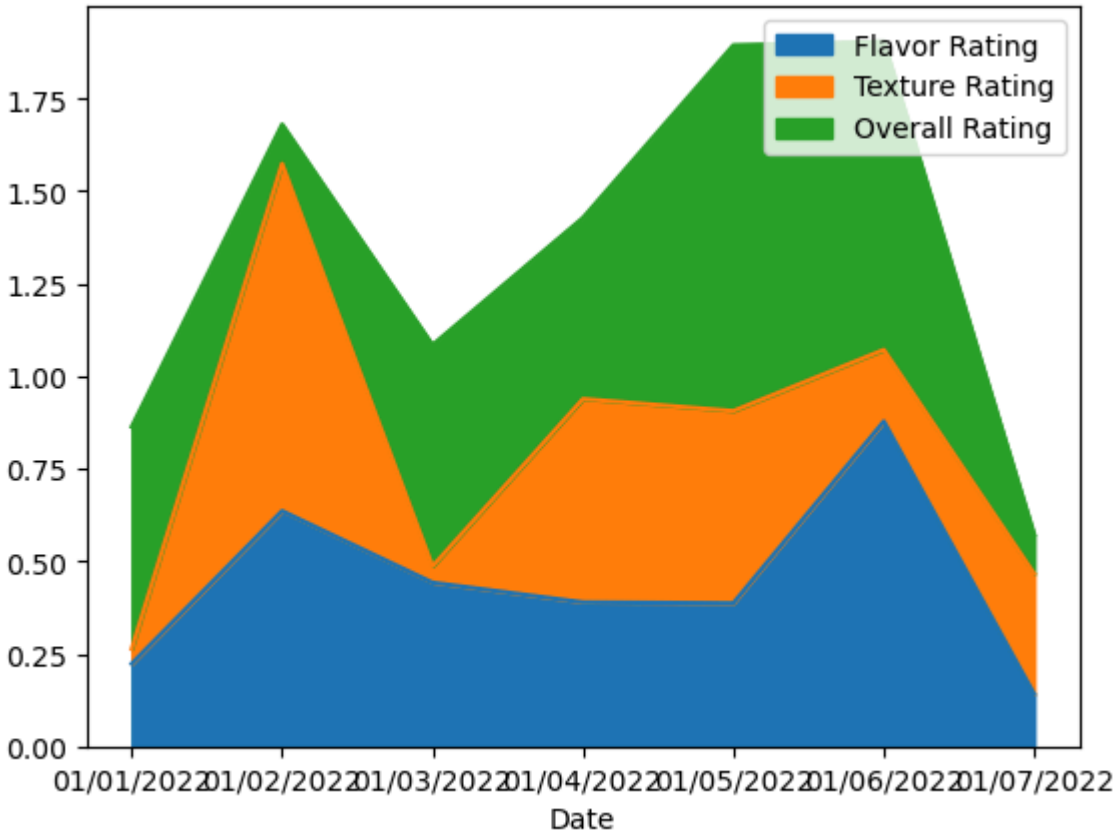
In [55]:
```
df.boxplot()
```

Out[55]: <Axes: >



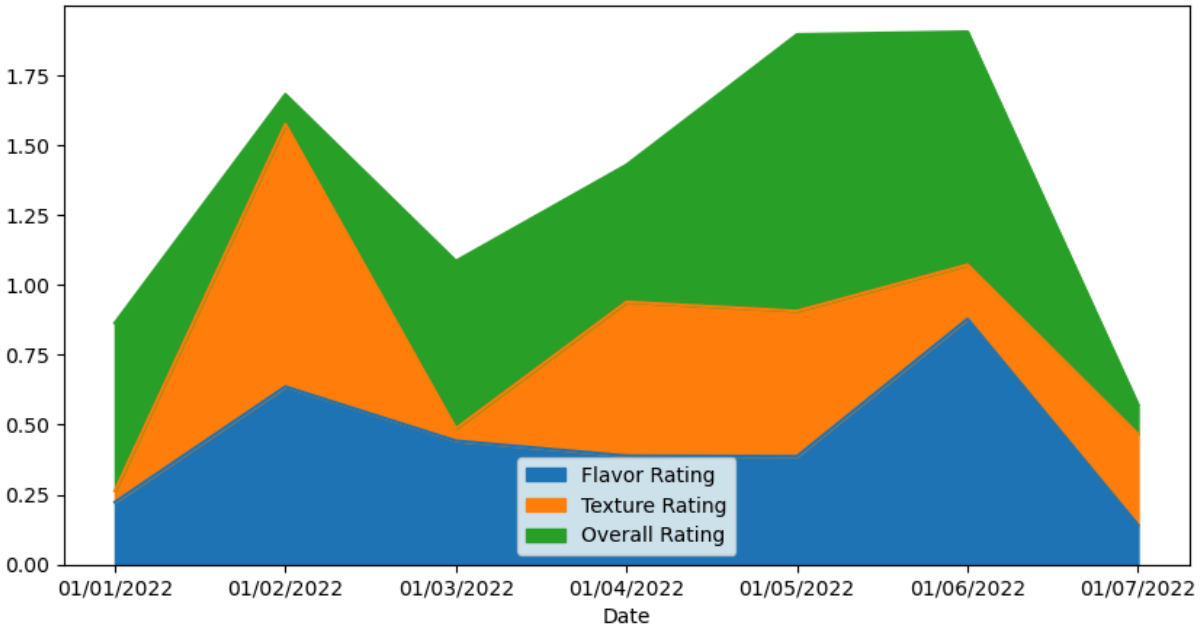
In [61]:
```
df.plot.area()
```

Out[61]: <Axes: xlabel='Date'>



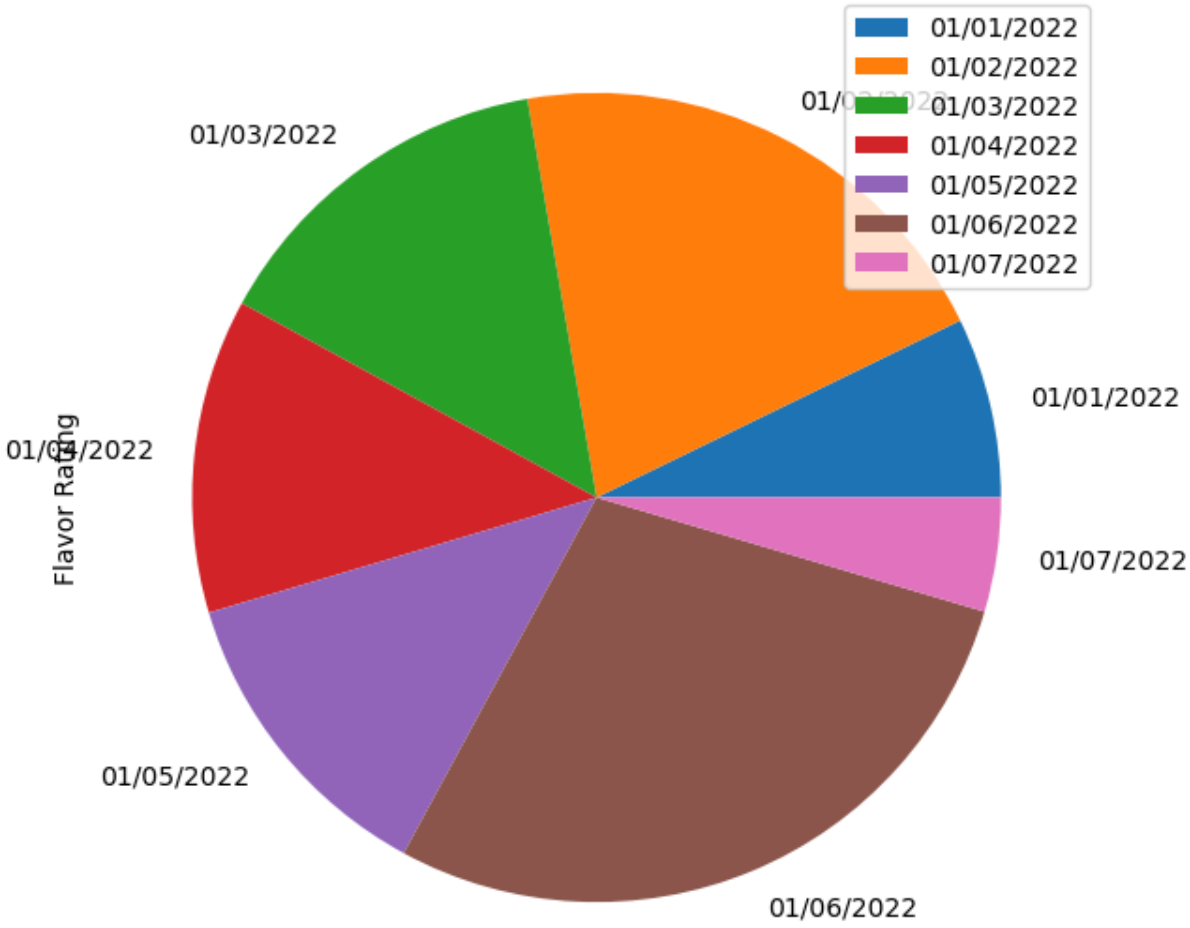
In [71]:
```
df.plot.area(figsize = (10,5))
```

Out[71]: <Axes: xlabel='Date'>



In [81]:
```
df.plot.pie(y = 'Flavor Rating', figsize = (8,7))
```

Out[81]: <Axes: ylabel='Flavor Rating'>


01/01/2022
01/02/2022
01/03/2022
01/04/2022
01/05/2022
01/06/2022
01/07/2022
01/03/2022
01/01/2022
01/07/2022
Flavor Rating
01/05/2022
01/06/2022