

GREEN CAMPUS INITIATIVES

The University of Patanjali (UoP) has always had a deep harmony with nature. On the basis of science and realization, we also strongly believe that more a person's diet, thoughts, words, behavior, nature, relationships, business and all other conduct are harmonious with nature, the more we stay away from calamities, and remain healthy, wealthy, happy and satisfied. University campus is a holy place blessed by sages and saints. It is situated in a green pollution free zone where students transform themselves within its conducive atmosphere. At present, whole world has started to believe that nature has to be kept in mind in all the activities for an inclusive and sustainable development including nature friendly education, business ventures, activities, environmental initiatives and practices, production and utilization of resources etc.

It is also to be noted that the original roots of Patanjali is "Prakriti", that is nature and, for that reason Yoga, Ayurveda, Swadeshi to self-reliant India in each and every domain are introduced and being worked out in all the sister educational institutions of Patanjali group i.e., University of Patanjali, Patanjali Research Institute, Patanjali Gurukulam, Kanya Gurukulam, Acharyakulam etc. in their teaching methods. In the four fields of revolutionary work that are being executed at Patanjali i.e., Yoga, Ayurveda, Swadeshi and Education, we have kept nature in the center. Some of the key points are discussed below, i. In the past two and half decades, Patanjali has planted numerous plant species including trees, shrubs, herbs etc. along with medicinal and aromatic properties, followed by various plantation drives all over the country. Some of the plants are *Embellica officinalis* (Amla), *Aloevera*, *Tinospora cordifolia* (Giloy), *Azadirachta indica* (Neem), *Ocimum tenuiflorum* (Tulsi) and other medicinal plant species.

University of Patanjali had a substantial role in this activity where the organizations', services, principles, policies and the students of the institution have played a vital role. ii. The Students of the university, under the guidance of "Param Pujya Acharya ji" have run number of cleanliness awareness campaigns' out of which one example is "Road cleanliness drive from the University campus to "Harkipauri" area of Haridwar, UK, India". iii. The



Students of the University consume “organic” and “Satvik” food in their mess on a daily basis. The students do not eat junk-food or, fast-food. iv. Through Patanjali Research Institute (PRI), our students acquire practical training on the protection, promotion, uses, health benefits of medicinal and aromatic plant species and, also their get a static idea of their economic importance which in-turn can aid in National Economy Building. v. In the campus, restriction on entry of heavy automobiles is a prime motive and concern. vi. Scientific distribution of water is another major area of concern within the campus so that, water consumption can be reduced to minimal requirement and recycling parameters can be taken care of.

EXTENSION ACTIVITIES: UNIVERSITY OF PATANJALI

University of Patanjali, from the day of its establishment has been engaged in various extension activities viz., Plantation (Medicinal and Aromatic Plants) Drives, Yoga, Health and Hygiene Awareness Drives, Social Responsibilities and Awareness Programmes, Women Safety, Security and Empowerment Campaigns, Language Promotion Programmes especially Ancient Languages such as Sanskrit, Maithili etc., Psychological Awareness Drives, Science and Technological Intervention Programmes, Academic and Co-curricular Programmes, Drug Discovery and Development, Tribal Upliftment through Training, Communication, Education and Awareness, Agricultural Interventions etc. Some of the glimpses of different extension activities are given below.

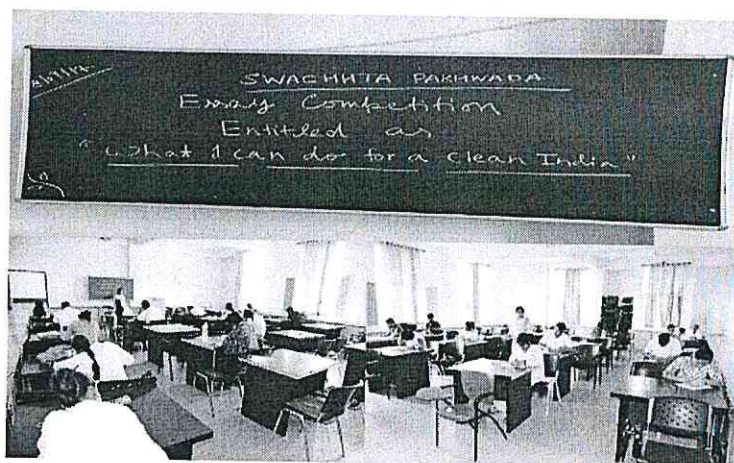
1. PLANTATION DRIVE BY THE COLLEGE STUDENTS





