



per un **FUTUR**  **sostenibile**
a.r. 2018 / 2019



Siena, March, 7-10, 2019

STRADE BIANCHE GRANFONDO CROWDFUNDING

Service Plastic Buster

Supported by Rotary International Fellowship Cycling to Serve



Objective

Within Rotary International, a world wide community of more than 1,2 million members share a lot of common intrests. Fellowships, creating possiblities to meet and greet friends with the same intrests reach out to several continents, countries, regions and cities. Cycling to Serve is a typical, fast growing Fellowship connecting cyclists around the world.

Serving above Self

In Italy, region Tuscany, the beautiful area of Siena, the Rotaryclub Montaperti – Castelnuovo – Berardenga, with coördinator Manuel Giuggioli, presents their event **Strada Bianche Granfondo Crowdfunding – Service Plastic Buster**

Offering our worldwide Rotarian friends a cycling granfondo to remember for ever, and supporting a social international project like the Plastic Buster are the pillars this event is build upon.

Read the program, the offerings and the social project and join us from March, 7nd, 2019 in Siena!



With Rotarian greetings,
Manuel Giuggioli
Rc Montaperti Castelnuovo Berardenga
Chairman project commission
manuelgiuggioli@gmail.com

Useful links:

Strada Bianche 2019
Social project Service Plastic Buster
Rotaryclub Montaperti Castelnuovo Berardenga
Rotary Fellowship Cycling to Server

<http://gfstradebianche.it/>
<https://plasticbustersmpas.interreg-med.eu/>
<http://rotarymontaperti.it/>
<http://cyclingtoserve.org/>

1 Word of the RI FCS Jean-Luc Berger



Dear rotarian and non-rotarian friends

The Rotary Fellowship Cycling to Serve is proud to support and happy to participate in this event on the one hand, a human communion around that passion that is cycling during this fabulous event Granfondo Strade Bianche, on the other hand being involved in this very nice social project led by the Rotary Club Montaperti Castelnuovo Berardenga ...

Once again, cyclist rotarians are leading the way for this major and urgent cause to save our seas, flora and fauna. In so many other delicate situations, Rotarians like to mobilize and with their encouragements like today, transcending national borders, support the commitment made by our Italian friends.

May these days in this wonderful Siena environment be a beautiful cycling event but beyond that a step further to make our planet more beautiful and safe !



jeanluc.fcsycling@yahoo.com

Word of the Rc Montaperti Castelnuovo B.ga President Daniela Bellucci



Our Club's intention is to focus on the universal values of sustainability because in his general concept we have recognized values and goals in common with Rotary's purposes.

With this specific project of service we want to enhance the University of Siena's scientific research on litter pollution of plastic in the Mediterranean Sea at European and international level, supporting the training of a young researcher, giving him the possibility to spend a period of training abroad. Through this experience he can exchange good practices for environment progress. All Mediterranean country should work together to develop new strategies to reduce and mitigate the litter pollution of micro-plastics. The results of this approach would be of fundamental importance to create the conditions for a healthier environment and for our best quality of life and well-being improving human relationships.

Rotary International President Barry Rassin laid out his vision for the future of the organization calling on leaders to work for a sustainable future and to inspire Rotarians and the community at large, he says: "Together, we see a world where people unite and take action to create lasting change — across the globe, in our communities, and in ourselves. *Be the Inspiration.*"

We believe that just a small commitment from each it's useful to get great results.



Daniela Bellucci

President a.r. 2018/219 Rotary Club Montaperti Castelnuovo Berardenga

Word of the Sky Professional Race Team

Being part of an advertising campaign aimed at sensitizing the responsible use of plastic products, was a source of pride for me, who have always been particularly attentive to the issues of environmental protection. I am thrilled to have the opportunity now to participate in an Italian project and use my image to promote environmental protection and I want to get the most out of bringing the greatest number of people to change their habits in favor of respect for our planet.

Gianni Moscon Team SKY Rider



3 The proposed cycling program

Wednesday, March, 6th, 2019

(preferred) arrival to the hotel, check in and be ready to explore the city at your own pace....

