Gardens & Museums IT

Service & Support Annual Report - 2022/2023 1st August 2022 - 31st July 2023

The 2022/23 Academic Year has once more seen many changes, growth and challenges within IT for both the Gardens & Museums and University of Oxford, which have resulted in considerable demand for support or IT engagement. Although there has been a reduction in the number of requests received when compared to the 5361 requests received in 2021/22, 4935 in 2022/23 is still considerable, particularly when compared to the numbers in the preceding years (3942 – 2020/21, 3671 – 2019/20, 3168 – 2018/19). A likely cause for the reduction in request numbers this year is the result of work in preventative measures, with many new activities and solutions to prevent support requests being implemented or improved, including regular system maintenance checks, improved monitoring, added network resilience, and communications. The reason for these improvements was to either mediate or detect issues before they impact our colleagues and thus allowing a resolution before support requests are raised.

Many University changes to Information Security have been implemented which have seen resulting impacts to systems, services and colleagues (Change to Microsoft Multifactor Authentication Application, Single Sign-On Integration to Oxford VPN Service and the removal of External Automatic Email Forwarding). Alongside this IT Services have moved to a position where they no longer accept emailed support requests, but only requests over the phone or via Service Request. These University led changes have required local management, communication and support. Also, during the 2022/23 period the Gardens & Museums IT Team have been reviewing the Audio-Visual Services & Systems in use across the Gardens & Museums and the Commercial Systems utilised throughout GLAM, in view of identifying the benefits that formal Gardens & Museums IT involvement will bring. This activity has led to considerable work and increased demand in these service areas.

Across the course of the year our response times have remained impressive, but the average days taken to resolve requests has risen as we have prioritised project work, and found ourselves dealing with more complex and lengthy requests, which have included various parties.

This report outlines the support requests we have received during the 2021/22 Academic Year, alongside data on the response and resolution times, and where the requests have come from in respect to service areas and locations.





The diagrams on this page show the number of support requests which we received and resolved between 1st August 2022 and 31st of July 2023. There was an 8% decrease on the numbers received when compared to 2021/22 Academic Year, but that year saw a 36% increase to those received in the 2020/21 Academic Year. Therefore, the numbers received and resolved, despite being lower than in 2021/22, are still significantly higher than in the preceding years.

Response levels are in-line with previous years, but Resolution times have increased.

Support Requests Received

4935

Average Days to Respond

0.4

Support Requests Resolved

4824

Average Days to Resolve

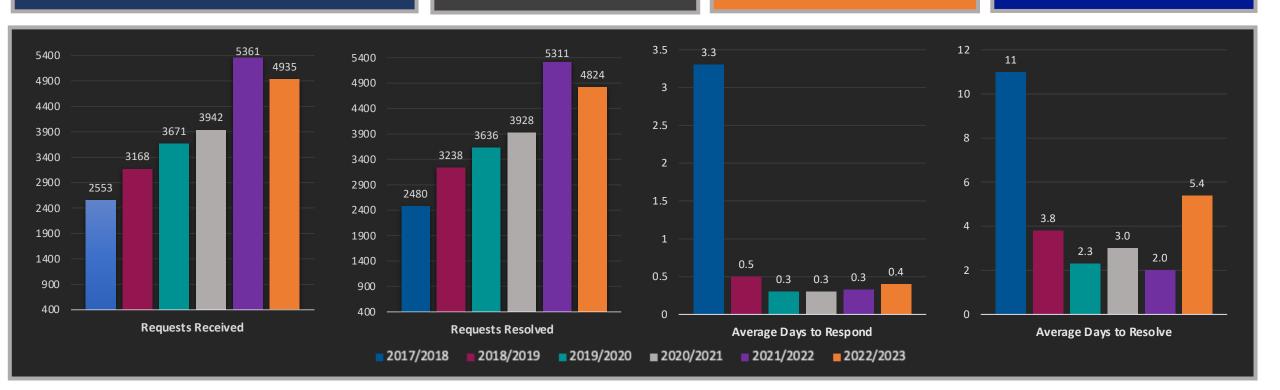
5.4

% Increase compared to 2021/22

-8%
(2021/22 was a 36% increase on 2020/21)

