



RUB

Fig 1.: Aerial photograph. Source: stockphotos

RUHR-UNIVERSITÄT BOCHUM

URBAN ACUPUNCTURE: SKARPNÄCK

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Urban Acupuncture

It revitalizes a “sick” or “worn out” area and its surroundings through a simple touch of a **key point**. Just as in the medical approach, this intervention will trigger **positive chain-reactions**, helping to **cure and enhance the whole system (WA, 2024)**.

Urban Acupuncture:



Overview



Most changed fields:

110 - Tall non-vegetation, mainly buildings

141 - Infrastructure, road area sealed, and bridge over water

210 - Urban green structure of open character

432 - Open dry-mesic grassland

614 - Mixed coniferous and deciduous forest/tree covered land on SGU bedrock outcrop

623 - Mixed coniferous forest/tree covered land on SGU coarse sediment

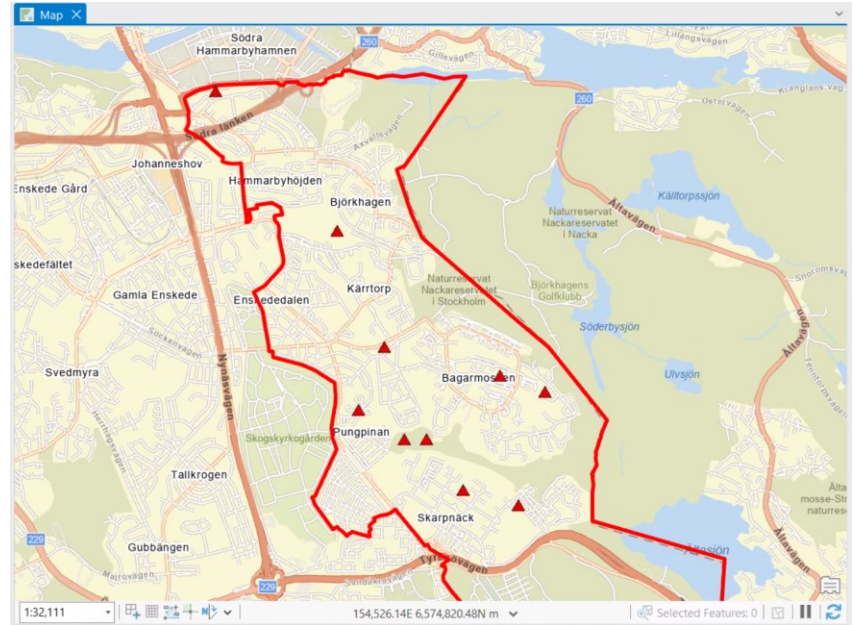
Changed to:

234 - Urban green structure of wooded character, according to NMD mixed coniferous and deciduous

212 - Green roof: sedum, turf, grass,

Locations of the green community gardens

- ❖ Reserved space for urban farming and garden
- ❖ **provides tools for population education**
- ❖ Located in green areas
- ❖ The goals are to enhance the existing biotope features
- ❖ Constructed on ground level for easy access to all population groups



Self-created map via ArcGIS

Locations of the green community gardens



Self-created map via
ArcGIS



Community Garden
Dome in Cork (own
photo)

Green Corridors and Urban Forests



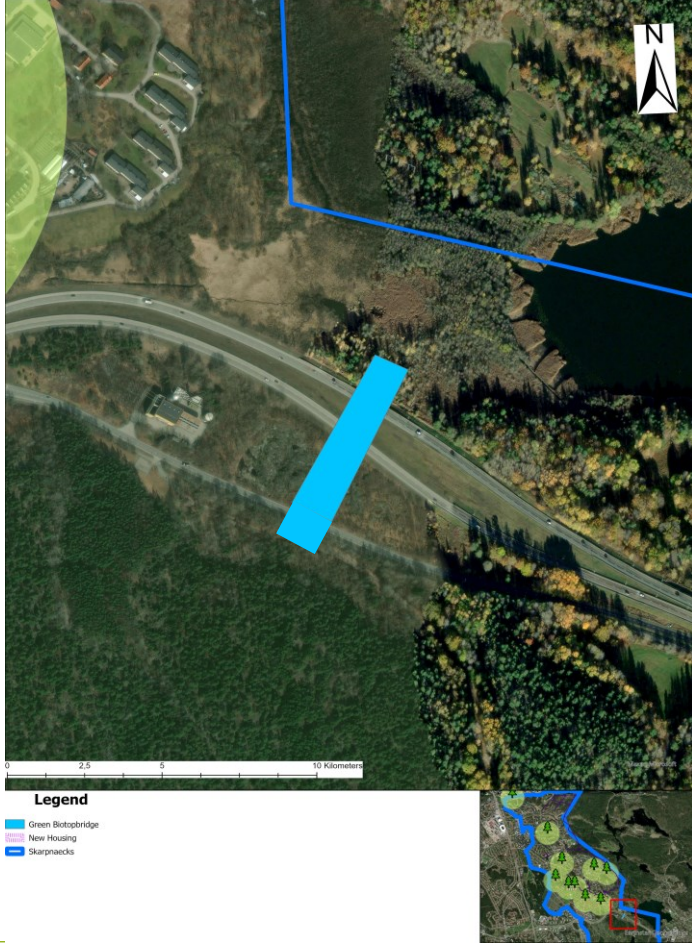
<https://cnr.ncsu.edu/news/2022/04/5-benefits-of-urban-forests/>