Thursday, March, 7nd, 2019 - Explore **the first part of the granfondo** Strade Bianche

from the start in **Siena** up to **Monteroni d'Arbia** and return to Siena for about 60 \ 70km (but for those who want can become 90 \ 100), exploring the first White Roads and crossing Val di Merse and Val d'Arbia.

Friday, March, 8th, 2019 - Explore **the final part of the granfondo** Strade Bianche

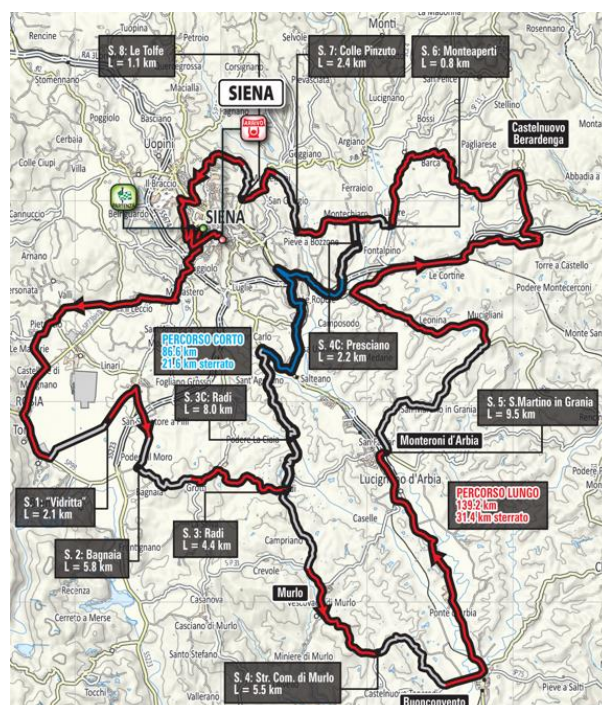
the last 60 \ 70km (but if one wants can become 90 \ 100 with Monte Sante Marie) where we will find all the Pro Teams to do the same thing. The final arriving at the famous Piazza del Campo is included where we probably take a final coffee with the best pro riders!

Saturday, March, 9th, 2019 – **Feel the beats** of the professional race Strade Bianche

two races of the Pro, women and men, and usually you can go to see them in more points of passage or by car or bike depending on how you prefer, however we will all wait for you at the top of Santa Caterina (the last entering the city – the Wout Van Aert hill) or at the Piazza del Campo for the arrival!

Sunday, March, 10th, 2019 – **Rotarians Strade Bianche!**

The exploration of the race on Thursday and Friday are **FREE OF CHARGE** for everyone.



The additional culture program

Thursday, March, 7nd, 2019 - The city of Siena and its monuments

9h40 appointment at the hotel reception

10h-13h00 –The city of Siena and its monuments in external + visit to the Civic Museum -
Groupspriice with reservation: 7,5€

Lunch tasting of typical local products at **Gastronomia Morbidi**

(<http://www.morbidi.com/morbidi/index.php?lang=it>) in the main street of the city € 20
at any time from 12 to 17

Cyclists, explore the first part of the granfondo

18h00 appointment at the hotel reception

18h30 -23 visit to the stable, museum and the church of the Nobile Contrada del Bruco
(<https://www.nobilcontradadelbruco.it/>) with **dinner** of typical products € 35

Friday, March, 8th, 2019 - Visit to the Duomo

10h10 appointment at the hotel reception

10h30-13h30 Visit to the Duomo

Duomo Complex (Cathedral, Crypt, Baptistery, Museo dell'Opera del Duomo with Salita al Facciato for panoramic view) + Porta del Cielo with the exceptional visit to the attics
(ticket price OPA-All- Inclusive Sipass, € 21)

Lunch tasting of typical local products at **Consorzio Agrario di Siena** ([ttp://www.capsi.it/h](http://www.capsi.it/h))
in the main street of the city € 20 at any time from 12 to 17

Cyclists, explore the finish part of the granfondo

17h30-19h / meeting at the Department of Physical Sciences, the Earth and the Environment of the University of Siena for **the awarding of the scholarship**

Free evening for dinner at your choice

Saturday, March, 9th, 2019 - visit to the winery with wine tasting

10h - on reservation visit to the winery (to be defined) with wine tasting

5 Accomodation

The hotel is in the center, served by an escalator that allows you to reach Piazza del Campo in **maximum 10 minutes on foot**.

