

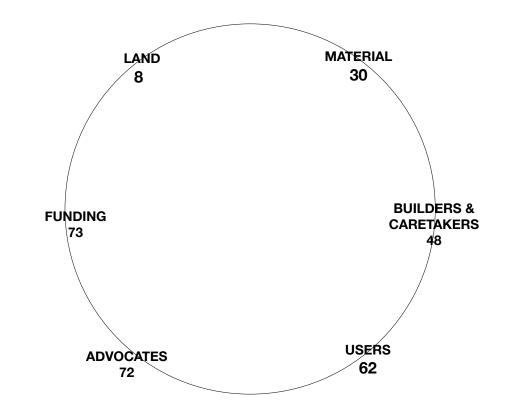


PUBLIC (SUMMER) HOUSING

PROJECT OVERVIEW DRAWING

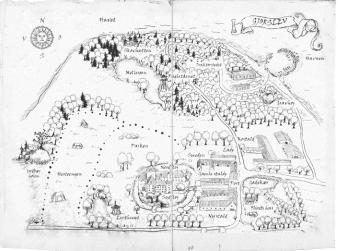
HANNAH CONNOLLY SUPERVISOR: NICHOLAS THOMAS LEE SPATIAL DESIGN, ARCHITECTURE HEAD OF PROGRAM: PETER THULE KRISTENSEN THE ROYAL DANISH ACADEMY ARCHITECTURE, DESIGN, & CONSERVATION SPRING 2024 The purpose of this booklet is to break down this drawing and look further into the 6 categories it illustrates: funding, land, material, advocates, users, and builders/ caretakers.











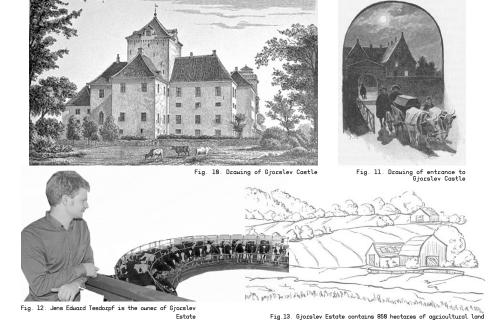
Gjorslev Estate, owned by Jens Edward Teadorpf and managed by Carsten L. Jakobsen, will grant permission for the use of its land at the location of the sawmill to enable this project.

The landscape provides the ---projeect's timber building materials.



Fig. 8. Historic map of Gjorslev Estate,

Fig. 9. Bishop Peder Jensen Lodehat orders the construction of Gjorsev in 1398



LAND

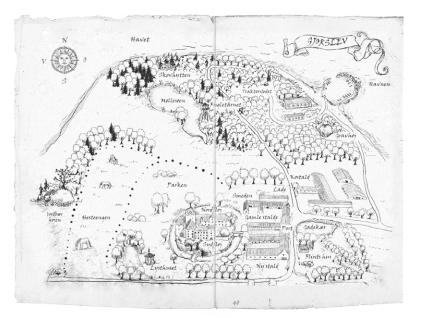


Fig. 1. Historic map of Gjorslev Estate

The proposed site is under the ownership of the Tesdorpf family, who oversees Gorslev Gods, an estate that consists of 850 hectares of agricultural land and 800 hectares of forest. It contains a cruciform medieval castle. It is located 17 km south-east of Køge, on the Stevns Peninsula, Stevns Municipality. It was was built around 1396-1400 by the Roskilde bishop Peder Jensen Lodehat.

In the 18th century, Gjorslev first functioned as an equestrian estate for the national cavalry under the Crown's ownership and then as the ancestral home of the Lindencrone family.

In 1793, the Scavenius family took over the estate through four generations, and from 1925 Gjorslev has been owned by the Tesdorpf family. Gjorslev is the country's largest and best-preserved medieval building, and has been secular since its construction.

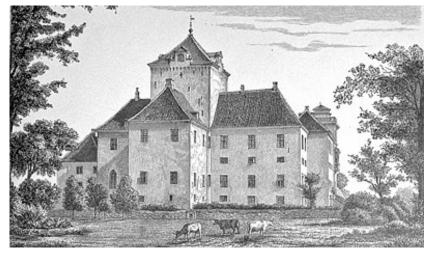


Fig. 2. Drawing of Gjorslev Castle

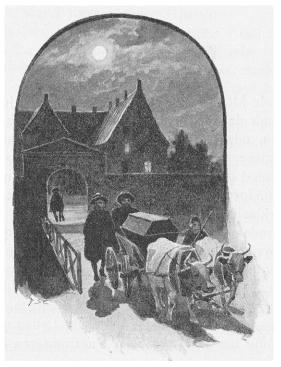


Fig. 3. Drawing of entrance to Gjorslev Castle



Fig. 4. Prospectus by Ferdinand Richardt, 1854



Fig. 5. View of castle in its current form







Fig. 6. View of Gjorslev Forest, a small lake in the woods Fig. 7. View of Klippinge Skov Beach, a short walk from the site Fig. 8. iew of Gjorslev Forest, a small pond in the woods Fig. 9. View of Gjorslev Forest, a trail through the woods **17** The site was chosen for its proximity to Copenhagen and its accessibility via public transportation. It takes 1.5 hours via public transportation from Copenhagen Central Station to the site. It is a one-hour drive, and a three-hour bike ride from central Copenhagen.