% First Call Resolution

50%



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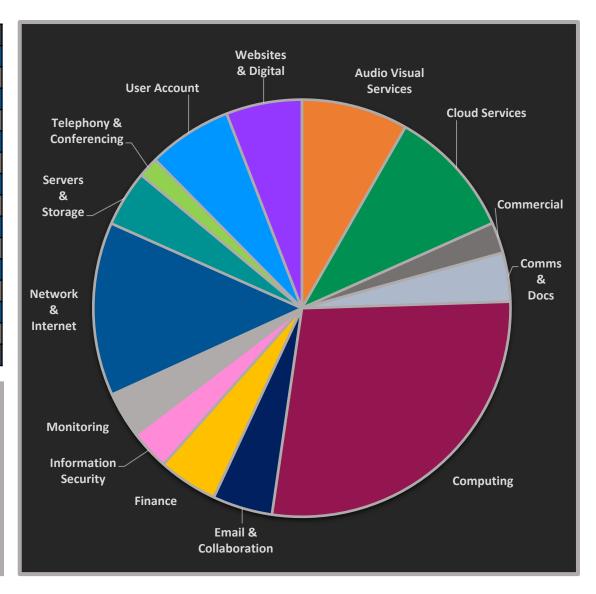
Type of Support Requests

Service	Q1	Q2	Q3	Q4	Total	%
Audio Visual Services	88	97	104	119	408	8
Cloud Services	100	127	126	143	496	10
Commercial	33	43	29	13	118	2
Communication & Documentation	50	38	54	45	187	4
Computing	369	310	342	351	1372	28
Email & Collaboration	61	55	37	76	229	5
Finance	64	52	62	49	227	5
Information Security	54	32	25	43	154	3
Monitoring	45	56	27	47	175	4
Network & Internet	158	177	199	130	664	13
Servers & Storage	57	58	63	37	215	4
Telephony & Conferencing	31	12	13	22	78	2
User Account	105	64	82	71	322	6
Websites & Digital	105	55	60	70	290	6
Total	1320	1176	1223	1216	4935	100

The types of support requests show the areas which we provide service and support, covering a large range of different IT areas.

The Computing Service Area once more amounts to a significant proportion of requests, but this is understandable as this includes Apple and Windows, with Apple amounting to 369 requests and Windows 382 of the 1372.

As this area continues to be our highest area for requests, we will look to split the data from Apple into macOS and iOS, and Windows into CONNECT and Windows GMIT, to provide a greater clarity on which areas require the most support, and whether there is growth within these areas.



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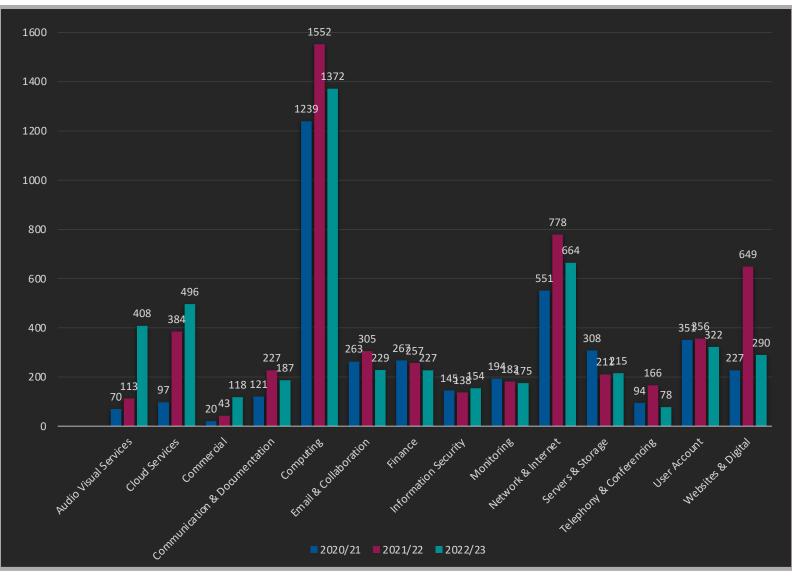
Type of Support Requests - comparison of 2020/21 & 2021/22

Service	2020/21	2021/22	2022/23
Audio Visual Services	70	113	408
Cloud Services	97	384	496
Commercial	20	43	118
Communication & Documentation	121	227	187
Computing	1239	1552	1372
Email & Collaboration	263	305	229
Finance	267	257	227
Information Security	145	138	154
Monitoring	194	182	175
Network & Internet	551	778	664
Servers & Storage	308	211	215
Telephony & Conferencing	94	166	78
User Account	351	356	322
Websites & Digital	227	649	290

As we have seen a reduction in the number of requests during this Academic Year it is understandable that many service areas have also seen a reduction.