The starting point of Strade Bianche is 5 minutes away by bike, and 15 on foot.

It has ample parking for private cars and a public one within walking distance.

It has a bike storage and an outdoor washing area, however it allows you to bring the bikes in the room **but only if clean.** 😊

For the evening before the race the restaurant of the hotel can prepare food on request and on **the morning of the race offer breakfast starting at 6.00**

<http://www.hotelmodernosiena.it/en/> (all the details are available on the website)



6 Signing up

Plastic Buster Granfondo Strade Bianche 2019 is a crowdfunding that can be found on the website <https://www.retedelodono.it/en/progetti/rotary-club-montaperti-castelnuovo-berardenga/ocean-rescure-plastic-buster>. To access it, look for the Service Plastic Buster under the heading Rotary Club Montaperti Plastic Buster 2019 or Strade Bianche 2019.

Participants to the Granfondo, the minimum registration fee is € 200, to be subscribed both as a participant and as a fundraiser collection, and applying the hotel reservation fee to the agreed rates (see hotel accommodation), guaranteed departure on the first starting grid (first 500 numbers) in the Medicea Fortress, includes the race pack and the special bib number!

For those who want to come to Siena during the competition a minimum personal donation of 100€ is required to make use of the hotel reservation at the agreed rates and participate to the culture program.

For those who do not participate the Granfondo it is possible to donate anyway on the Service Plastic Buster, see the mentioned website above, both as single and as a Rotary Club.

7 Pricing

The prices below are to be considered exclusively for those who participate in the Strade Bianche Granfondo 2019 or for those who do not take part but make a minimum free personal donation of € 100 on Plastic Buster Strade Bianche Granfondo 2019 crowdfunding on the website www.retedeldono.it

Hotel accomodation:

Stay of 3 nights: (Friday-Saturday-Sunday) rates by person, including contribution Service Ocean Rescue, including VAT and service, excluding tourist tax (on site to be payed)

Room and breakfast in double room, single use (1 person)	=> 240€ pp
Room and breakfast in double room (2 persons)	=> 135€ pp
Room and breakfast in triple room (3 persons)	=> 120€ pp
Half board in double room, single use (1 person)	=> 300€ pp
Half board in double room (2 persons)	=> 195€ pp
Half board in triple room (3 persons)	=> 180€ pp

The rates for **additional nights (on top of the minimum 3 nights)** are as follows:

Room and breakfast in double room, single use (1 person)	=> € 50.00 pp/night
Room and breakfast in double room (2 persons)	=> € 35.00 pp/night
Room and breakfast in triple (3 persons)	=> € 30.00 pp/night

Prices per person, per night, including VAT and service, excluding tourist tax.

Half board in double room, single use (1 person):	=> € 70.00 pp/night
Half board in double room (2 persons)	=> € 55.00 pp/night
Half board in triple (3 persons)	=> € 50.00 pp/night

Prices per person, per night, including VAT and service, excluding tourist tax.

Dinner includes first course, main course, dessert and mineral water.

The option within which customers must book is as of **December 31, 2018**.

By **10 January 2019** it is required to pay a deposit equal to **30% of the booked services**.

More details on the website (to be communicated asap)

8 How To Book?

Step 1: DONATE

- Go to <https://www.retedel dono.it/en/progetti/rotary-club-montaperti-castelnuovo-berardenga/ocean-rescure-plastic-buster>
- Click on Donate



A project by

Rotary Club Montaperti

- If you participate the Granfondo Strade Bianche: **donate (minimum) 200€**. This amount includes your subscription and enables the advantage of the accommodation offer
- If you do NOT participate the Granfondo Strade Bianche: **donate (minimum) 100€**. This amount enables the advantage of the accommodation offer.
- You are of course free to donate more...

Step 2: WAIT 😊

- Wait for an email of the organiser. In this email you will receive an **RotaryIntnnn** code

Step 3: Finalise

- Make the hotel reservation by sending an email to info@hotelmodernosiena.it and put the **RotaryIntnnn** code in the subject. The minimum stay is 3 nights. You can come over earlier and/or stay later. See Pricing above
- PUT manuelgiuggioli@gmail.com in CC!!!