The Gjorslev Saw Mill, in Stevns Municipality, stands at the edge of the Gjorslev forest, a short distance from Klippinge Beach. It is surrounded by coastal hiking trails, fruit orchards, and scenic spots. As of 2022, the saw mill has been vacated and it now stands empty and in disrepair. The saw mill and its grounds are owned by the Gjorslev Estate, which manages Denmark's largest medieval castle, built between 1396-1400.

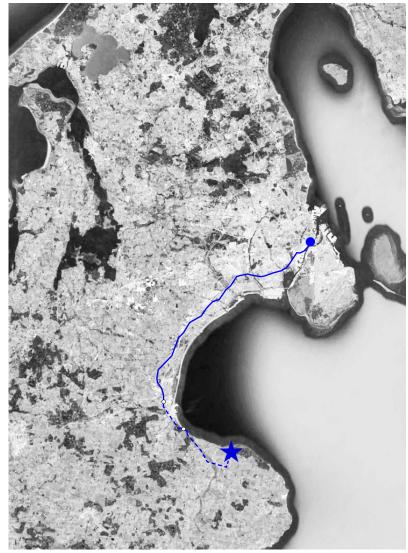


Fig. 10. East coast of Zealand, Denmark Copenhagen Central Station Proposed site S train line from Copenhagen to Koge ---- 251/27 Bus orute from Koge to site



Fig.11. Plan of site in context of Gjorslev

Ν

1

0 0.5 km



Fig. 12. Gjorslev Savvaerk in construction, 1950

The site, which was built in the 1950's, is a complex of 3 main buildings and some storage shelters for machinery and timber. The buildings are primarily constructed out of wood, with one of the larger workshop buildings constructed out of brick and the large hall is made from a steel framing system. For decades, the site has served as a place where forest workers and wood workers would gather and eat lunch together in the canteen on the site.

This project aims to preserve some of these original programs and the community that served them.