2. ONE WEEK CLEANLINESS DRIVE

2.1.ESSAY COMPETITION ENTITLED: "WHAT I CAN DO FOR CLEAN INDIA", DATED: 9TH Sept. 2017



2.2.CLEAN HOSTEL DAY (CELEBRATED BY THE STUDENTS OF UNIVERSITY)



2.3.MESS CLEANING BY THE GIRL STUDENTS



2.4.CLEAN CAMPUS DAY (6th Sep. 2017)



2.5.GREEN CAMPUS DAY (11TH. Sept. 2017)



2.6.NUKKAR NATAK BY UNIVERISTY STUDENTS TO SPREAD AWARENESS OF CLEANLINESS (9TH. Sept. 2017)

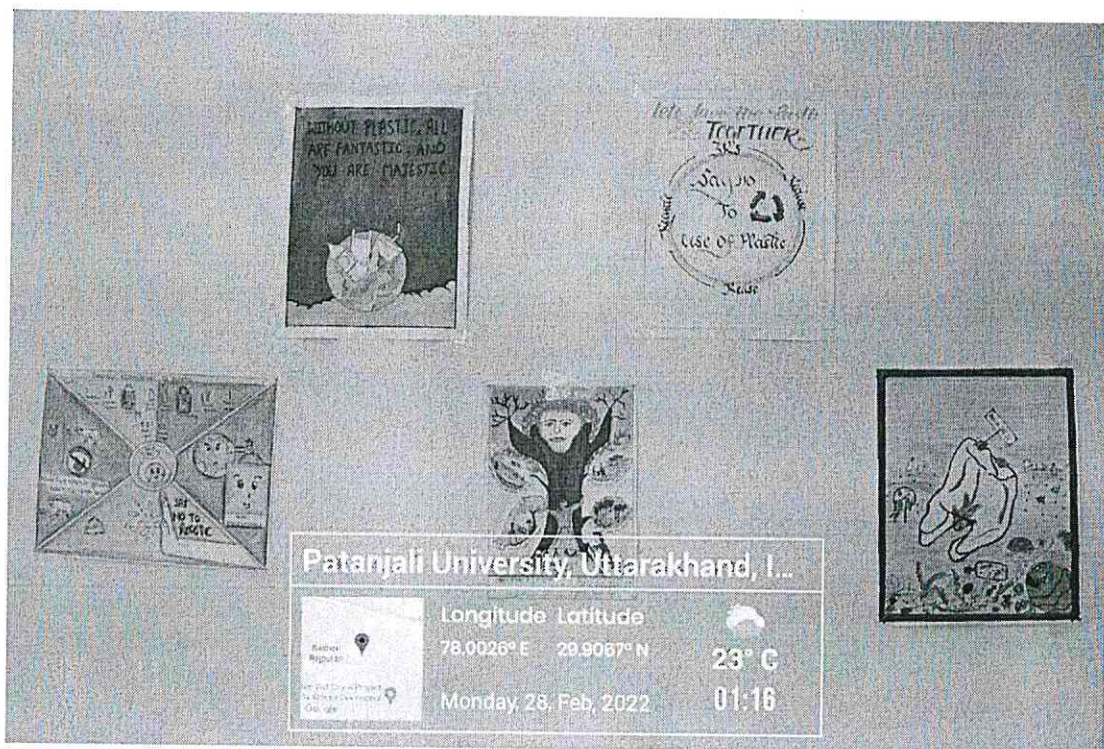


NOTE: The programme was organized by Dr. Vaishali Gaur, NSS Co-ordinator, University of Patanjali, under the scheme of "SwachhtaPakhwada", Ministry of Human Resource Development, Govt. of India.