Step 4: Wait and see

- Follow the instructions you will receive
- Keep on training!!



Impact of Marine litter on Italian fisheries and potential consequences on human health

Project coordinator: Prof. M. Cristina Fossi

Research group members: Cristina Panti, Matteo Baini, Silvia Casini, Matteo Galli, Dario Giani
Dipartimento di Scienze Fisiche, della Terra e dell'Ambiente, Università di Siena

State of art

Marine litter is one of the environmental issue raising most concern worldwide. In the Mediterranean Sea the effects of Marine litter on marine organisms and the possible consequences on the trophic chains have been little investigated compared to other marine ecosystems (eg Pacific Ocean), although recent data show that the Mediterranean is one of the most exposed seas to this emerging threat (UNEP/MAP, 2015). Several studies have shown that plastics represent 60-80% of marine litter (Misfud et al., 2013).

The effects of plastic debris, and in particular microplastics (plastic fragments smaller than 5 mm), on the marine edible species, in the commercial fisheries, as well as on human health, are still largely unknown and represent an important issue to be explored in the Mediterranean area.

In a study carried out by Rochman et al (2015) in the United States, anthropogenic debris (essentially microplastic) were found in 25% of edible fish species and in 67% of all species examined. Furthermore, the presence of microplastics has been reported in 33% of the sampled mussel species. A similar research carried out in Belgium (Van Cauwenberghe, 2014) reveals that the edible mussel species *M. edulis* contained on average 0.36 ± 0.07 g⁻¹ of microplastics (wet weight). As a result, in this research, the annual exposure for shellfish consumers at European level has been estimated of around 11,000 microplastics annually.

This project represents an important step to increase the available knowledge about the impact of marine litter, in particular microplastics, on Mediterranean fish species, the related impact on fisheries, the consequences on edible and commercial species and the possible consequences on human health.

Project overview

The specific activities proposed by University of Siena (UNISI) within the project are:

- Monitoring and characterization of micro and macro-plastics on the surface and in the water column in the study area (the pilot areas will be identified in the North Tyrrhenian Sea and other areas of comparison). This survey will make it possible to identify the different types and sources of anthropogenic contamination in order to guide future mitigation actions.
- Determination of the presence of macro - meso and micro - plastics in fish species, crustaceans and mussels for human consumption in different study areas. The activities will be carried out in collaboration with local fisheries.
- Evaluation of the effects of plastic debris in the different edible species, previously identified as the most exposed to the marine litter contamination. In these species will be

evaluated both the levels of plastics additives and the biomarkers responses to identify possible negative effects on fish stocks.

Student training

The project will be carried out by a young researcher within his/her PhD program. The PhD student will collaborate in the planning and implementation of the sampling and subsequent laboratory analysis of the analyzed species, which is fundamental for the achievement of the project objectives. During the period of the project, the student will have the opportunity to increase the skills on the sampling and laboratory procedure related to the detection of marine litter and microplastics and their effects on biodiversity. The six months will allow to the students to be trained and to increase the ability to work on the scientific field and enhance the communication skills. In addition, to applying the knowledge learned in the academic field, the student will develop and acquire new technical skills necessary for the performance of the project activities. There will also be a training period abroad with one of the research group partners of the Plastic Busters MPAs project (e.g. IFREMER, Hellenic Centre for Marine Research, Centro Oceanográfico de Baleares del Instituto Español de Oceanografía). At the end of the planned activities, he will be responsible for drafting the scientific report in which the results achieved and any scientific publications deriving from the project results will be reported. The results will be also presented at scientific conferences and disseminates to a wider general public.

For the development of the project, the student must have documented experience on the issue of marine litter and knowledge of the methods used to evaluate the impact on marine species. The student must also have the ability to collect organs and tissues of marine organisms and have acquired analytical, microscopic and molecular techniques for the evaluation of ecotoxicological state, as well as a good knowledge of instruments for the infrared spectroscopy analysis (eg. ATR-FT-IR).

Furthermore, the student should be available to spend a period of training abroad will be planned in order to increase the skills of the student.

Duration

Six months.