Despite this a number of areas have seen an increase – specific examples of this being 'Audio Visual Services', 'Cloud Services' and 'Commercial Systems'.

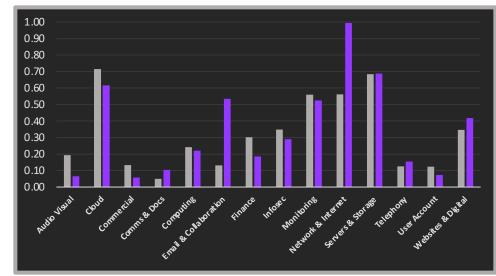
Cloud Services is a business area which continues to grow, whereas AV and Commercial Systems have seen the Gardens & Museums IT Team become involved on a formal basis during this year, leading to many operational and security improvements in both key business areas.



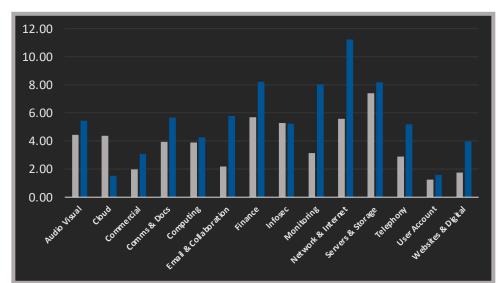
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Average Response & Resolution by Service: 2022/23 compared to 2021/22

Average Days to Respond	2021/22	2022/23	Increase/Decrease
Audio Visual Services	0.19	0.07	0.12 Reduction
Cloud Services	0.71	0.62	0.09 Decrease
Commercial	0.13	0.06	0.07 Decrease
Communication & Documentation	0.05	0.10	0.05 Increase
Computing	0.24	0.22	0.02 Decrease
Email & Collaboration	0.13	0.54	0.41 Increase
Finance	0.30	0.19	0.11 Decrease
Information Security	0.35	0.29	0.06 Decrease
Monitoring	0.56	0.52	0.04 Decrease
Network & Internet	0.56	0.99	0.43 Increase
Servers & Storage	0.68	0.69	0.01 Increase
Telephony & Conferencing	0.13	0.15	0.02 Increase
User Account	0.12	0.07	0.05 Decrease
Websites & Digital	0.35	0.42	0.07 Increase



Average Days to Resolve	2021/22	2022/23	Increase/Decrease
Audio Visual Services	4.4	5.4	1.0 Increase
Cloud Services	4.4	1.5	2.9 Decrease
Commercial	2.0	3.1	1.1 Increase
Communication & Documentation	3.9	5.7	1.8 Increase
Computing	3.9	4.3	0.4 Increase
Email & Collaboration	2.2	5.8	3.6 Increase
Finance	5.7	8.2	2.5 Increase
Information Security	5.3	5.2	0.1 Decrease
Monitoring	3.1	8.0	4.9 Increase
Network & Internet	5.6	11.2	5.6 Increase
Servers & Storage	7.4	8.2	0.8 Increase
Telephony & Conferencing	2.9	5.2	2.3 Increase
User Account	1.3	1.6	0.3 Increase
Websites & Digital	1.8	4.0	2.2 Increase



Over the course of 2022/23 many service areas have seen their response times reduce, but a number of areas have seen an increase – in particular Network & Internet has seen a considerable increase in the time it takes for us to respond to incidents within this service area. Despite this all service areas have a response times of within 1 working day and we continue to work towards maintaining this, and improving areas where there are concerns.

In comparison Resolution times have become a concern with most areas seeing an increase in the times it takes to resolve requests. Certain areas have become more complex, and involve several parties, but we will continue to pay close attention to this to ensure service quality is maintained and that we continue to reach established and required standards.

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Where have the Support Requests come from?