Fig. 13. Gjorslev Savvaerk in construction, 1950



Fig. 14. Gjorslev Savvaerk in construction, 1950



Fig. 15. Gjorslev Savvaerk in construction, 1950



Fig. 16. Gjorslev Savvaerk in construction, 1950



Fig. 17. Gjorslev Savvaerk in construction, 1950



Fig. 18. Gjorslev Savvaerk in construction, 1950

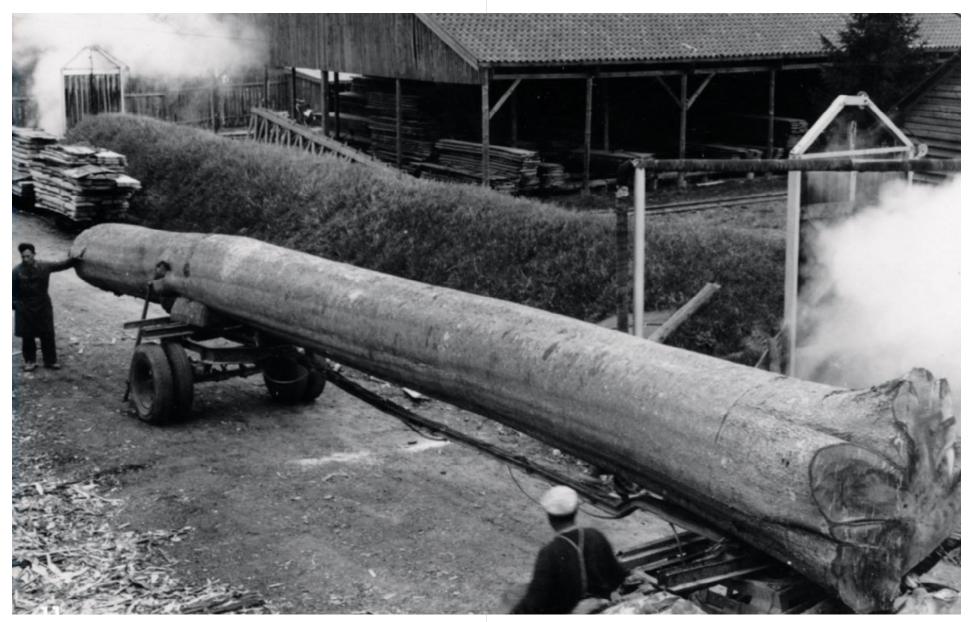


Fig. 19. Gjorslev Savvaerk in early days of operation, 1950's

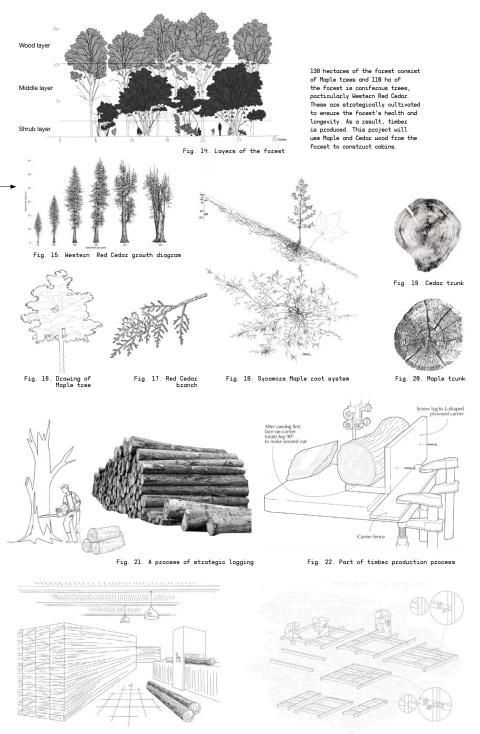


Fig. 23. Tree trunks are converted to lumber on the sammill

Fig. 24. Cabins are assembled in timber

MATERIAL

Danish forests supply approx. 25% of Denmark's wood consumption. The rest is imported – especially from neighboring countries.

Gjorslev Forest is located on calcareous Stevnsjord, a soil mostly or partly composed of calcium carbonate. This is good soil for natural drainage, and provides the forest with very good growing conditions.

Of the forest's 800 hectares, 138 hectares are composed of maple trees (20% of total forest area). Most of these trees are between 41-70 years old.

1-40 years old:	14 ha
41-70 years old:	116.2 ha
71-100 years old:	7.8 ha
Total:	138 ha

According to a survey of Gjorslev Forest by Skovdyrkerne, the optimal trees to be cultivated are maple trees early in their cycle, less than 20 years old.

The forest contains groves of Western Red Cedars (Giant Thujas), aged approximately 89 year sold. These groves have a value of just over DKK 500,000 per hectare, (Gravesgaard, 2023).

Approximately 110 hectares of the forest is used for the cultivation of coniferous trees, particularly Western Red Cedar. Other species include Red Spruce, and Sikta Spruce, Douglas Fir, Larch, Grandis, and cypress. The western red cedars have an average diameter of 55cm (variation from 42 - 61 cm).

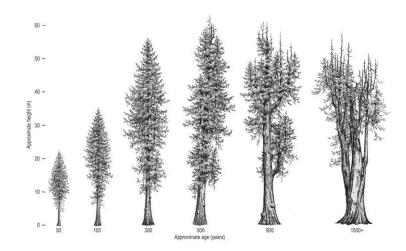


Fig. 20. Growth diagram of Western Red Cedar

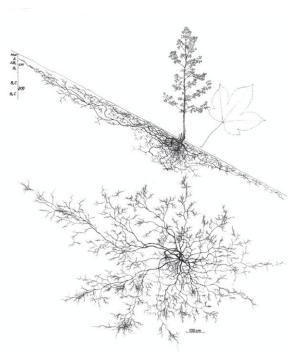


Fig. 21. Root system of Sycamore Maple

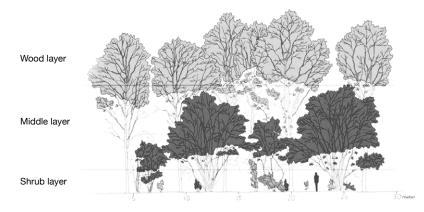


Fig. 22. Layers of the forest

Maple grows in uneven-aged stands, because it is very shade-tolerant. Maple very self-reproducing, so a natural maple bush contains a wood layer of large mature trees, a middle layer of understory of adolescent trees, and a shrub layer of numerous patches of regen (young saplings and seedlings). As such, when you want to harvest some trees, the way to do it is selectively, perhaps 30% of the crown cover and allow the next generation of trees to have more access to sunshine, water and nutrients for both vertical and lateral growth. Gjorslev Forest has Denmark's largest collection of Sycamore Maple trees, which consist of approximately 20% of its 800 hectares. According to a survey of Gjorslev Forest by Skovdyrkerne, a sustainable Forest management system will require frequent, low impact cultivation of middle aged Maple trees around 20 years old. Removing these trees will allow for a healthier growth for the mature trees, as well as for young beech and Douglas Fir. The end product will be 6 m of fine trunks and 19 m of crown. Approximately 2500 - 5000m³ is sold per year.