Poster competition on "Say No to single use plastic"



INITIATIVE FOR SPARROW CONSERVATION AT UNIVERSITY CAMPUS

Project Title: Present Status of Threatened House Sparrow Bird (*Passer domesticus*) in two campuses namely University of Patanjali and Patanjali Phase One with Especial Reference to Silent Threats

Duration of Project: 21st May 2022 to 21st May 2023

Submitted by/Principal Investigator: - Dr.Romesh Kumar Sharma, Assistant Professor (Environmental Science)

Department: Allied and Applied Science, University of Patanjali, Haridwar

1. **Introduction of the Subject:** The research topic is taken under seed fund in minor research project category for the duration of one year. The aim behind the research is to identify the trend of House sparrow Bird with its behavioural pattern in nest site selection; breeding's and intraspecific relationship within community. Important observation after research shall generate the outputs for the development of State or National Level Action Plan or Policy to sustain the population of bird (House Sparrow) in urban ecosystem by the support of Patanjali Research Model.

Study Site: Two study sites were finalised for the data collection namely, University of Patanjali and Patanjali Phase 1.

Material and Methods: A field observation on foot for the duration of 30-60 minutes was considered for the data collection. A digital camera (model Fujifilm Finepix S2000 HD) was used to take pictures as well as done videography of the birds and its associated locations. Mostly, morning hrs was preferred to observe the avian density and diversity. Recoding of data were maintained during each visit in note book at every site followed by data entry in excel sheet in computer during office working hrs. To reduce the error in density parameter in House sparrow an random sampling were done in same site for two-three times in specific time duration.

The main focus of this preliminary study (May-Dec. 2022) is to know the trend of avian diversity followed by abundance of House Sparrow bird via observing and recording the roosting; resting and nesting sites within two study sites of various locations (see the table 1 below). Foraging behaviour and silent threats was also observed during the period of study.

Locations (UOP)	Abbreviation	Locations (Phase 1)	Abbreviation
Back Side of Yoga Building	BSYD	Disha Building Lobby	DBL
Front of Science Building	FSB	Samarpan Building Lobby	SBL
Garden of Yoga Building	GYB	Annapurna Building Lobby	ABL
Near Boys Hostel Mess	NBHM	Tapasya Building Lobby	TBL



Near Sewage Treatment Plant	NSTP	At Sadbhawana Building Lobby	ASBL
Boundary in-between UOP & Phase 1 (on fencing)	BPU	Shradha Building	SB
Backyard of Science Block	BSB	Front of PNS Bank	FPB
Play Ground	PG	At Car Parking	ACP
Nearby Boy Hostel	NBH	At Ayurveda College Campus	AACC

Results and Discussion

In present study duration from 21st May 2022 to 30th December 2022, a total 613 House Sparrow were found in both the study site in total of 172 visits (Table 2). In an observation total 94 visits has been done in University of Patanjali and 78 visits in Patanjali Phase 1 (Table 2). A total 48 House Sparrows were found in University of Patanjali followed by 565 House Sparrows in Patanjali Phase 1 (Table 2). The results shows that out of 94 visits in University of Patanjali a total 48 House sparrows were sighted with the rate of 1.95 birds per visit and in Patanjali of University total 565 House Sparrow were sighted out of 78 visits with the rate of 7.24 birds per visit (Table 2). The means of sighted visit of bird in total sighted visits are 2.28 birds per visit in University of Patanjali and 8.83 birds per visit in Patanjali Phase 1 (Table 2). The success of sighting in the duration of eight months was 21.05 % in University of Patanjali and 78.03 % in Patanjali Phase 1.