The research group

The research group coordinated by Prof. M.C. Fossi has played a key role in investigate the emerging theme of Marine Litter, in particular microplastics, from 2010, including the European Marine Strategy Framework Directive (D10 -MSFD). Since 2013, the University of Siena research group has been the scientific coordinator of the "Plastic Busters" project born in the framework of the United Nations project Sustainable Development and Solution Network-Mediterranean and declared as UN-SDSN Med *Flagship Project*. The Project has also received the unanimous endorsement by the *Union for the Mediterranean (UfM)*, and achieved the prestigious UfM label in February 2016 ([http://ufmsecretariat.org/plastic-busters-for-a-mediterranean-free-from litter/](http://ufmsecretariat.org/plastic-busters-for-a-mediterranean-free-from-litter/)).

The Plastic Busters MPAs project made up of 15 European partners (<https://plasticbustersmpas.interreg-med.eu/>), born from the Plastic Busters (SDSN) receive funding under the European Interreg-Mediterranean. The project will bring together the main experts at Mediterranean levels on the topic of marine litter, policy makers and stakeholders involved in the issue.

The activities of Plastic Busters MPAs has been followed on SkyTG24 Italy in the awareness campaign “Un mare da salvare.” (<https://tg24.sky.it/ambiente/sky-un-mare-da-salvare.html>) and participated to several national TV programs (Linea Blu, Presa Diretta, Petrolio, ecc), The results of the projects and studies carried out in the last decade have been also published in several national and international newspapers and magazines (La Repubblica, Il Corriere della Sera, The independent, BBC press, La Stampa, Sette, ecc.).

The UNISI research group has also coordinated numerous national projects (Ministry of Environment, Tuscany Region) on the impact of plastics and microplastics on Mediterranean risk species (cetaceans and sea turtles) Plastic Busters MPAs is also on Twitter (<https://twitter.com/plasticbusters?lang=bg>), Facebook and a website (<http://plasticbusters.unisi.it/>).

Research group International partnership:

- IFREMER Institut français de recherche pour l'exploitation de la mer,
- HCMR Hellenic Centre for Marine Research,
- SOCIB Balearic Island Coastal Observing and Forecasting System,
- ISPRA , The Institute for Environmental Protection and Research,
- Biochemistry and Environmental Toxicology, Higher Institute of Agronomy, University of Sousse (TN),
- IWRS, Institute for Water of the Republic of Slovenia (SI),
- CNR, Consiglio Nazionale delle Ricerche,
- Consorzio Lamma (IT),
- ISOTECH – Environmental Research and Consultancy Cyprus