There is also a significant number of beech trees in the forest, and some of these must be removed to maintain the forest's health. These trees have long logs with a diameter of approximately 25cm, despite their mature age of 66 years.

Approximately 110 ha of the forest is used fort the cultivation of coniferous trees. There are areas of the forest where Western Red Cedars are 86 years old, 30m tall with a height of 55cm. These areas have a wood mass of $800m^3$ / ha.

Proposed material strategy:

110 ha designated for cultivation of Western Red Cedar 138 ha designated for cultivation of Sycamore Maple

This project will utilize the forest's production of Cedar and Maple. The cabins' building frames will be constructed in cedar, and its interior finishes will be constructed in Maple. Waste wood and leftover sawdust will be used to manufacture wood fibre insulation for the project.



Fig. 23. Timber from Sycamore Maple



Fig. 24. Western red cedar wood



Fig. 25. Sycamore maple hardwood



Fig. 26. Timber from Sycamore Maple

SYCAMORE MAPLE:

INTERIOR FINISHES FLOORING FURNISHINGS



Fig. 27. Timber frame construction, Nicolai Bo Andersen Arkitekt, 2019

WESTERN RED CEDAR:

CABIN BUILDING FRAMES EXTERIOR DECKING



Fig. 28. Western red cedar wood



Fig. 29. Wood fibre insulation

SCRAP WOOD & SAWDUST:

WOOD FIBRE

HEATING

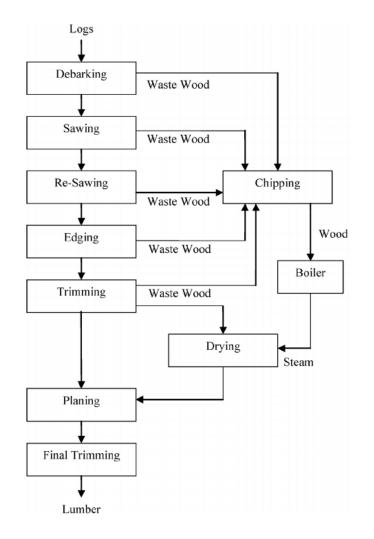


Fig. 30. Process flow diagram of lumber production

These processes will inform the spatial layout of the project's technical facilities.

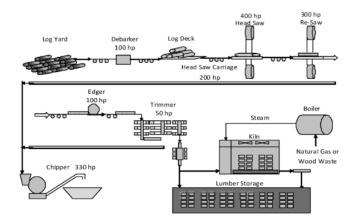


Fig. 31. Product layout for a typical kiln-dried lumber facility

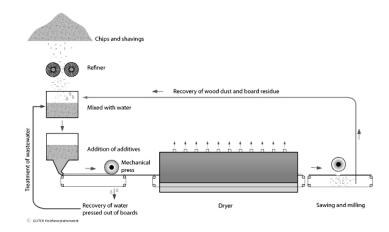






Fig. 33. Stick frame home under construction



Fig. 34. Viggso, by Arrhov Frick, Sweden

This project will use a similar timber stick framing technique that can be seen in examples. It is a relatively straightforward framing system that can utilize young timber and can be taught to apprentices.



Fig. 35. Assembly of The Alice Hawthorn Inn, Yorkshire, The Timber Workshop

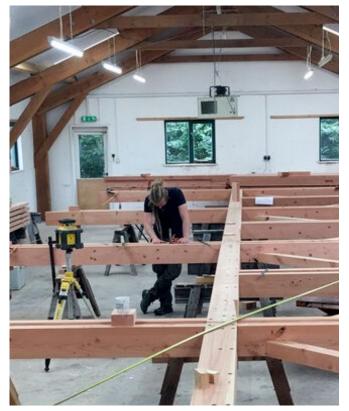
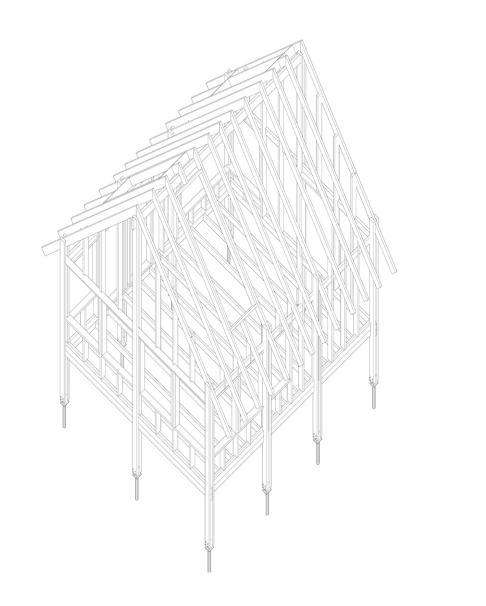
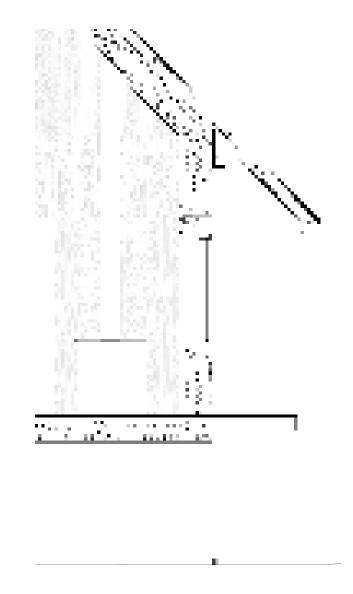