The dominant location in connection to much sighting of House Sparrow in Patanjali Phase 1 was Disha Gallery followed by Annapurna Gallery, Tapasya Gallery, Sankalp Gallery and near by the grassland (open green area) of yug-shalla. In case of University of Patanjali, a site behind the Science Block followed by Sewage Treatment Plant and the boundary of both the campuses were dominant in abundance of House Sparrow.

In connection to House Sparrow recorded data, it shows that much number of birds is present in Phase 1 near with the anthropogenic activities, which is an interesting sign of survival and live hood of bird. In the same the continuous pressure of humans is low in university at various locations, but the House Sparrow is absent completely. As the University Campus is adjacent to Patanjali Phase 1, therefore, some individuals of House Sparrow travel to boundary area for foraging purpose.

The study shows that anthropogenic pressure is could not disturbs the bird if there is the possibilities of suitable nesting sites with good food resources. As per the evolutionary point of view a House Sparrow preferred human settlement for their complete life cycle and resistance with the human presence means much tolerant of human pressure as compare to other birds.

Nesting Sites: A total 11 (Eleven) nesting site (Fig. 1) were observed in Phase 1 in the month of June 2022. The presence of nesting sites was abnormal. The entire nest was recorded inside the



roof lamp (Fig. 1). The interesting study reflects that the roof lamp which is missing of CFL and having the cavity is preferred for the nesting (Fig. 2) by the bird. A dry grass, sometime half dry grass was used as nesting material for nesting preparation. Not a single nest of House Sparrow was recorded in University Campus during the study period.

Artificial Nest Box

As per the recommendations in first phase of work some scientific developed artificial nest boxes (Fig. 6) as alternate nesting site or habitat of the bird, near by the natural nesting site to support the existed population and to welcome some more pairs in future were tagged (Fig.8). Presently keen observation was recording to understand the artificial nest site selection by the bird (Fig. 8). Some more facts in behavioural study were recorded and some to be recorded in connection to nest site survey/selection, pairing, mating, communication in between, foraging, habitat and territory guarding, nesting material etc. A total 68 wooden nest boxes were tagged in Patanjali Phase 1 and 24 boxes in University of Patanjali in October and November months.

Feeding/Foraging Behaviour: It has been observed that male and female both (pair) provide feeding material to their siblings. The common feeding material preferred by the parents is the insects and larva's, which is available in hug amount due to heavy light systems in campus, during night. Group feeding on grass seed by the adults (male and female both) was recorded numbers of time on grassland; show the social bonding in the community (Fig. 5).

Under preliminary observation it was interesting to know that male bird guard the nest and produce high frequency song. The same high frequency song is produce by male to attract the female after the nest site selection. Keenly observation shall differentiate in-between call and songs produce by the male. This kind of observation and recording could be the best example to show an acoustic communication behaviour by the sparrows, which shall be used to study the other aspects of research.

Some other avian was recorded in both the campus (Table 3). The most interesting survey was shows that a bird species namely Sand Lark (*Calandrellaraytal*) and Paddy field Pipit (*Anthusrufulus*) were sighted for about 14-18 days in University Play Ground and still the presence is active. This was totally absent in Phase 1 (more observation is to be done in future).

Conclusion: In my conclusion remarks on preliminary observation, is stated that the gallery or lobby of first floor of phase 1 is nil in House Sparrow number due to maintenance of roof lamp (Fig. 5). The maintenance of Disha, Annapurna, Sankalp and Tapasya Galleries is under observation. If these areas were maintained under lighting system resulting House Sparrow forced to leave the place or the phase 1 shall be the no place of House Sparrow in coming future. So far artificial nest boxes were tagged in different location of study sites.

In connection to development of continuous stress/threat to birds in both the campuses especially in Patanjali Phase 1, a cutting and decoration of ornamental plants by the gardener on daily basis shall be restricted in the month of January to June (Fig 11). This is the time when lots of birds i.e. Bulbul, Doves, Munia, Warblers, Myna and House Sparrow do the breeding and preparing nest and roaming near by the home range in searching of suitable nesting sites.