Research group main publications on the topic of the project

- Fossi M.C., Baini, M., Panti, C., Galli, M., Jiménez, B., Muñoz-Arnanz, J., Marsili, L., Finoia, M.G., Ramírez-Macías, D. Are whale sharks exposed to persistent organic pollutants and plastic pollution in the Gulf of California (Mexico)? First ecotoxicological investigation using skin biopsies. *Comparative Biochemistry and Physiology Part C*. 2017
- Baini, M., Martellini, T., Cincinelli, A., Campani, T., Minutoli, R., Panti, C., Finoia, M.G., Fossi, M.C. First detection of seven phthalate esters (PAEs) as plastic tracers in superficial neustonic/planktonic samples and cetacean blubber *Analytical Methods*. 9, 1512-1520, 2017.
- Cincinelli, A., Scopetani, Chelazzi, D., Lombardini, E., Martellini, T., Katsoyiannis, A., Fossi, M.C. Corsolini, S Microplastic in the surface waters of the Ross Sea (Antarctica): Occurrence, distribution and characterization by FTIR. *Chemosphere*, 175, 391-400, 2017.
- Fossi M.C., Marsili L., Baini M., Giannetti M., Coppola D., Guerranti C., Caliani I., Minutoli R., Lauriano G., Finoia M.G., Rubegni F., Panigada S., Bérubé M., Urbán R.J., Panti C., Fin whales and microplastics: The Mediterranean Sea and the Sea of Cortez scenarios, *ENVIRONMENTAL POLLUTION*, vol. 209, pagg. 68–78, 2016.
- Pedà C., Caccamo L., Fossi M.C., Gai F., Andaloro F., Genovese L., Perdichizzi A., Romeo T., Maricchiolo G., Intestinal alterations in European sea bass *Dicentrarchus labrax* (Linnaeus, 1758) exposed to microplastics: Preliminary results, *ENVIRONMENTAL POLLUTION*, vol. 212, pagg. 251–256, 2016.
- Romeo T., Battaglia P., Pedà C., Consoli P., Andaloro F., Fossi M.C., First evidence of presence of plastic debris in stomach of large pelagic fish in the Mediterranean Sea, *MARINE POLLUTION BULLETIN*, vol. 95, n. 1, pagg. 358–361, 2015.
- Panti C., Giannetti M., Baini M., Rubegni F., Minutoli R., Fossi M.C., Occurrence, relative abundance and spatial distribution of microplastics and zooplankton NW of Sardinia in the Pelagos Sanctuary Protected Area, Mediterranean Sea., *ENVIRONMENTAL CHEMISTRY*, vol. 12, n. 5, pagg. 618–626, 2015.
- Fossi M.C., Michael H Depledge, Exploring the potential of large vertebrates as early warning sentinels of threats to marine ecosystems, human health and wellbeing., *MARINE ENVIRONMENTAL RESEARCH*, vol. 100, n. SI, pagg. 1–2, 2014.
- Fossi M.C., D. Coppola, M. Baini, C. Guerranti, L. Marsili, C. Panti, E. de Sabata, S. Clò, Large filter feeding marine organisms as indicators of microplastic in the pelagic environment: The case studies of the Mediterranean basking shark (*Cetorhinus maximus*) and fin whale (*Balaenoptera physalus*), *MARINE ENVIRONMENTAL RESEARCH*, vol. 100, n. SI, pagg. 17–24, 2014.
- G.A. de Lucia, I. Caliani, S. Marra, A. Camedda, S. Coppa, L. Alcaro, T. Campani, M. Giannetti, D. Coppola, A.M. Cicero, C. Panti, M. Baini, C. Guerranti, L. Marsili, G. Massaro, Fossi M.C., M. Matiddi, Amount and distribution of neustonic micro-plastic off the western Sardinian coast (Central-Western Mediterranean Sea), *MARINE ENVIRONMENTAL RESEARCH*, vol. 100, n. SI, pagg. 10–16, 2014.
- Galgani F, Claro F, Depledge M, Fossi M.C., Monitoring the impact of litter in large vertebrates in the Mediterranean Sea within the European Marine Strategy Framework Directive (MSFD): Constraints, specificities and recommendations, *MARINE ENVIRONMENTAL RESEARCH*, vol. 100, pagg. 3–9, 2014.
- T. Campani, M. Baini, M. Giannetti, F. Cancelli, C. Mancusi, F. Serena, L. Marsili, S. Casini, Fossi M.C., Presence of plastic debris in loggerhead turtle stranded along the Tuscany coasts of the Pelagos Sanctuary for Mediterranean Marine Mammals (Italy), *MARINE POLLUTION BULLETIN*, vol. 74, n. 1, pagg. 225–230, 2013.
- M.H. Depledge, F. Galgani, C. Panti, I. Caliani, S. Casini, Fossi M.C., Plastic litter in the sea, *MARINE ENVIRONMENTAL RESEARCH*, vol. 92, pagg. 279–281, 2013.
- Fossi M.C., Panti C., Marsili L., Maltese S., Spinsanti G., Casini S., Caliani I., Gaspari S., Munoz-Arnanz J., Jimenez B., Finoia M.G., The Pelagos Sanctuary for Mediterranean marine mammals: Marine Protected Area (MPA) or marine polluted area? The case study of the striped dolphin (*Stenella coeruleoalba*), *MARINE POLLUTION BULLETIN*, vol. 70, n. 1–2, pagg. 64–72, 2013.

- Fossi M.C., C. Panti, C. Guerranti, D. Coppola, M. Giannetti, L.Marsili, R. Minutoli, Are baleen whales exposed to the threat of microplastics? A case study of the Mediterranean fin whale (*Balaenoptera physalus*), *Marine Pollution Bulletin*, vol. 64, pagg. 2374–2379, 2012.