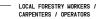
Fig. 36. Assembly of The Alice Hawthorn Inn, Yorkshire, The Timber Workshop

The cabins will be assembled on site using the village saw mill and workshop facilities. In this example project, small buildings are assembled on





47



is coniferous trees, particularly Hestern Red Cedar. These are strategically cultivated to ensure the forcest's health and longevity. As a result, timber is produced. This project will use Maple and Cedar wood from the forcest to construct cobins.



Fig. 26. Jesper Kloppenborg and Jorn Svendsten sitting in the saw mill

TECHNICAL SCHOOL STUDENTS FROM NEXT: EUD CARPENTRY PROGRAM

This project proposes a collaboration between NEXT: EUD. This is a technical high school system based in Copenhagen that offers the opportunity for students to specialize in building and ourpentry.

Students at this program could work at a satellite compus on the site of the Gjorslev Holiday Village, where they can collaborate with the local forcestry workers and carpenters in building the project's wood cobins.

next» eud

Building carpenter

Gjorslev Campus



EDUCATION & COLLABORATION

EDUCATION & COLLABORATION

Fig. 25. Drawing of existing Gjorslev forest worke

Fig. 28. Next: EUD students during a carpenty performance (

Fig. 27. Next: EUD students

— YOUTH ORGANIZATIONS FROM PARTICIPATING SOCIAL HOUSING ASSOCIATIONS

Many social housing associations, such as Vejleapaten, have youth organizations where young people con gather and participate in community activities and build relationships with their peecs. These such organizations of participating housing associations will offer youth training progens in corpentry and hospitality on the site of the Gjorslev Village.



g. 29. Youth groups will train Fig. 30. Students from with NEXT students and locals Islandsgarden youth group volunteer to clean up

Fig. 31. Students from Bovest yout organization volunteer to plant tree





Fig. 39. Drawing of the village workshop interior



Fig. 40. Gjorslev Savvaerk in construction, 1950

LOCAL FORESTRY WORKERS / CARPENTERS / OPERATORS

The site's technical facilities will be operated by local operators, builders, and craftspeople from Stevns Kommune. For decades, Gjorslev Sawmill has served as a center for their community, and this project aims to continue that. It is also imagined that these locals can share their knowledge and expertise with young students and apprentices.



Fig. 42. Claus Jensen at Gjorslev Savvaerks



Fig. 43. Claus Jensen at Gjorslev Savvaerks



Fig. 41. Claus Jensen, a forestry worker who has worked around Gjorslev Savvaerks for 25 years

The site has been used as a timber mill until 2022. Claus, pictured above, has been a forestry worker in the Gjorslev Forest for 25 years. The Gjorslev saw mill has been a central place for his work and a center for community, where he and his colleages often join together to eat lunch. Jesper Kloppenborg, a teacher, and Jørn Svendsen, a forestry worker and fisherman, are local residents of Stevns community and have dreamed of building wooden shelters for visitors at the Gjorslev Sawmill. In their scheme, which they started in 2021, Jesper and Jørn build cabins for assembly, and the user purchases these materials and builds it in place. They imagined a collaborative project with Stevns Nature Center, World Heritage Stevns and other local stakeholders, so that these kinds of outdoor accommodations can become a larger part of Stevns' tourism offering.

The Gjorslev forest offers a few species of wood such as larch and red spruce, and the Gjorslev Saw Mill had the facilities for carpentry and building prior to its deactivation. This project plans to continue the history of forestry and wood working on the site, and maintain some facilities for wood working and carpentry, to be used for the construction of small guest houses, and for use by local craftspeople and visitors who wish to learn about forestry and woodworking.



Fig. 44. Jesper Kloppenborg and Jorn Svendsten sitting in the saw mill



Fig. 45. Jesper Kloppenborg at Gjorslev Savvaerks



Fig. 46. Next: EUD students during a carpenty performance exam

This project proposes a collaboration between NEXT: EUD. This is a technical high school system based in Copenhagen that offers the opportunity for students to specialize in building and carpentry.