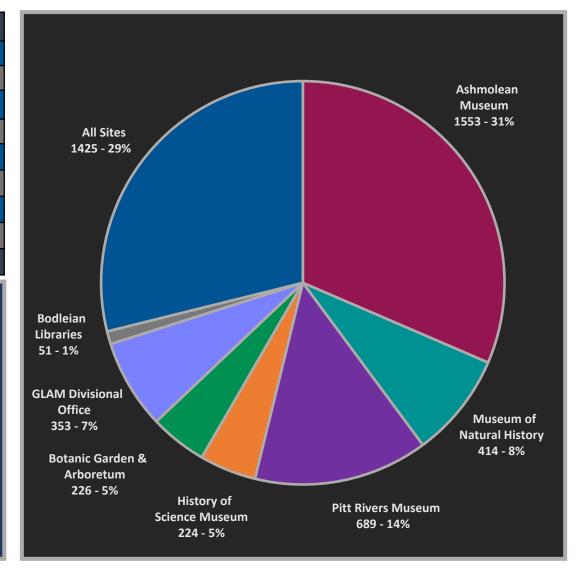
Location	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Ashmolean Museum	1234	1438	1191	981	1375	1553
Museum of Natural History	247	443	465	538	658	414
Pitt Rivers Museum	335	489	576	631	809	689
History of Science Museum	197	206	324	316	211	224
Botanic Garden & Arboretum	10	28	112	142	158	226
GLAM Divisional Office	10	219	333	348	361	353
Bodleian Libraries	0	0	0	0	0	51
All Sites	520	345	662	991	1789	1425
Total	2553	3168	3671	3947	5361	4935

The diagrams on this page shows where the demand for service has come from within the Gardens & Museums, and how this compares to previous years.

We have received more requests this year from the Ashmolean Museum, History of Science Museum and Botanic Garden & Arboretum. We have received less requests from the Museum of Natural History, Pitt Rivers Museum and GLAM Divisional Office.

Changes which Central University IT Services made to how they receive support requests (removing ability to email directly) resulted in requests being received from the Bodleian Libraries, which we began recording during this Academic Year.

One area which remains high, despite being lower than last year, is All Sites. This represents requests or activities which are for the benefit of all sites, such as communications, core networking and firewall improvements, finance and vendor relationship management. As many services have been standardised into single solutions this number continues to be high.



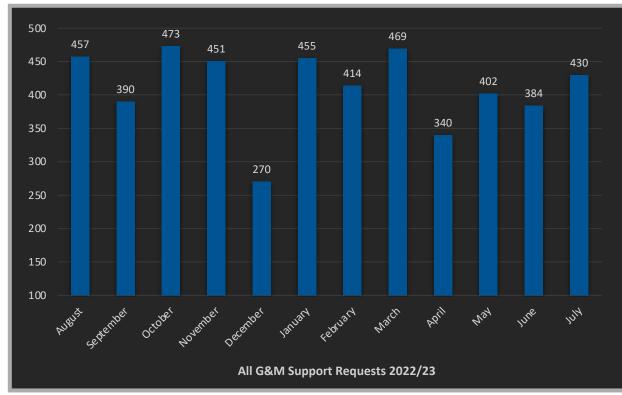


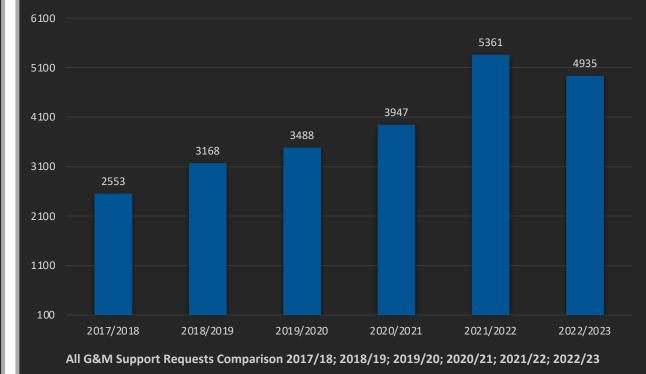
Overview of all Gardens & Museums Requests

All G&M Support Requests 2022/2023	4935
All G&M Percentage of Requests	100%
All G&M Support Requests 2021/2022	5361
Increase/Decrease in Support Requests	-426
Percentage Increase/Decrease	-8%

Support Requests numbers from across the Gardens & Museums have decreased when compared to the 2021/22 Academic Year, with 5361 in 2021/22 and 4935 in 2022/23. Despite this the numbers in 2022/23 are still significantly more than during 2020/21 (3947). This year represents the first year where demand for IT Support has lessened, having increased year on year since 2017/18 when we received 2553 requests.

The likely reason for the slight decrease is that all locations have now fully adjusted to New Ways of Working which were significant aspects in the continued and significant growth in demand from the onset of the Pandemic in 2020. Our new involvement within Commercial Systems and AV have kept the requests for support high.