Artificial Nest Box Experiment

Artificial Nest Box Experiment has been setup in both the study sites in connection to record the numbers of pairs, breeding frequency, nesting, roosting and resting behaviour, predation rate, number of clutch size etc. Establishment of boxes were tagged at the same (actual) nesting position areas, recorded in first survey. Still the work is in progress. To record more data's, a survey is in progress.

Table 2: Total Visits, Numbers of House Sparrow, Sighted per visit, Mean of Bird and Success Rate

Locations	Numbers of Visits	Numbers of House Sparrows @rate/visit	Sighted of Bird per visit	Bird Mean per sighting visit	Success % of Sighting
UOP	94	48 @ 1.95	21	2.28 birds/visit	21.05 %
Phase 1	78	565 @7.24	64	8.83 birds/visit	78.03 %
Total	172	613	85	11.11	

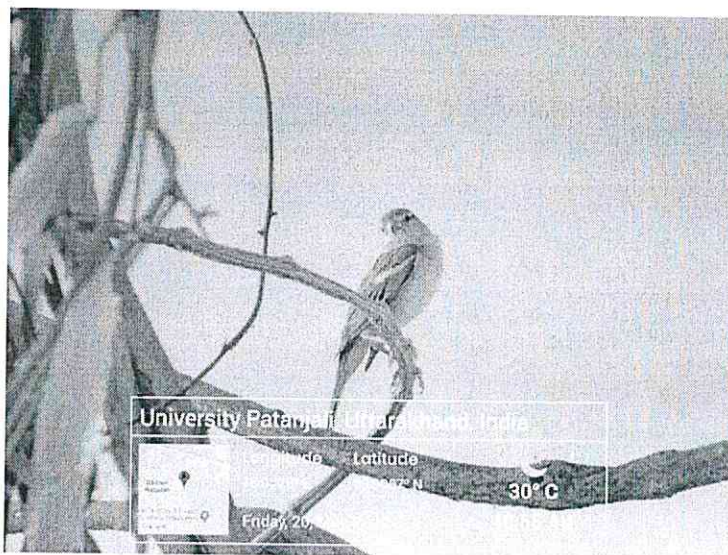
Table 3: Check List of Birds in Both the Campuses (Patanjali Phase 1 and University of Patanjali)

S. No.	Common Name	Zoological Name
1	Red Turtle-dove	Streptopelia tranquebarica
2	House Swift	Apus affinis
3	Indian Cuckoo	Cuculus micropterus
4	Ubulcus ibis	Cattle Egret
5	Spotted Owlet	Athene brama
6	Indian Grey Hornbill	Ocyrops birostris
7	Asian Green Bee-eater	Merops orientalis
8	Indian Golden Oriole	Oriolus kundoo
9	Black Drongo	Dicurus macrocercus
10	House Crow	Corvus splendens
11	Red-vented Bulbul	Pycnonotus cafer
12	House Sparrow	Passer domesticus
13	Purple Sunbird	Cinnyris asiaticus
14	Pied Bush chat	Saxicola caprata
15	Common Myna	Acridothera tristis
16	Rose-ringed Parakeet	Psittacula krameri
17	Red Turtle-dove	Streptopelia tranquebarica
18	Brown Rock chat	Oenanthe fusca
19	Red-wattled Lapwing	Vanellus indicus
20	Western Koel	Eudynamis scolopacea
21	Oriental Magpie-robin	Copsychus saularis
22	White-eyed Buzzard	Buteo butor
23	Paddyfield Pipit	Anthus rufulus
24	Tailor Bird	Orthotomus sutorius
25	Rufous-fronted Wren	Prinia buchanani



26	Pied Myna	Gracupica contra
27	Sand Lark	Calandrellaraytal
28	Ashy Wren Warbler	Priniasocialis
29	Golden Oriole	Oriolusoriolus
30	Himalayan White Throated Fantail	Rhipiduraalbicollis