Students at this program could work at a satellite campus on the site of the Gjorslev Holiday Village, where they can collaborate with the local forestry workers and carpenters in building the project's wood cabins.





Fig. 47. Next: EUD students





Fig.48. Students from Bovest youth organization volunteer to plant trees



Fig. 49. Copenhagen youth project is an organization that helps vulnerable youth to build new career skills

YOUTH ORGANIZATIONS FROM PARTICIPATING SOCIAL HOUSING ASSOCIATIONS

Many social housing associations, such as Vejleaparken, have youth organizations where young people can gather and participate in communnity activities and build relationships with their peeers.These such organizations of participating housing associations will offer youth training progams in carpentry and hospitality on the site of the Gjorslev Village.



WE AND SHOW ton

Fig. 34. Collage of Mjolnerparken

Fig. 33. Drawing of residents in Mjolnerparken

STUDENTS ON EDUCATIONAL RETREATS





During the months where the demand for tourism is lower, the facilities and accommodations could be used by groups on educational trips. For example, a school in Copenhagen could rent the accommodations for a 3-day carpentry excursion.



AUTUMN / WINTER

62

Fig.37. Children planting trees

YEAR-ROUND USE / MAINTAINANCE

USERS



Fig. 50. Visitors enjoying the swimming hall terrace

Residents from participating Copenhagen social housing associations will be able to sign up for accommodation in the village for their subsidized SUMMER summer holiday. It will work like a time-share system. ife s a Beach, Parr, M Copenhagen social housing residents Collage of residents Student group trip Office retreat AUTUMN SPRING Children play in a pool Life's a Beach, Parr, M Fig. 38. Next: EUD students WARDAN . Educational workshops Collage of residents Arriving gu Julefrokost Carpentry workshop rentals Local carpenters / forest workers Group holiday rentals WINTER

> In the colder months when demand for holidays is lower, the facilities can be rented by groups, for example, company holidays, Christmas parties, and school trips.



Fig. 51. Drawing of residents in Mjolnerparken



Fig. 52. Collage of Mjolnerparken

Residents from Copenhagen social housing associations will have access to the accommodations for their summer holidays, through a time share rental system. These subsidized accommodations will be offered during the spring and summer months.



Fig. 53. A woman prepares her son for a bath



Fig. 54. Two children play a game of cards



Fig. 55. Group activity, drawing by author

Fig. 56. Next: EUD students



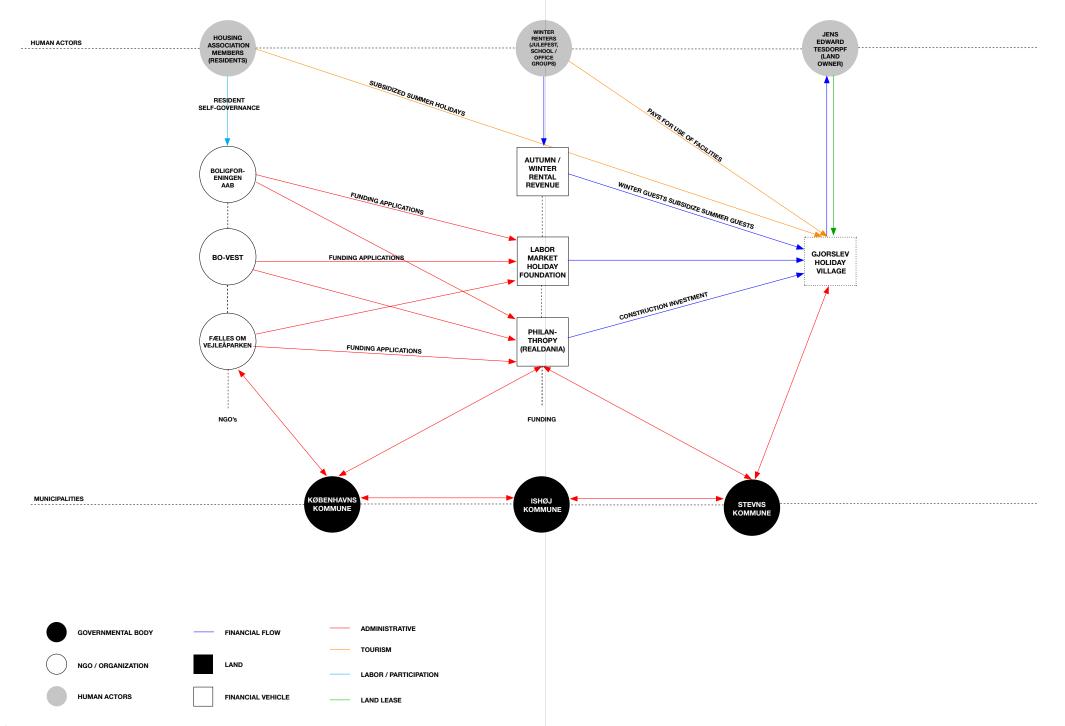
Fig. 57. Drawing of forest workers

In the colder months when demand for holidays is lower, the facilities can be rented by groups, for example, company holidays, educational retreats, and carpentry and foresty workshops.