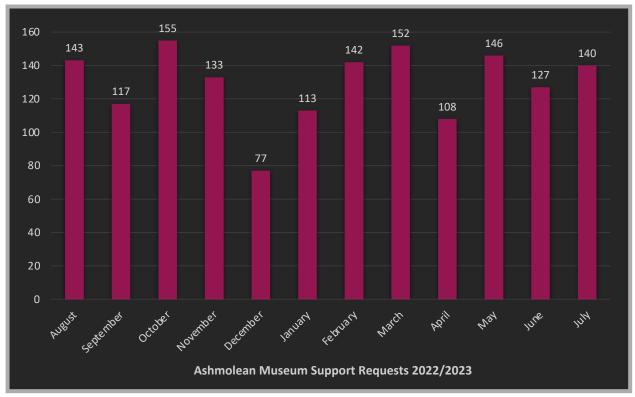


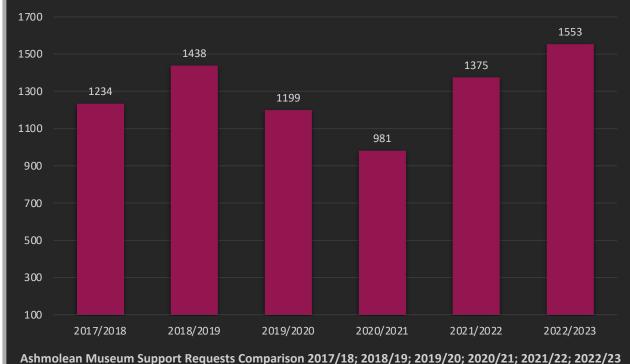
Ashmolean Museum

Ashmolean Support Requests 2022/2023	1553
Ashmolean Percentage of Requests	31%
Ashmolean Support Requests 2021/2022	
Increase/Decrease in Support Requests	
Percentage Increase/Decrease	13%

Support Request numbers from the Ashmolean Museum remain the highest from all individual locations with 1553 requests received during the 2022/23 Academic Year, which equates to the 31% of the total received.

This represents an increase of 178 from those received in 2021/22, which also saw an increase from the previous year. Our engagement and involvement with AV at the Museum, which commenced from August 2022, is a significant factor is this rise.





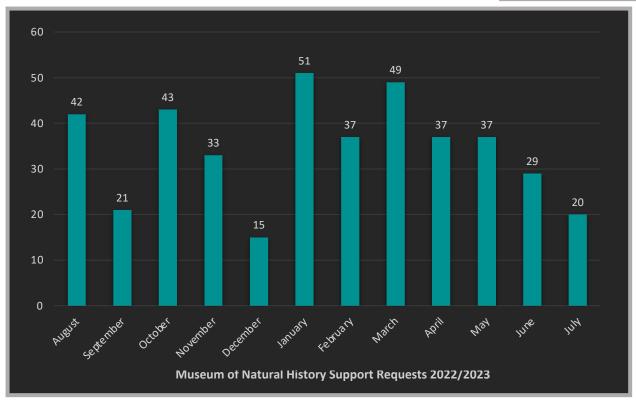


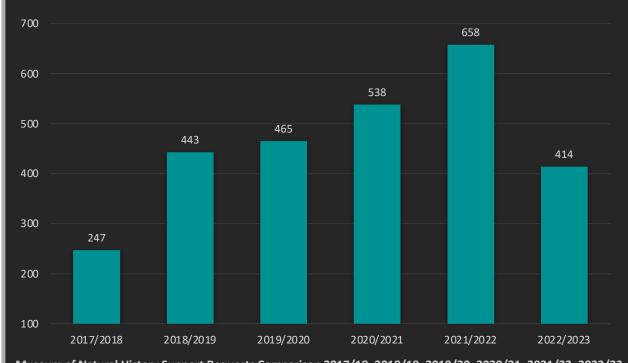
Museum of Natural History

Natural History Support Requests 2022/2023	414
Natural History Percentage of Requests	8%
Natural History Support Requests 2021/2022	658
Increase/Decrease in Support Requests	-244
Percentage Increase/Decrease	-37%

Requests for IT assistance from the Museum of Natural History have dropped this year, after seeing consistent growth from 2017/18 onwards, where the numbers were 247, to 658 received in 2021/22. This year's 414 is the lowest since 247 in 2017/18. The likely causes of this are the number of IT based projects which occurred in the location being less than in previous years, such as the network replacement, and the preventative measures which were implemented at the time. With the upcoming Wi-Fi replacement in late 2023, and Ocean Census coming in 2024, we anticipate these numbers to be higher than this next year.