SOME PICTURES OF PROJECT DEVELOPMENT



Flame Vine (*Pyrostegia venusta*) Vegetation at study site (Patanjali Phase 1)



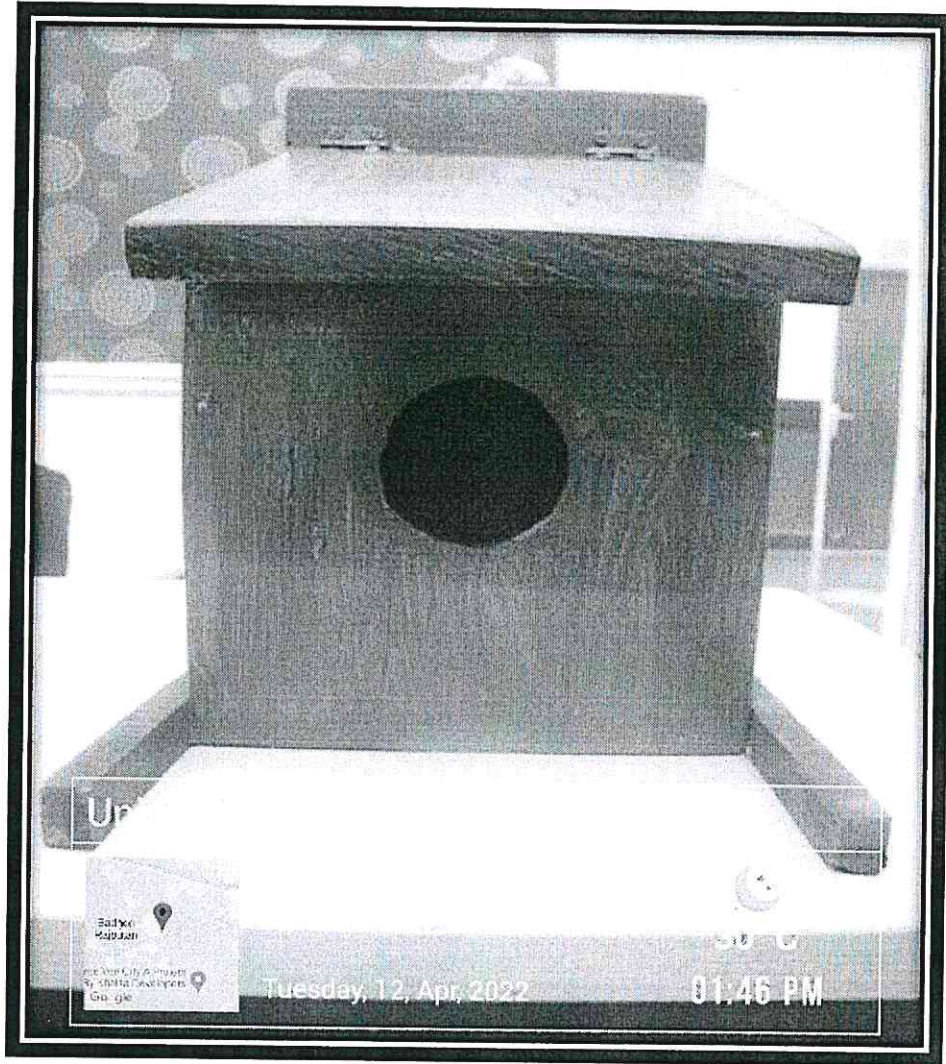


Foraging behaviour (feeding on grass seed)



Abnormal Nesting sites of House Sparrow (inside the roof lamp) Patanjali Phase 1





Scientific design Artificial Nest Box as alternate habitat for the bird "Mission Conservation"