Revenue from these visits will contribute to the cost of running the village year round.



FUNDING / ADVOCATES



THE HOLIDAY VILLAGE

In the 20th century, social development enabled by the Danish welfare state allowed for the institutionalization of holiday benefits. The Labour Market Holiday Foundation (Arbejdsmarkedets Feriefond) was founded under the Ministry of Labour and Social Affairs, with the aim to support holidays for wage earners through attractions and accommodations. Subsequently, enterprises and municipalities began to set up non-profit holiday organizations with the aim of providing low-cost, quality holidays. This lead to the emergence of holiday villages in the country's coastal regions, where families could rent a summerhouse that was subsidized by the organization (Hjalager, 2005).

Particularly in the latter half of the twentieth century, these developments allowed the holiday at the summerhouse to be accessible to a majority of the population, regardless of socio-economic status. This historical background has solidified the summer house's position as an integral aspect of Danish culture.

Since the 1990's, due to various factors such as the rise in competition from the private domestic tourism sector and the increased availability of low-cost foreign holidays, the Labour Market Holiday Foundation has shifted its resources from accommodations to attractions (www.aff.dk). While many holiday villages are still in operation today, they are not commonly built and no longer play a dominant role in domestic tourism.

I wish to revisit the original intentions of the holiday in the welfare state, and explore how they could be applied in a contemporary context.



Fig. 58. Rodhus Klit holiday center, 1959

Danish workers' Holiday pay contributes to Arbejdsmarkedets Feriedond, which will allocate funds for this project in response to an application from local social housing assiations

Unclaimed holiday pay = funds that must be re-allocated by Arbeidsmarkedets Feriedond



Fig. 59. Map of Zealand's coast



Fig. 60. Stevn's Nature Center visitors



Fig. 61. Stevn's Nature Center

Stevn's Nature Center is owned by the municipality, and offers a space for educational events to do with experiences in nature. It can accommodate up to 50 people. It can be rented by groups.

This project could be partially sponsored by the municipality and used for educational purposes by local schools.

IMAGES CITED

Fig. 1. Bianca, L. Heaven's Secrets. [Drawing].

Fig. 2. Richardt, F. (1854). Prospectus. [Drawing].

Fig. 3. Bianca, L. Heaven's Secrets. [Drawing].

Fig. 4. Richardt, F. (1854). Prospectus. [Drawing].

Fig. 5. Gjorslev Gods. Danmarks største middelalderslot. [Image]. https://gjorslev.dk/

Fig. 6. Gjorslev Gods. [Image]. https://gjorslev.dk/

Fig. 7. Thaarup, K. (2023). [Image]. https://www.google.com/maps/ place/

Fig. 8. Nielsen, E. (2013). https:// www.sn.dk/stevns-kommune/ dn-katastrofe-med-kabelstation-imagleby-skov/

Fig. 9. Fig. 36. Gjorslev Gods. [Image]. https://gjorslev.dk/

Fig. 10. Google Maps. (2006). [View of The Site] . Retrieved 10.02.24.

Fig. 11. Connolly, H. (2024). Site map. [Drawing].

Fig. 12. Unknown. (1955). Gjorslev Sawmill. [Picture]. Stevn's Local History Archive.

Fig. 13. Unknown. (1955). Gjorslev Sawmill. [Picture]. Stevn's Local History Archive. Fig. 14. Unknown. (1955). Gjorslev Sawmill. [Picture]. Stevn's Local History Archive.

Fig. 15. Unknown. (1955). Gjorslev Sawmill. [Picture]. Stevn's Local History Archive.

Fig. 16. Unknown. (1955). Gjorslev Sawmill. [Picture]. Stevn's Local History Archive.

Fig. 17. Unknown. (1955). Gjorslev Sawmill. [Picture]. Stevn's Local History Archive.

Fig. 18. Unknown. (1955). Gjorslev Sawmill. [Picture]. Stevn's Local History Archive.

Fig. 19. Unknown. (1955). Gjorslev Sawmill. [Picture]. Stevn's Local History Archive.

Fig. 20. Franz, H. Changes in crown form in Cedar over time. [Drawing].

Fig. 21. Stere, V. Root System of a Mature Sycamore Tree. (2023). [Drawing].