Enhance biodiversity inside the city

Increased exchange of individuals between the forest, parks and urban gardens

Corresponds to the natural culture with a lot of knowledge and benefits from it

Green Corridors



sz-magazin.sueddeutsche.de/natur/waechst-da-zusammen-was-zusammengehoeert-86063wechsel-

New Buildings

- Built in existing developed areas to protect nature's green
- 5-6 levels high
- Build up is orientated on urban gardening and green corridors



Sports in Nature

- Meaningful leisure: Summer and winter sports nature-based solutions integrates different groups over 20 years old – including the foreign population
- Since 1950's a new trend in sports: horse riding as culture

Nature-based solutions of sports in nature also effect:
UHI, Flood Prevention, Loss of biodiversity, social cohesion and quality of life



Flooding risks

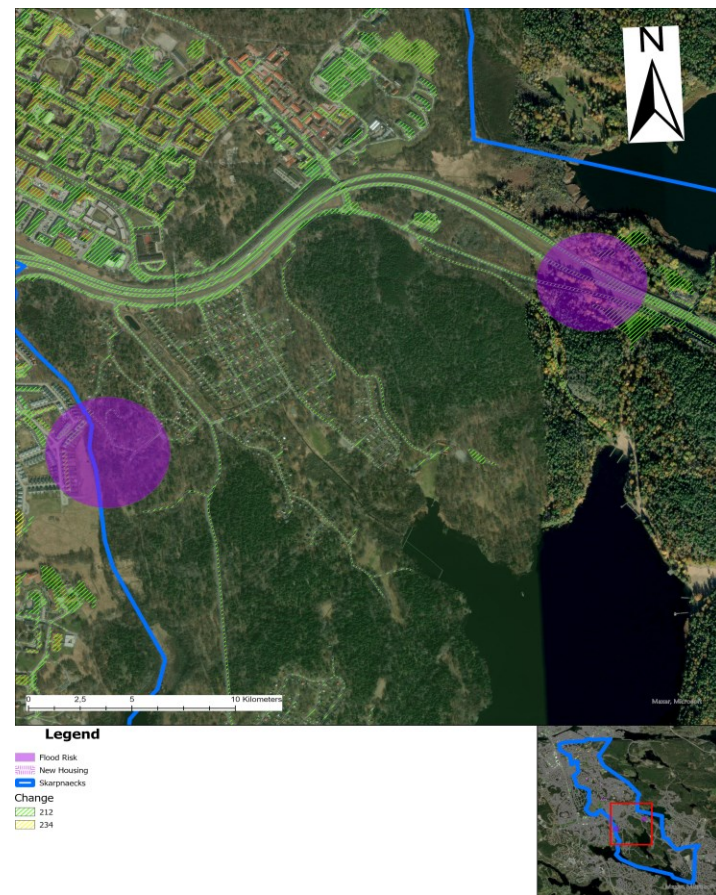
- ❖ Highly dense building areas shall get green roofs on a large scale
- ❖ Transforming Skarpnäck gård's housing area
 - Green roofs as well as facade greening
- ❖ Increases stormwater retention in the living area and mitigates flooding risks in high rainfall events



Skarpnäcks Gard & Bargamossen LU Change (Own illustration)

Flooding risks

- ❖ Implementation of road verges next to sealed roads
- ❖ Road verges alongside vulnerable road sections
- ❖ stormwater retention effects and therefore lowering the risk of streets getting flooded & damaged



Priority Areas Road Verges LU Change (Own illustration)

Conclusion

Skarpnack will become a harmonious neighborhood where nature and culture are intertwined, creating a community that thrives on sustainability and biodiversity. With eco-friendly infrastructure, abundant green spaces, and renewable energy, residents will live in an environment that promotes well-being and environmental stewardship. Cultural activities, from seasonal festivals to nature-inspired art, will celebrate the natural world, while protected natural areas and wildlife corridors ensure the preservation of local flora and fauna. Through community engagement and historical preservation, Skarnapck will honor its heritage while innovatively embracing the future, fostering a deep, collective connection to the environment that defines the neighborhood's unique cultural identity.

Thank you very much!

Literature

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<https://cnr.ncsu.edu/news/2022/04/5-benefits-of-urban-forests/> [05.07.2024]

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<https://sz-magazin.sueddeutsche.de/natur/waechst-da-zusammen-was-zusammengehört-86063> [05.07.2024]

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