Tagged Nest Boxes at study sites



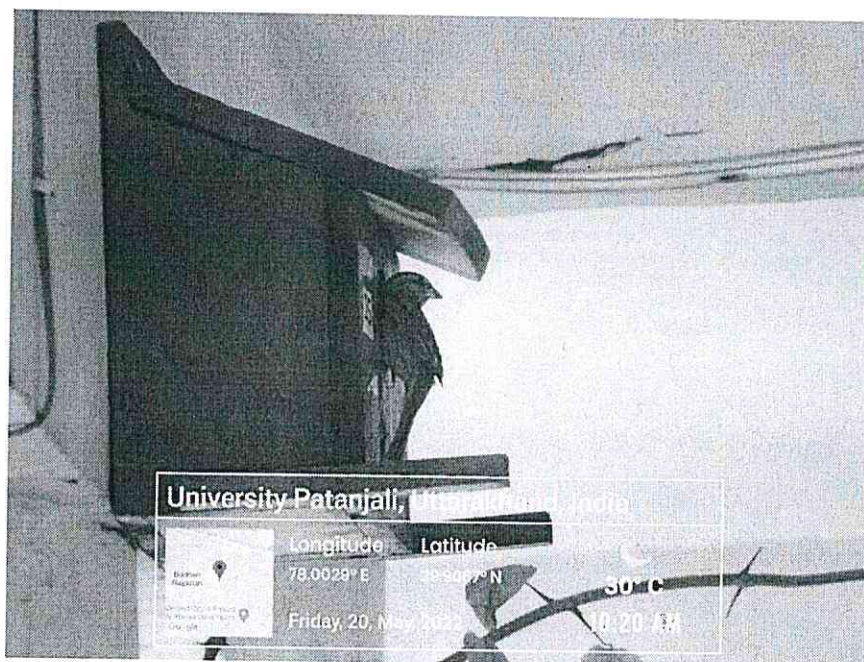


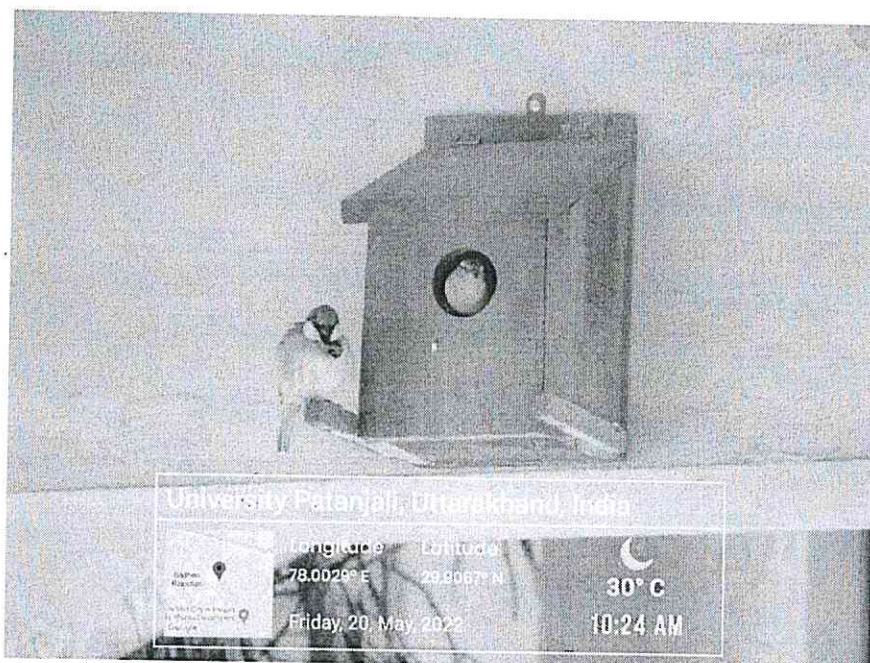
Flock of House Sparrow at study sites (Patanjali Phase 1)





Tagged Nest Boxes in University of Patanjali at different locations





Success sign of the project work (Bird attract towards the nest boxes at study sites)

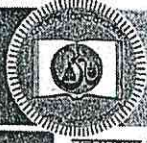
Report on NSS Vatika

August 4, 2021

National Service Scheme (NSS) was introduced in 1969 with the primary **objective** of developing the personality and character of the youth through voluntary community service. 'Education through Service' is the **purpose** of the NSS. To **achieve the purpose** of NSS, we **planned to grow kitchen garden in our campus**. Definitely, Kitchen garden will provide a practical, sustainable way for students to grow their own nutrient food and improve quality of life.