Please note these numbers do not include requests related to work or projects which cover the entire Gardens & Museums site, only those specific to this location. Requests that covered the entire Gardens & Museums totalled 1425, which is 29% of the overall total.





Museum of Natural History Support Requests Comparison 2017/18; 2018/19; 2019/20; 2020/21; 2021/22; 2022/23

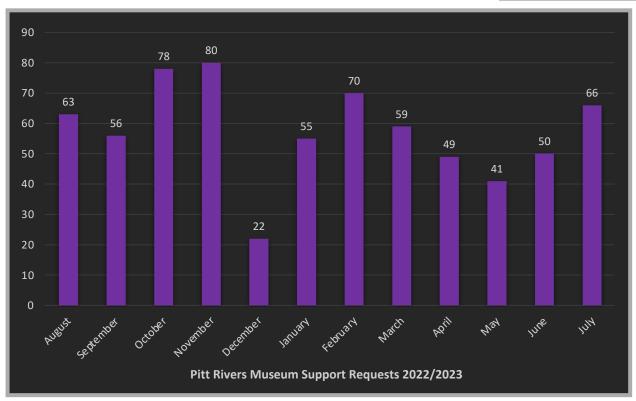


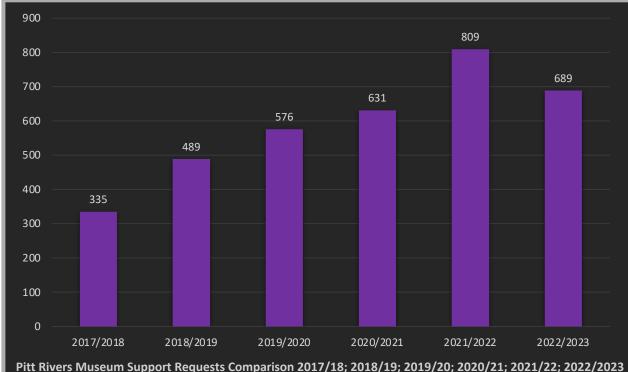
Pitt Rivers Museum

Pitt Rivers Museum Support Requests 2022/2023	689
Pitt Rivers Museum Percentage of Requests	14%
Pitt Rivers Museum Support Requests 2020/2021	809
Increase/Decrease in Support Requests	
Percentage Increase/Decrease	-15%

Support Requests from the Pitt Rivers Museum have decreased from the 809 requests received in 2021/22 to 689 in 2022/23, but this still represents the second highest amount from a single location behind the Ashmolean.

Like many of the Gardens & Museums locations we support the Pitt Rivers Museum have made use of the investigations which have taken place into Audio Visual Systems and Services and have benefited from improvements to their Lecture Theatre and Seminar Room locations, with new technologies introduced alongside operational and aesthetic improvements. Additionally preventative checks on AV spaces have been implemented to ensure continued operation.





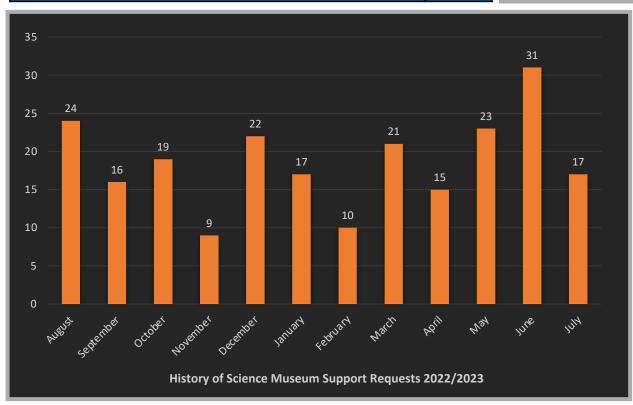


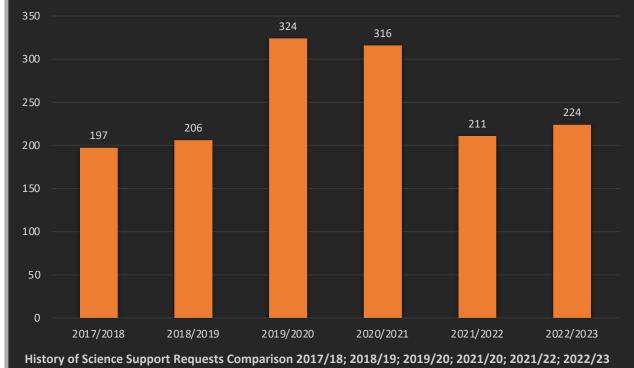
History of Science Museum

History of Science Support Requests 2022/2023	224
History of Science Percentage of Requests	5%
History of Science Support Requests 2021/2022	211
Increase/Decrease in Support Requests	13
Percentage Increase/Decrease	6%