Fig. 22. Fakta, G. (2009). Gynnar stor artrikedom. [Drawing].

Fig. 23. Hearne, H. (2024). Characteristics of English Sycamore [Photo].

Fig. 24. Tauriko, S. (2023). Cedar wood. [Photo].

Fig. 25. Tauriko, S. (2023). Cedar wood. [Photo].

Fig. 26. Hearne, H. (2024). Characteristics of English Sycamore [Photo].

Fig. 27. Andersen, N. (2021). A House Like Me. [Photo].

Fig. 28. Tauriko, S. (2023). Cedar wood. [Photo]

Fig. 29. Timber Explorer. (2024). Insulation Board. [Photo].

Fig. 30. Science Direct. (2022). Process Flow Diagram for Saw Mill Operation. [Diagram].

Fig. 31. Science Direct. (2022). Product Layout for a Typical Kiln-Dried Lumber Facility. [Diagram].

Fig. 32. Science Direct. (2022). Process flow diagram of wood fibre insulation. [Diagram].

Fig. 33. Alamy Photos. (2024). Stick frame construction phohto. [Photo].

Fig. 34. Olsson, M. (2016). Viggsö, Arrhov Frick Arkitektkontor. [Photo].

Fig 35. Hufton, C. (2019). The Alice Hawthorn Inn. [Photo].

Fig. 36. Hufton, C. (2019). The Alice Hawthorn Inn. [Photo].

Fig. 37. Connolly, H. (2024). Structural Axo. [Drawing].

Fig. 38. Connolly, H. (2024). Sec-

tion. [Drawing].

Fig. 39. Connolly, H. (2024). Visualization. [Drawing].

Fig. 40. Unknown. (1955). Gjorslev Sawmill. [Picture]. Stevn's Local History Archive.

Fig. 41. Nielson, E. (2017). The Dream Job. [Picture]. https://www.sn.dk/ stevns-kommune/billeder-droemme-jobbet-helt-ude-i-gjorslevs-skove/

Fig. 42. Nielson, E. (2017). The Dream Job. [Picture]. https://www.sn.dk/ stevns-kommune/billeder-droemme-jobbet-helt-ude-i-gjorslevs-skove/

Fig. 43. Nielson, E. (2017). The Dream Job. [Picture]. https://www.sn.dk/ stevns-kommune/billeder-droemmejobbet-helt-ude-i-gjorslevs-skove/

Fig. 44. Slavensky, C. (2021). Sheltereventyr i skovens dybe, stille ro. [Picture].

Fig. 45. Slavensky, C. (2021). Sheltereventyr i skovens dybe, stille ro. [Picture].

Fig. 46. Next. (2024). Building Carpenter. [Image].

Fig. 47. Next. (2024). Building Carpenter. [Image].

Fig. 48. Bo Vest. (2019). Cleanup Underway. [Image].

Fig. 48. Bo Vest. (2019). Cleanup Underway. [Image].

Fig. 49. Copenagen Youth Project. (2024). Facebook. [Poster].

Fig. 50. Connolly, H. (2024). Visualization. [Drawing].

Fig. 51. Connolly, H. (2024). Sketch. [Drawing].

Fig. 52. Connolly, H. (2024). Collage. [Drawing].

Fig. 53. Connolly, H. (2024). Visualization. [Drawing].

Fig. 54. Connolly, H. (2024). Visualization. [Drawing].

Fig. 55. Connolly, H. (2024). Collage. [Drawing].

Fig. 56. Next. (2024). Building Carpenter. [Image].

Fig. 57. Connolly, H. (2024). Sketch. [Drawing].

Fig. 58. Larsen, A. (1959). Rødhus Klitvej 101 - Rødhus Klit Holiday Center. [Image]. https:// www.kb.dk/danmarksetfraluften/ images/luftfo/2011/maj/luftfoto/object1833332

Fig. 59. Connolly, H. (2024). Map. [Drawing].

Fig. 60. Stevns Kommune. (2023). Stevns Nature Center. [Image].

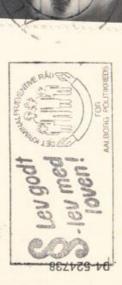


A. 966 1986

Rødhus Klit Feriecenter Dansk Folke-Ferie Rødhus Klit, DK 9440 Åbybro Telf. 08-249015

Kinic Bedstempin

ning Sk muget til at kommu tilbage næste år. og save i hythen i staven, det er lige tage mig tiler at bade i svammehaden com on at cove i et træhus. Jeg glædur Jeg uil itte hown. Min favorit ting at kanon tid / Glorglev Saverth Village! ther er så skont, og jeg har en





Heiskup Les LII ST.H. Jangen Luleiss

Place Wallensber Str

Vi ecs i næste uge, tys og krann Ole