पतंजलि विश्वविद्यालय University of Patanjali

उत्तराखण्ड विधान मण्डल द्वारा पारित पतंजलि विश्वविद्यालय अधिनियम संख्या 4, वर्ष 2006 के अन्तर्गत स्थापित
Established by Uttarakhand State Legislature Under the University of Patanjali Act No. 4, Year 2006

पत्रांक UOP/NSS/2022/26

दिनांक (Date) : 06/03/2022

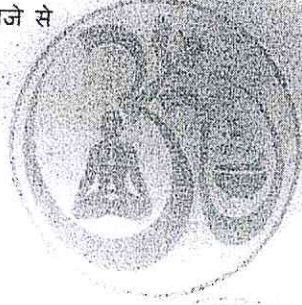
कार्यालय सूचना

पतंजलि विश्वविद्यालय के समस्त अधिकारीगण, अध्यापकगण, कर्मचारीगण एवं छात्र छात्राओं को सादर सूचित किया जाता है कि दिनांक 8 मार्च 2022 को राष्ट्रीय सेवा योजना के माध्यम से अंतर्राष्ट्रीय महिला दिवस का आयोजन किया जा रहा है। आप सब इस कार्यक्रम में सादर आमंत्रित हैं।

मुख्य अतिथि: प्रतिकुलपति

कार्यक्रम स्थल: मिनी ऑडिटोरियम, पतंजलि विश्वविद्यालय, हरिद्वार

कार्यक्रम समय: अपराह्न 2:00 बजे से



सचदीया

Dr. VISHALI GAUR
NATIONAL SERVICE OFFICER
कार्यक्रम अधिकारी
राष्ट्रीय सेवा योजना

प्रतिलिपि :

- संकाय अध्यक्ष शिक्षण एवं शोध, पतंजलि विश्वविद्यालय
- संकाय अध्यक्ष योग विज्ञान विभाग पतंजलि विश्वविद्यालय
- संकाय अध्यक्ष मानविकी एवं प्राच्य विद्या संकाय पतंजलि विश्वविद्यालय
- बालिका छात्रावास
- बालक छात्रावास

कार्यालय : पतंजलि विश्वविद्यालय, दिल्ली-हरिद्वार राष्ट्रीय राजमार्ग, निचले बहादुरबाद, हरिद्वार-249405, उत्तराखण्ड, भारत
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VAN MAHOTSAV CELEBRATION AT UNIVERSITY OF PATANJALI

By the blessings of Swami Ramdev Ji and Acharya Balkrishnaji, **Van Mahotsav** week was celebrated on 06 July 2021 by the University of Patanjali, Haridwar by planting several saplings of Ashoka, Mango, Neem, etc in the new campus to spread awareness of forest conservation and to save the environment, among students and teachers. In the plantation drive launched under the guidance of the Pro-Vice Chancellor, Professor Mahavir Agrawal most of the faculty members were present. Professor ParveenPunia, the Registrar, Professor V.K Katiyar, the Dean and Mr V.C Pandey, Retd. IAS, Controller of Examination and Professor G Paran Gowda, Professor of the Yoga Department, Prof. K.N.S Yadav, Secretary, Advisory Committee, University of Patanjali and others also planted several saplings. The event was jointly organized by DrLaxmi Shankar Rath, Associate Professor, Department of Chemistry, Dr Vinay Sharma, Associate Professor, Department of Biological Sciences and DrNivedita Sharma, Assistant Professor, Department of Biological Sciences.


डा० महावीर अग्रवाल
प्रति - कुलपति
पतंजलि विश्वविद्यालय, हरिद्वार