Gardens & Museums IT Support Requests in 2022/23 Academic Year from the History of Science Museum have increased slightly on the 211 received in 2021/22 to 224, but still some way off the numbers in 2019/20 and 2020/21 which were above 300 in each year.

A likely cause of the growth this year is that we have been heavily involved in a number of AV improvements within the gallery spaces, reviewing the current gallery interactives and in many cases either re-building to introducing improvements to their security and operations, or directly assisting in the build and implementation of new.





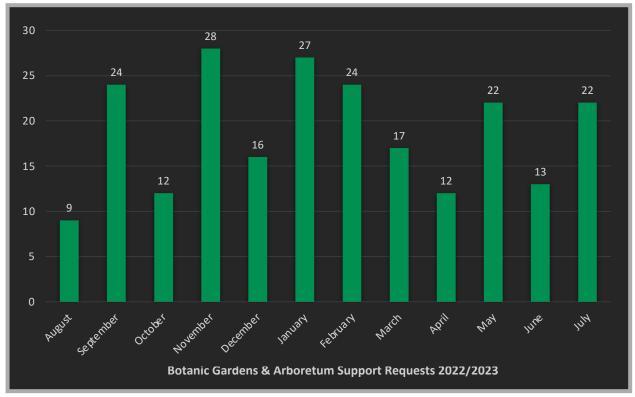


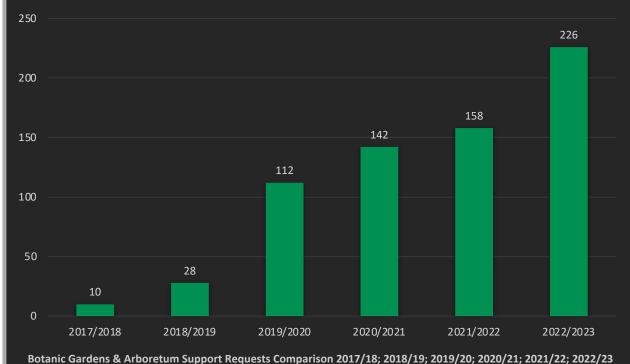
Botanic Garden & Arboretum

Botanic Garden Support Requests 2022/2023	
Botanic Garden Percentage of Requests	5%
Botanic Garden Support Requests 2021/2022	
Increase/Decrease in Support Requests	
Percentage Increase/Decrease	

The number of requests received from the Botanic Garden and Arboretum have risen once more, with requests rising from 158 in 2021/22 to 226 in 2022/23, representing an increase of 68 requests or 43%. During this Academic Year there has been a regular and consistent requirement for support throughout the year from the Botanic Gardens and Arboretum.

This year there have been several activities which have contributed to this number, including network changes and Audio-Visual implementations .





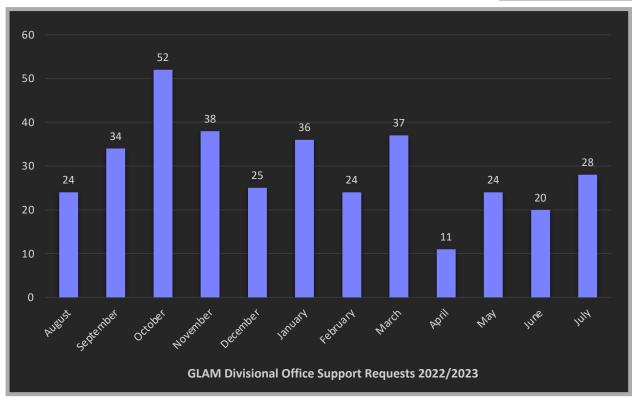


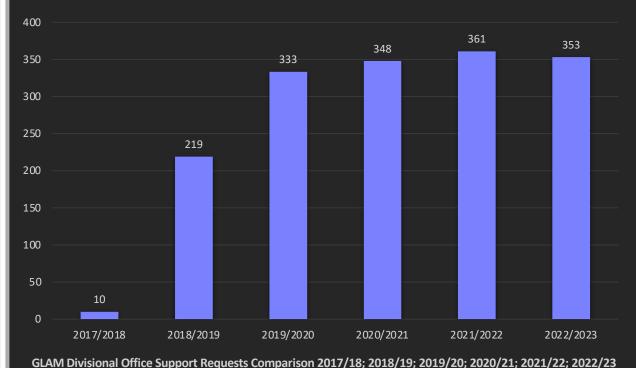
GLAM Divisional Office

GLAM Support Requests 2022/2023	353
GLAM Percentage of Requests	7%
GLAM GMIT Support Requests 2021/2022	
Increase/Decrease in Support Requests	-8
Percentage Increase/Decrease	-2%

The number of requests from the GLAM Divisional Office are slightly lower than in 2021/22, but very much in line with the previous years with the numbers received since 2019/20 showing slight growth or being quite similar after a significant jump in 2018/19.

The likely reason for the slight decrease in numbers is that many Hybrid Working solutions were established, implemented and finessed during the 2021/22 Academic Year, meaning that during 2022/23 these methods of working were no longer new and there was more familiarity with the use and issues had been ironed out.







Report Findings & Conclusion

The demand for IT support within the Gardens & Museums remains high despite the small decrease in numbers when compared to 2021/22 - this is particularly apparent when compared to those years preceding. Data within this report has shown that requests cover all service areas, but certain elements of the data stand out, either through indicating growth in particular service areas or decreased response and resolution times. Impacted areas and findings are detailed further in the sections below.

Increased Response & Resolution Times

Over the course of the 2022/23 Academic Year, we have seen a continued increase in both the Response and Resolution times that we deliver, meaning that we are currently taking longer to respond to and resolve IT requests. Fortunately, the increase in response times is marginal, going from 0.3 days (where it has been in 2019/20, 2020/21, 2021/22) to 0.4 days.

More concerning is the increase in resolution times, going from an average of 2 days to 5.4 days. Although nearly all service areas have contributed to this increase, a number have seen a larger rise, in particular Network & Internet, which has moved from 5.6 days to 11.2. The likely reason for this, is that most work within this area this year has been related to a number of complex and lengthy network-based projects, including the Wi-Fi Replacement Project, Core Network Upgrades and Network Resilience Improvement Work.

We will continue to closely monitor all service Response and Resolution times to ensure that numbers do not continue to rise, and to continue to ensure that requests that have adverse impact on the work of our colleagues continue to be prioritised, actioned and resolved as soon as possible.

Audio-Visual Services & Systems and Commercial Systems

In August 2022 we commenced a review of the AV Services and Systems in place across the Gardens & Museums, and the Commercial Systems across GLAM to establish the level of IT requirement in these business-critical areas, and the benefits or improvements which could be made with formalised and resourced Gardens & Museums IT Team engagement. Throughout this process many improvements were implemented in both service areas, including enhanced Information Security, the implementation of automation technologies, improved operations and documented processes.

The results of this work have seen increase in the number of IT requests in both areas (AV: 2021/22 – 113, 2022/23 – 408; Commercial Systems: 2021/22 – 43, 2022/23 – 118) and crucially the implementation of formalised Gardens & Museums IT Team involvement in these services moving forward.

Computing Service

The Computing Service area continues to be an area with the highest number of requests, due to it encompassing a number of colleague facing services, including CONNECT, Windows, Apple macOS and iOS Management and Hybrid Working. Due to this, and to fully establish the number of requests that each area receives and any associated growth in demand, we have made some changes to our Service Management System to improve the data which we receive. Additionally, we have identified that the number of devices in use continues to grow, for example the number of iPads within our Managed Apple iOS Service has grown from 50 to 93 in the last year. With device numbers and improved data, we will be better placed to analyse the growth in these computing elements of the Gardens & Museums.

In Conclusion

The 2022/23 Academic Year has seen IT continue to be a key aspect of Gardens & Museums operations, and although requests have decreased, they remain high, and with several high-level projects either commencing or coming to fruition during the 2023/24 Academic Year we anticipate these numbers continuing to be high, though hope that improvements made in preventative measures (Monitoring, Network Resilience, Communications, routine system checks) will continue to positively impact these numbers. Response and Resolutions times will be closely monitored and managed, with colleague impacting instances being prioritised at all times to mitigate impact and ensure operational functionality for the Gardens & Museums.